



# *Needham School Committee*

*December 18, 2018*

*7:00 p.m.*

*Broadmeadow School  
School Committee Room*

*A school and community partnership that creates excited learners,  
inspires excellence, fosters integrity*



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**REVISED 12-17-18**

**SCHOOL COMMITTEE MEETING AGENDA**

**December 18, 2018**

**Broadmeadow School  
School Committee Room**

**Next School Committee Meeting: January 8, 2019**

**7:00 p.m.      Public Comments**

**7:05 p.m.      School Committee Chair and Subcommittee Updates**

**7:10 p.m.      Superintendent's Comments**

**7:10 p.m.      Consent Agenda**

1. Minutes of the Meeting of November 20, 2018
2. Approve FY19 Budget Transfers
3. Accept Donations

**Discussion Item**

**7:15 p.m.      FY20 Budget Discussion: Student Support Services**

**8:15 p.m.      Mitchell Modularity Update**

**8:30 p.m.      Action Item**

Approve FY19 Grant

**8:35 p.m.      School Committee Comments**

**Information Item**

Needham Housing Authority Facilities Master Plan Draft, September 25, 2018

**Needham School Committee**  
**December 18, 2018**

Agenda Item:     **Public Comments**

Background Information:

- The Chairperson will offer the opportunity for the public to speak to the School Committee on issues not on the agenda.

**Needham School Committee**  
**December 18, 2018**

Agenda Item:     **School Committee Chair and Subcommittee Update**

Background Information:

- The Chairperson and subcommittee members may offer brief updates on issues not on the agenda.

Members of the School Committee available for comment:

Aaron Pressman, Chair  
Michael Greis, Vice-Chair  
Connie Barr  
Heidi Black  
Andrea Longo Carter  
Susan Neckes  
Matthew Spengler



**Needham School Committee  
December 18, 2018**

Agenda Item:     **Superintendent's Comments**

Background Information:

Superintendent Daniel E. Gutekanst will apprise the School Committee of events, information, and matters of interest not on the agenda.

**Needham School Committee**  
**December 18, 2018**

Agenda Item:     **Consent Agenda**

1. Approve Minutes of the Meeting of November 20, 2018
2. Approve FY19 Budget Transfers
3. Accept Donations

Chair: “Does anyone wish to remove any item from the consent agenda?”

If none removed:

“There being no objection, these items are adopted by unanimous consent.”

Needham School Committee  
Minutes of the Meeting  
November 20, 2018

Aaron Pressman, Chairman of the Needham School Committee called the meeting to order at 7:01 p.m.

Members of the School Committee present were:

Aaron Pressman, Chair	Andrea Longo Carter
Michael Greis, Vice-Chair	Susan Neckes
Connie Barr	Matthew Spengler
Heidi Black	

Members of the Central Administration present were:

Dan Gutekanst	Mary Lammi
Terry Duggan	Alexandra McNeil
Anne Gulati	

Public Comments

Public Comments

Chairman Pressman offered the opportunity for the public to speak to the School Committee on issues, not on the agenda.

There were no comments.

School Committee Chair and Subcommittee Update

School Committee  
Chair and  
Subcommittee  
Updates

There were no Chair and Subcommittee updates.

Superintendent's Comments

Superintendent's  
Comments

Superintendent Gutekanst expressed his appreciation to Terry Duggan, Assistant Superintendent for Student Learning who, at the request of School Committee, provided information about ACCESS for ELLs (Assessing Comprehension and Communication in English State-to-State for English Language Learners).

Superintendent Gutekanst took a moment to commend the Needham High School Rockets, Girls and Boys Cross Country, for an excellent season. He stated that the Dance team finished 3<sup>rd</sup> in the state with a superb performance. He also stated that the Unified Basketball team had a great season finishing 5-1. Superintendent Gutekanst stated that the girls Swimming and Diving team had an amazing year and several students performed exceptionally well. He stated Zoei Howard is the state champion and set a record in the 50 Free, and Emma Higgins won the 200M. Superintendent Gutekanst stated that Needham will host Wellesley this year at the Thanksgiving Day Football game on Thursday, November 22, 2018, at Memorial Field.

Superintendent Gutekanst stated that on Wednesday, November 21, 2018, the school department will engage in a day of learning titled "Equity in Action." The event will be a half day of programs, beginning with a keynote speech from Dr. Beverly Daniel Tatum, President Emerita of Spellman College and author of, *"Why Are All the Black Kids Sitting Together in the Cafeteria."* Afterward, there will be a variety of 50 different workshops that the staff will engage in as the district continues its work towards ensuring every child in Needham has an equitable and inclusive opportunity to learn.

Consent Agenda

## Consent Agenda

1. Minutes of the Meeting of October 16, 2018
2. Approve FY19 Budget Transfers
3. Accept Donations

Chairman Pressman asked if members of the School Committee wanted to remove any item from the Consent Agenda. He stated that because there are no objections, the items are adopted by unanimous consent.

## DISCUSSION ITEMS

Hillside School Improvement PlanHillside School  
Improvement Plan

Dr. Gutekanst introduced this item. He stated that the Hillside School Council has worked collaboratively this past year to advise Principal Michael Kascak and develop and maintain the School Improvement Plan. Dr. Gutekanst stated that in accordance with M.G.L. Chapter 71, Section 59c, the Superintendent has approved the Hillside School Improvement Plan. Dr. Gutekanst welcomed Principal Michael Kascak and members of the Hillside School Council and invited them to present the Hillside School Improvement Plan.

Principal Kascak introduced members of the Hillside School Council, classroom teacher, Evan Brown, and media teacher, Liz Hitron. Principal Kascak stated that the School Improvement Plan covers the school community in their last year at the Hillside campus and the first two years at the new Sunita Williams Elementary School which opens in the fall.

Principal Kascak provided a brief review of the Hillside School Improvement Plan. He outlined action steps and summarized evidence and outcomes in each goal area. Principal Kascak pointed out that equity, diversity, and inclusion are three concepts that are driving many of the objectives in this plan. Principal Kascak noted that the balance between keeping the cramped and outdated campus functioning while planning for the opening of the new facility will remain the primary focus this year. Principal Kascak also noted that teacher training residency program will move from Lesley University to Curry College. Principal Kascak presented a slideshow on the Sunita Williams Elementary School construction site. Discussion followed. The entire Hillside School Improvement Plan is available online at [www.needham.k12.ma.us](http://www.needham.k12.ma.us).

Needham Education Foundation 2018 Fall Grant AwardsNeedham  
Education  
Foundation 2018  
Fall Grant  
Awards

Dr. Gutekanst introduced this item and welcomed Needham Education Foundation Fall Grant Committee Co-Chairs, Seema Meloni, and Christine Beach and invited them to present the 2018 Fall Grant Awards.

Ms. Meloni expressed appreciation to the Needham community for their generous donations to the NEF. Ms. Meloni stated that the NEF is recommending for approval sixteen grants totaling \$67,553. She stated that there are three professional development grants, two large grants, nine small grants and two express grants that the NEF is recommending for approval. Ms. Meloni and Ms. Beach provided a brief summary of the grants. Discussion followed.

Accept the Needham Education Foundation 2018 Fall Grant Awards

Upon the recommendation of the Superintendent that the Needham School Committee accepts with gratitude from the Needham Education Foundation the 2018 fall grant awards in the amount of \$67,553.

A motion was  
made:

Seconded  
Vote 7-0-0

Racial Equity Access Leadership Coalition UpdateRacial Equity  
Access  
Leadership  
Coalition  
Updates

Dr. Gutekanst introduced this item. He stated that the 2017-2018 Equity Audit prompted the district to create a team of staff, students, and community members to address the many recommendations in the Equity Audit. Dr. Gutekanst stated that Susan Neckes and Mary Lammi, Assistant Superintendent for Student Support Services would provide the School Committee with an update about the Racial Equity Access Leadership Coalition's work to date.

Ms. Lammi recapped the initial presentation of the REAL Coalition to the School Committee and the Needham community last spring. She pointed out that the presentation involved the unpacking of the results of the Equity Audit and that subsequently, the Coalition began the task of creating an Equity Plan and Goals. Ms. Lammi stated that this school year the coalition will move forward with action planning. Ms. Lammi stated that the REAL Coalition held its first meeting in October. She added that the Coalition includes district leaders, school leaders, teachers, parents, community members, and students. Ms. Lammi stated that the Equity Plan includes six key areas: communications and community engagement; culture and climate; curriculum, program and data; policies, procedures, and practices; professional learning; and hiring/employment practices. Ms. Lammi stated that a Steering Committee has been formed to provide support to leaders of the Subcommittees. She added that the REAL Coalition is operating in a three-tiered system: the larger Coalition, the Steering Committee, and the Subcommittees. Ms. Lammi stated that the Coalition is excited about the districtwide professional learning day taking place on November 21. Ms. Lammi spoke about the intentional work of the Coalition as it moves forward in getting to both concepts and, understanding as well as skillset.

Susan Neckes spoke about the organization and structure of the meetings. She added that she is impressed with the way Ms. Lammi, administrators, and Steering Committee have organized the work, there are real action steps and real implementation steps that make the process feel more concrete. Ms. Lammi stated that she feels confident in the ability make a change and that we are moving to the point of beginning to have an impact on the culture, climate, student experience, and the curriculum. Ms. Lammi added that she is honored to be involved with the REAL Coalition. Discussion followed.

School Committee CommentsSchool Committee  
Comments

Connie Barr stated that she appreciated having a tour of Needham High School which present a very nice view of the expanded and well-lit classrooms.

A list of all documents used at this School Committee meeting is available at:

A List of  
Documents

[http://www.needham.k12.ma.us/district\\_info/school\\_committee/packets](http://www.needham.k12.ma.us/district_info/school_committee/packets)  
2018-2019

At approximately 8:35 p.m., a motion was made to adjourn the School Committee meeting of November 20, 2018.

Adjournment

A motion was  
made:

Seconded  
Vote 7-0-0

Respectfully submitted by Cheryl Gosmon, Note Taker

## ***NEEDHAM SCHOOL COMMITTEE***

**Agenda Item #:** \_\_\_\_\_

**Date:** December 18, 2018

**Item Title:** **FY 2018/19 Budget Transfers**

**Item Description:** Transfer of FY19 budget allocations between line items in the following amounts:

Salaries	\$0.00
Purchase of Service/Expense	\$0.00
Capital	<u>\$0.00</u>
Net Change:	\$0.00

**Issues:** Under Massachusetts General Law Chapter 71, Section 34, and School Committee Policy #DBJ, the School Committee is empowered to make changes in allocations between line items within its budget, once approved by Town Meeting. In no case may a transfer result in the aggregate Operating Budget being more than authorized by the Town. Transfers between separate, non-operating appropriations are prohibited except as permitted by law.

**Recommendation/Options:** Approve the attached line item budget transfers.

**Rationale:** The attached line item budget transfers are requested to more accurately reflect expenses to be incurred during this fiscal year.

**Implementation Implications:**

**Supporting Data:** Attached listing of requested line-item budget transfers within the FY19 Operating Budget.

School Committee (circle one)

Action	Information	Discussion	Consent Calendar
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Central Administrator	Town Counsel	Sub-Committee:	_____
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Will report back to School Committee (date): \_\_\_\_\_

Respectfully Submitted,

*Anne Gulati*

Anne Gulati  
Assistant Superintendent for Finance & Operations

G/L ACCOUNT #	DEPARTMENT	SCHOOL	FUNCTION	OBJECT	DEBIT	CREDIT	NET
<b><u>PURCHASE OF SERVICE &amp; EXPENSE</u></b>							
0001.3551.040.99.3100.081.99.520.030.5380.300.04	Interpretations & Translations	District	Attendance & Parent Liason Services	Other Purchased Services	2,000.00		2,000.00
0001.3570.005.10.2440.099.99.520.030.5380.300.04	Student 504 Compliance	District	Other Instructional Services	Other Purchased Services	27,161.00		27,161.00
0001.3534.010.10.2320.099.99.520.030.5300.300.04	SPED Professional Services	District	Medical & Therapeutic Services	Professional & Technical Services		29,161.00	(29,161.00)
	<b>SUBTOTAL PURCHASE OF SERVICE &amp; EXPENSE</b>				<b>29,161.00</b>	<b>29,161.00</b>	<b>-</b>
	<b>GRAND TOTAL</b>				<b>29,161.00</b>	<b>29,161.00</b>	<b>-</b>

# NEEDHAM SCHOOL COMMITTEE

**Agenda Item#:** \_\_\_\_\_ **Date:** December 18, 2018

**Item Title:** **Approve School Department Donations**

**Item Description:** The following donations have been made to Needham Public Schools:

- |  |            |
|--|------------|
| • Mr. Daniel Matthews, Needham, MA donation to benefit the Robert Burke Fitzgerald Scholarship | \$1,000.00 |
| • Proceeds from Hoodie Fundraiser to benefit the NHS Class of 2020                             | \$3,280.00 |
| • Proceeds from phone wallet sales to benefit the NHS Class of 2021                            | \$10.00    |
| • Proceeds from bake sale to benefit the NHS Scribbles That Matter Club                        | \$55.00    |

**Issues:** M.G.L. Chapter 44, Section 53A and School Committee policy #DFC/KH authorize the School Committee to accept any grant of gifts or funds given for educational purposes by the federal or state government, charitable foundations, private corporations, PTCs or an individual. M.G.L. Chapter 44, Section 53A further stipulates that any monies received and accepted by the School Committee may be expended without further appropriation.

**Recommendations/Options:** That the School Committee accept with gratitude the aforementioned donations.

**School Committee:** Consent Calendar

Respectfully Submitted,

*Anne Gulati*

Assistant Superintendent for Finance and Operations



**Needham School Committee  
December 18, 2018**

Agenda Item:     **Discussion**

**Superintendent's FY2019-2020 Budget Request: Student Support Services**

Background Information:

- This will be one of several discussions about the FY20 budget and will highlight the student support services program.

Persons Available for Presentation:

Dr. Dan Gutekanst, Superintendent of Schools  
Dr. Alexandra Montes McNeil, Assistant Superintendent for Human Resources  
Dr. Terry Duggan, Assistant Superintendent for Student Learning  
Ms. Anne Gulati, Assistant Superintendent for Finance and Operations  
Ms. Mary Lammi, Assistant Superintendent for Student Support Services

# **Needham Public Schools Student Support Services**

FY20 Budget Presentation

# Student Support Services

- ❑ Special Education
- ❑ Section 504 Accommodation Plans
- ❑ Counseling Services
- ❑ Nursing Services
- ❑ English Language Education
- ❑ METCO
- ❑ Home Hospital Tutoring
- ❑ Home School



# FY20 Budget Drivers

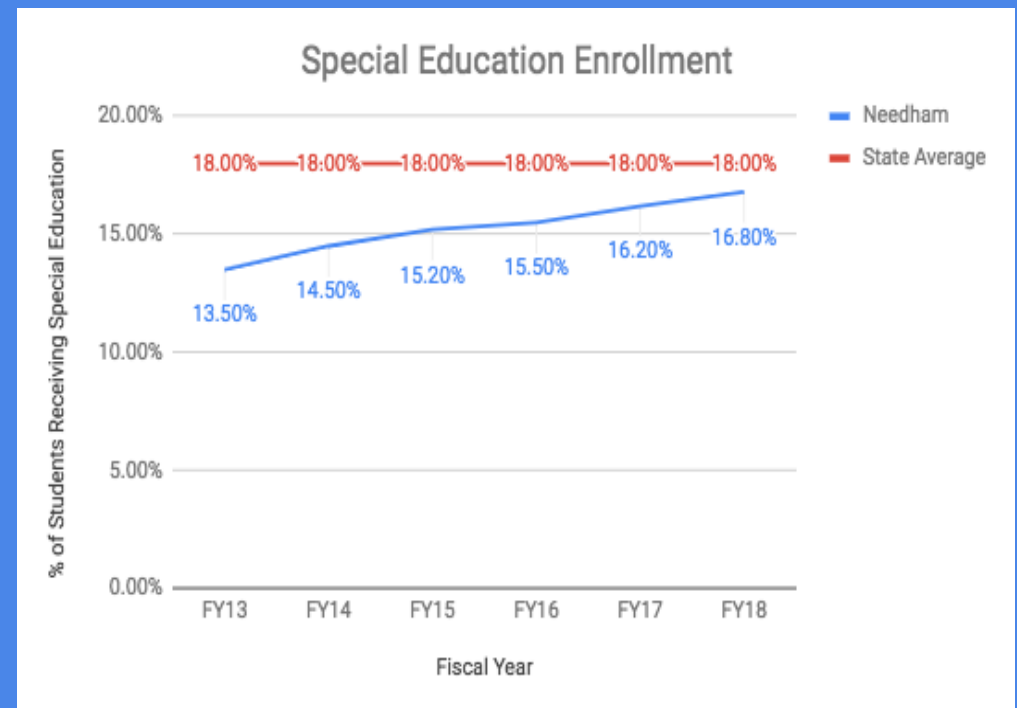
- Provide necessary support services personnel to meet student enrollment growth and level of student needs K-12
- Respond to grants being phased out and stricter federal rules requiring services to parentally placed private school and home school students
- Provide necessary administrative support and direct services for Sunita Williams Elementary School and the newly relocated K-5 Elementary Learning Center
- Maintain appropriate funding to support special education contractual services, out of district tuition, and extended school year services.

# FY20 Budget Context: Special Education

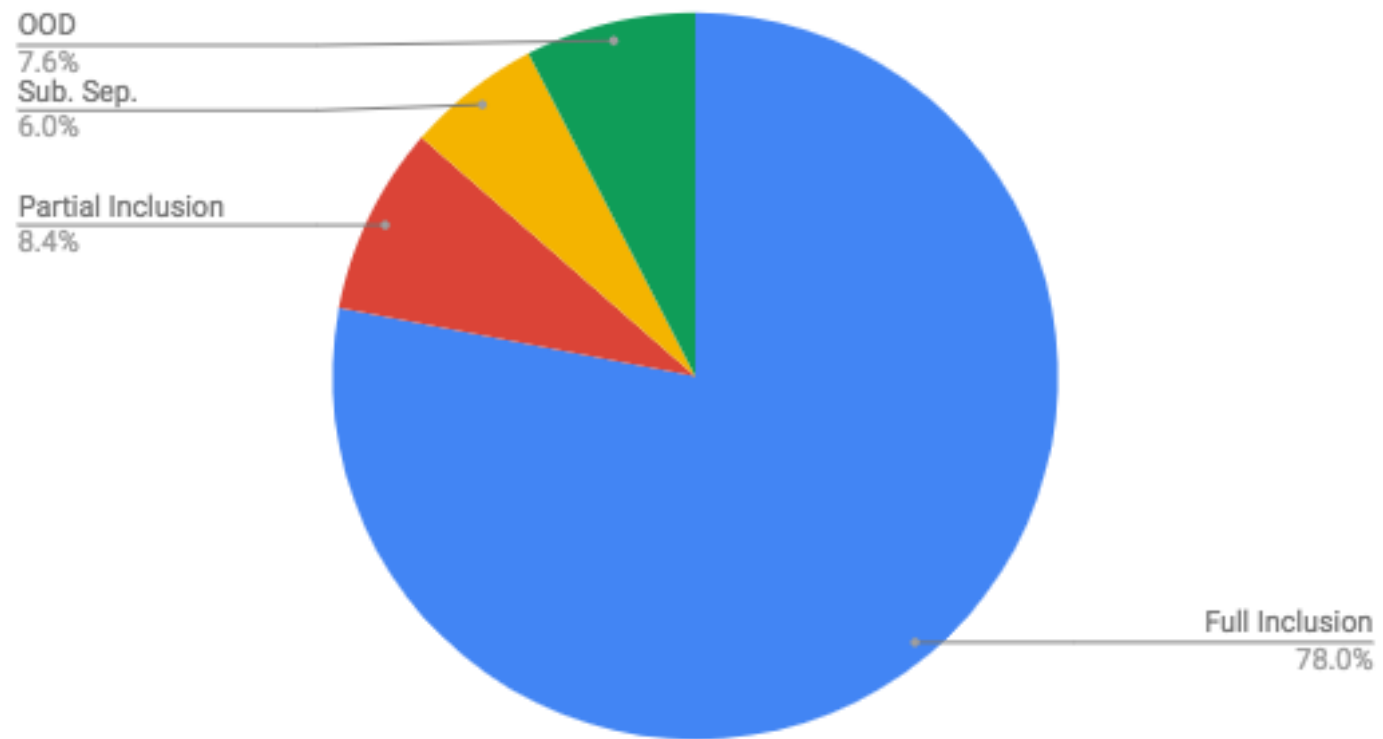
The Individuals with Disabilities Act (IDEA) requires that all students with disabilities be provided a Free Appropriate Public Education (FAPE) in the Least Restrictive Environment (LRE)

Individual Education Programs (IEPs) are developed for each student requiring special education and can include services such as specialized instruction, behavior plans, speech therapy, physical and occupational therapy, hearing and vision services, and counseling

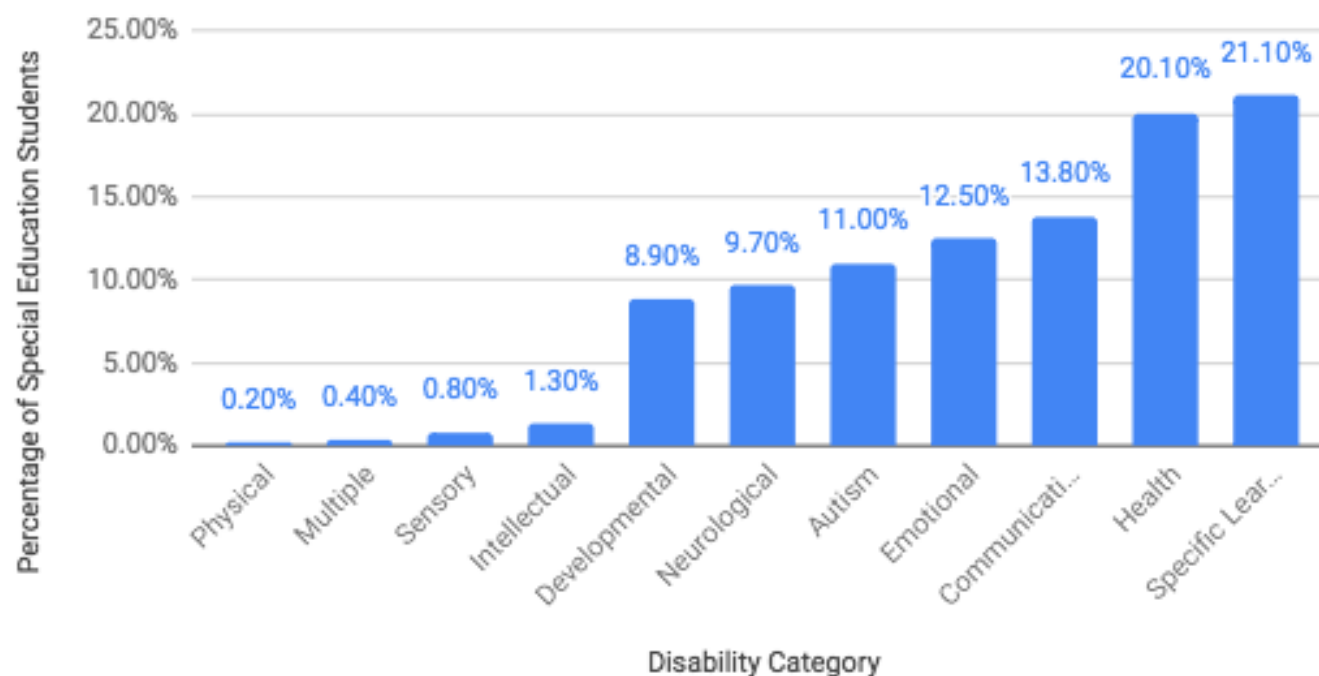
Special Education Evaluations are conducted by qualified school teams to determine eligibility and to inform the development of IEPs



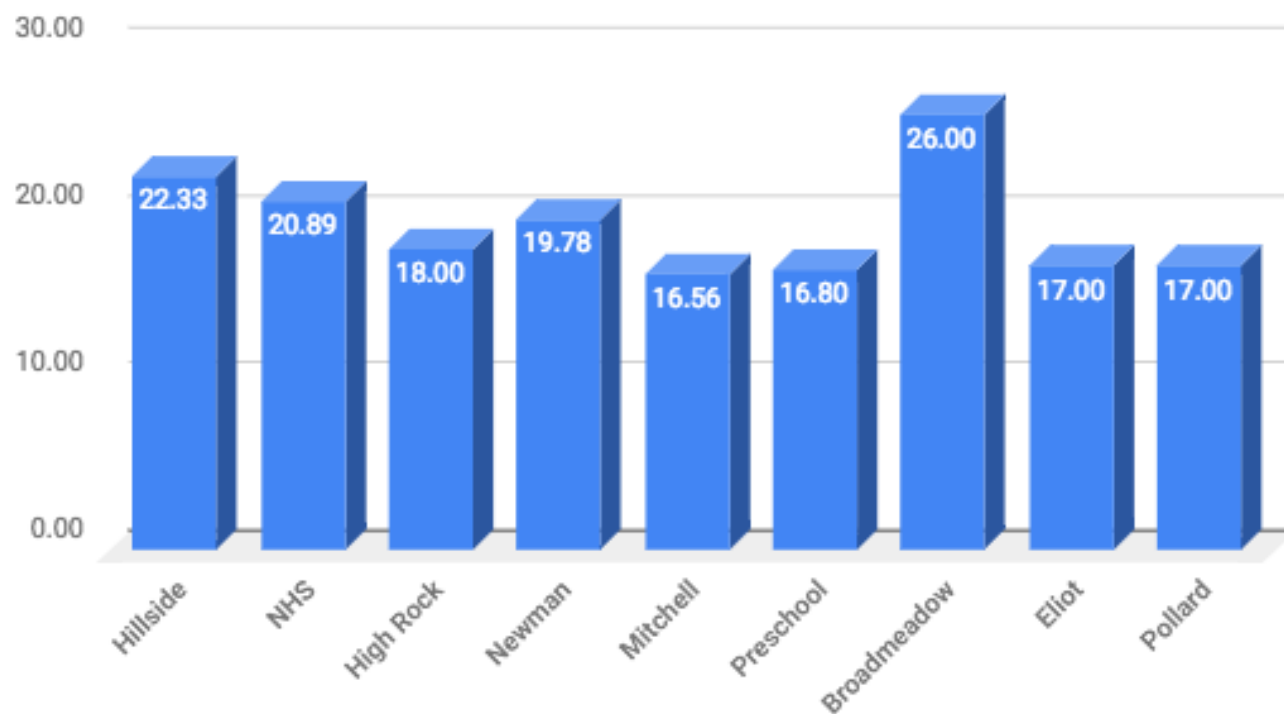
Placement by Type SY 2017-2018



### Percentage of Students Receiving Special Education Services by Disability Category SY 2017-2018

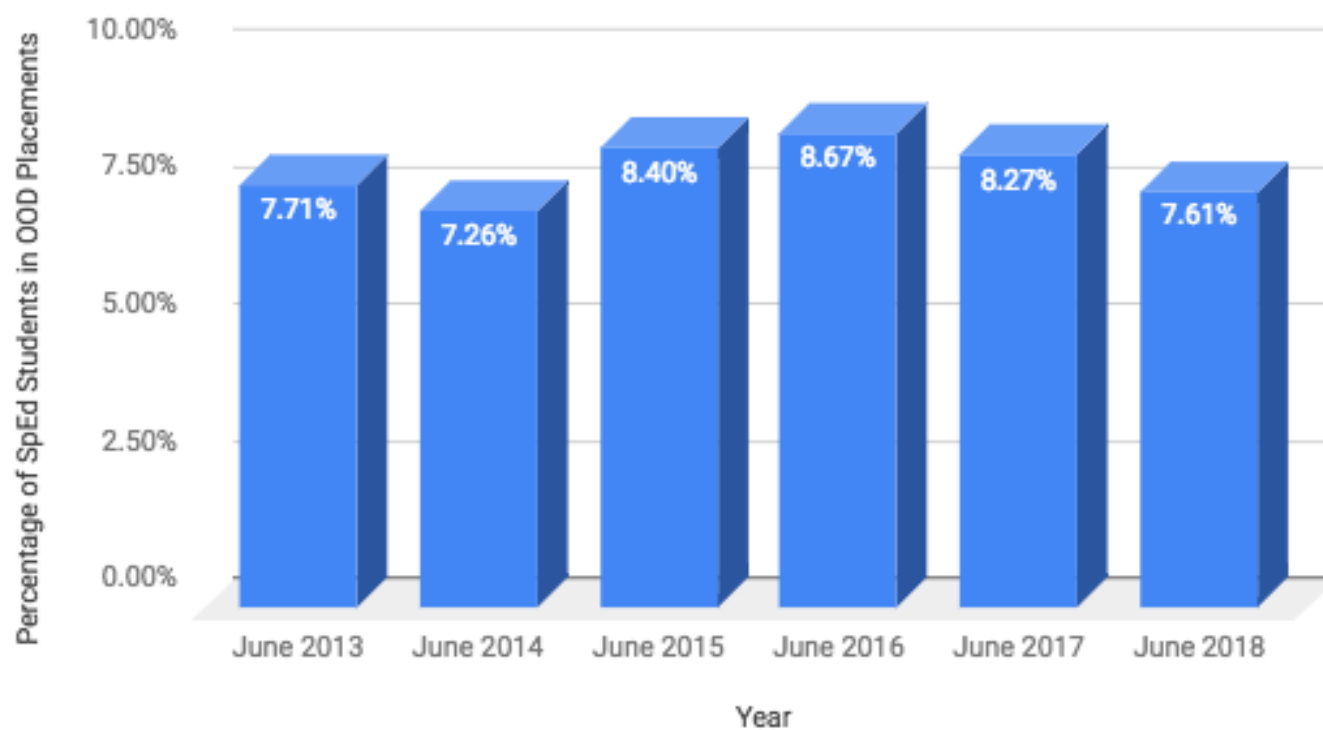


**Inclusion Based Special Education Liaison Caseloads (Oct. 1, 2018)**

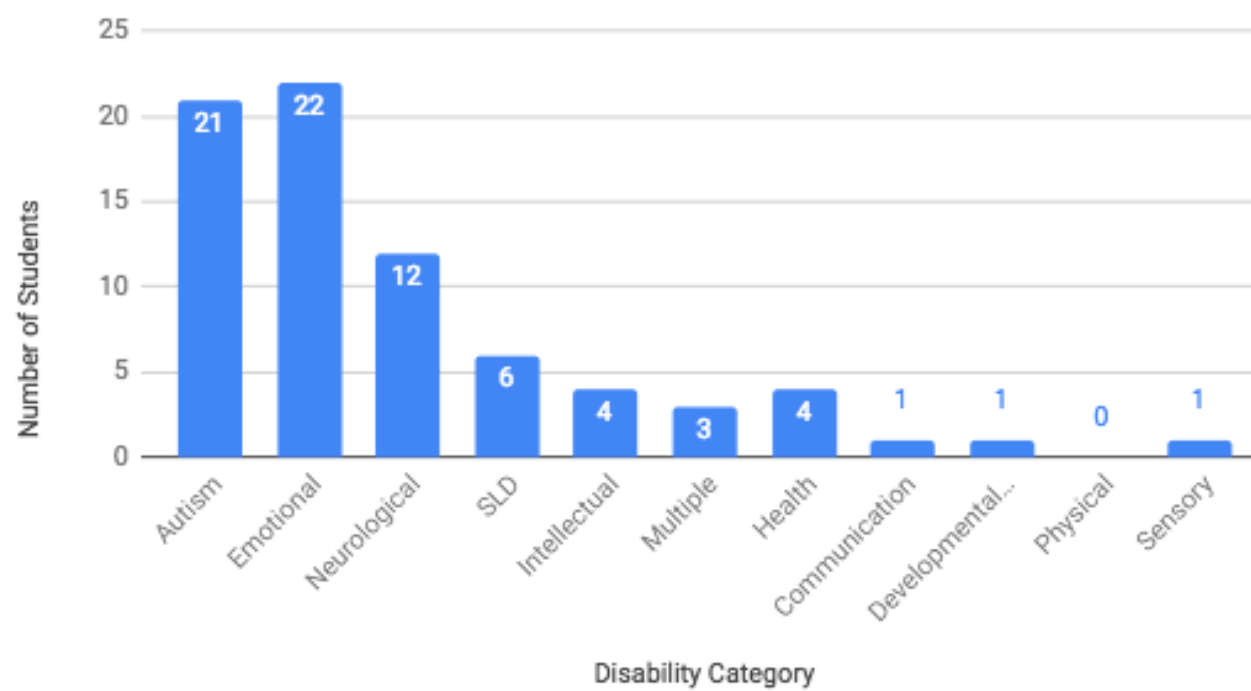




**OOD as a Percentage of Special Education June 2013 - June 2018**



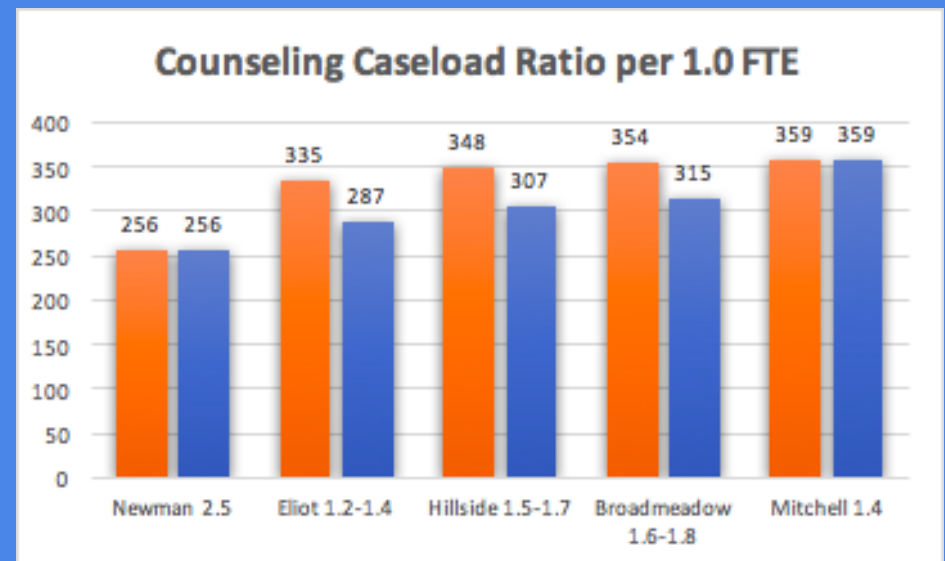
Number of OOD Students per Disability Category



# FY20 Budget Context: Counseling Services

Counseling services are comprehensive and include:

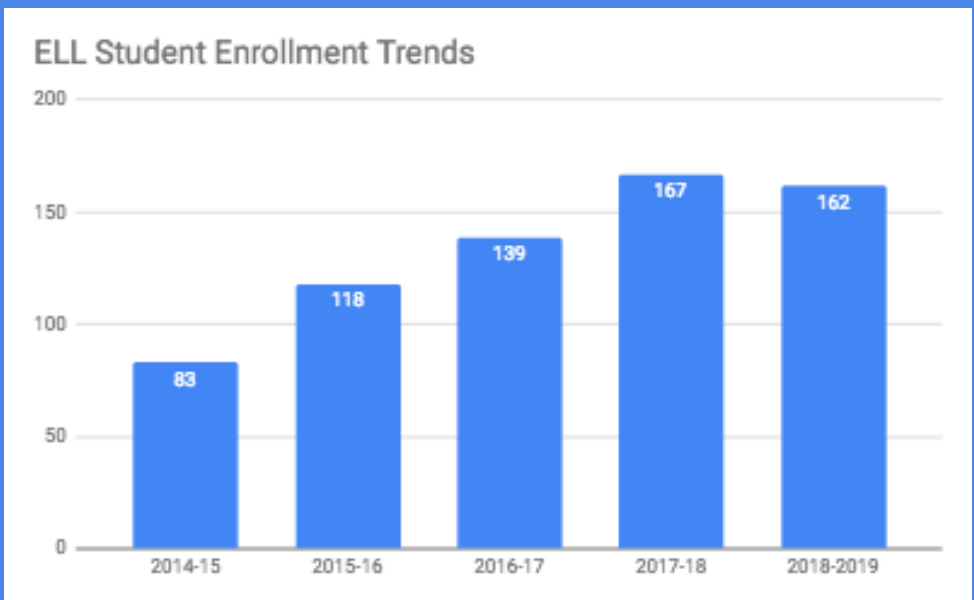
- Social Emotional Learning (SEL) individual and group instruction in/out of classroom
- Individual and group counseling
- Consultation to teachers
- Consultation to families
- Mental Health crisis intervention
- Interface with community agencies
- Liaisons to Walker Group Home
- Individual Education Plans (IEPS) for special education
- 504 Accommodation Plan Coordination and service provision



# FY20 Budget Context: ELL services

Federal and State law require schools to address language barriers that prevent ELs from participating meaningfully in their education

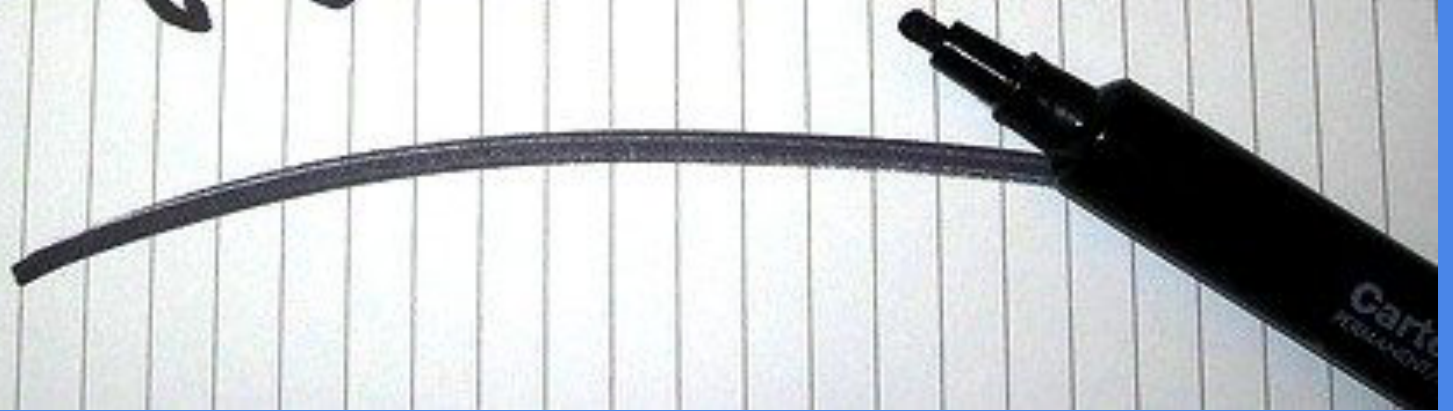
- Formal procedures to Identify and progress monitor ELs
- Screening requirements expanded to preschool and private school students
- Provision of appropriate frequency, duration, & type of EL instruction
- Language translation and assistance for parents when needed



# FY20 Budget Request: Student Services

- 5.8 Special Education Direct Service Staff (special education teachers, teaching assistants, psychologist, grant phase out)
  - .6 Guidance Counselors
  - 2.05 Nursing Staff (transport nurse, grant phase out)  
Total FTE: 8.45
  - .4 SpEd Coordinator Sunita Williams
  - .2 Upgrade ELL Coordinator to Administrative Position
  - .6
  - Funding to meet Out of District tuition obligation  
\$482,412.00
- Total FTE:

Questions?





# NEEDHAM PUBLIC SCHOOLS

OFFICE OF FINANCIAL OPERATIONS  
ANNE GULATI, ASSISTANT SUPERINTENDENT  
1330 HIGHLAND AVENUE \* NEEDHAM, MA 02492  
781-455-0400 EXT. 206 \* 781-455-0417 (FAX)

December 18, 2018

To: Needham School Committee  
From: Anne Gulati, Assistant Superintendent for Finance & Operations  
RE: Endorse Special Town Meeting Warrant Article Request for Mitchell Modular Additional Appropriation

In October, 2018, Special Town Meeting voted to approve \$1,350,000 for Mitchell Modular classroom construction. This appropriation was in addition to a \$210,000 modular design allocation (in May, 2018), for a total modular classroom appropriation of \$1,560,000<sup>1</sup>.

Recently, a single bid was received for the modular units. The bid exceeded cost estimate by approximately \$628,000. The PPBC has indicated that, if the Town is to proceed with the current bid, an additional appropriation of at least \$600,000 will be needed from Special Town Meeting, with an emergency preamble. If approved, a project award could be made in early Spring to maintain a scheduled opening in early Fall of 2019. A budget update from the PPBC is attached as information.

The School Committee is asked to endorse the following placeholder warrant language, with exact amounts and funding sources to be inserted by the Town Manager.

## **ARTICLE X: APPROPRIATE FOR MITCHELL SCHOOL MODULAR CLASSROOMS**

To see if the Town will vote to raise and/or transfer and appropriate the sum of \$XXX for the construction of modular classrooms and any associated work at the Mitchell Elementary School, said sum to be spent under the direction of the Permanent Public Building Committee and Town Manager, and to meet this appropriation that \$XXXXXX be raised and/or transferred from XXX; or take any other action relative thereto.

INSERTED BY: Board of Selectmen  
FINANCE COMMITTEE RECOMMENDS THAT:

ALG/alg  
Attachment(s)

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<sup>1</sup> Town Meeting also appropriated \$50,000 for the Full-Day Kindergarten Feasibility Study, which the PPBC also considers to be a related element of the overall project budget, of \$1,610,000.

**Needham School Committee  
December 18, 2018**

Agenda Item:     **Action**

**Approve FY19 Grant**

Action Recommended:

Upon recommendation of the Superintendent, that the Needham School Committee approves the FY19 grant from the New England Dairy and Food Council as submitted.



## ***NEEDHAM SCHOOL COMMITTEE***

**Agenda Item #:** \_\_\_\_\_

**Date:** September 5, 2018

**Item Title:** **Approve FY 2018/19 Grants**

**Item Description:** The School Department has received a grant from the New England Dairy and Food Council to promote the consumption of hot chocolate milk in the school cafeterias. The grant is for a monetary award of \$347 for event promotion materials and an in-kind equipment award of two hot chocolate milk dispensers valued at \$2,100.

<b>Federal &amp; State Grants:</b>	<b>FY18</b>	<b>AWARD FY19</b>	<b>\$ INC/(DEC) OVR FY18</b>	<b>REVISED FY19</b>	<b>\$ INC/(DEC) OVR FY19</b>
<u><i>Federal Grants</i></u>					
Title IIA/ Improving Educator Quality/ 140	70,803	65,111	(5,692)		
Title I Part A/ 305	106,225	98,197	(8,028)		
Title III Part A/ English Language Acquisition/180	22,107	23,526	1,419		
Title III/ English Language Acquisition (Supplemental)/184	547	-	(547)		
Title IVA Part A/ Student Support & Academic Enrichment / 309	3,147	7,638	4,491		
LEAP Incentive Grant	5,000	-	(5,000)		
SPED Program Improvement/ 274	-	-	-		
SPED Early Childhood/ 262	33,988	35,254	1,266		
SPED Early Childhood Program Improvement/298	-	-	-		
SPED Entitlement/240 (94-142)	1,386,213	1,295,960	(90,253)		
<u><i>State Grants:</i></u>					
Academic Support/632 (MCAS Tutoring)	-	-	-		
Essential School Health	115,899	115,899	0		
METCO/ 317	1,046,266	1,040,262	(6,004)	1,088,335	48,073
Special Education Circuit Breaker *	1,386,213	1,488,797	102,584		
<u><i>Local Grants:</i></u>					
Metrowest Health Foundation SBIRT	-	-	-		
Food Service Fuel to Play	3,484	3,550	66		
<b>NEDFC Hot Chocolate Milk</b>	<b>-</b>	<b>347</b>	<b>347</b>		
NEF Interdisciplinary Initiative	42,864	-	(42,864)		
NEF Innovation Fund	2,155	-	(2,155)		
NEF Fall & Spring Small Grants	57,789	67,553	9,764		
NEF Large Grants	43,135	N/A	TBD		

Circuit Breaker Reimbursement %s: FY18 Final 72.09%; FY19 Preliminary 72%

**Issues:** M.G.L. Chapter 44, Section 53A and School Committee policy #DFC/KH authorize the School Committee to accept any grant of gifts or funds given for educational purposes by the federal or state government, charitable foundations, private corporations, PTCs or an individual. M.G.L. Chapter 44, Section 53A further stipulates that any monies received and accepted by the School Committee may be expended without further appropriation

**Recommendation/Options:** That the School Committee approves the receipt and acceptance of the FY19 Hot Chocolate Milk grant, including monetary award of \$347 and in-kind equipment award, valued at \$2,100.

**School Committee:**                      **Action**

Respectfully Submitted,

*Anne Gulati*

Assistant Superintendent for Finance & Operation

**Needham School Committee**  
**December 18, 2018**

Agenda Item:     **School Committee Comments**

Background Information:

- Members of the School Committee will have an opportunity to report on events, information, and matters of interest not on the agenda.

Members of the School Committee available for comment:

Aaron Pressman, Chair  
Michael Greis, Vice-Chair  
Connie Barr  
Heidi Black  
Andrea Longo Carter  
Susan Neckes  
Matthew Spengler

**Needham School Committee**  
**December 18, 2018**

Agenda Item:     **Information Item**

- Needham Housing Authority Facilities Master Plan  
Draft, September 25, 2018



NEEDHAM HOUSING

FACILITIES MASTER PLAN

SEPTEMBER 25, 2018





*Prepared for the Needham Housing Authority*

## **NEEDHAM HOUSING AUTHORITY**

### **NHA Board of Commissioners:**

Scott Brightman, Chair  
Karen Hughey, Vice Chair  
Reginald Foster, Treasurer  
Peter Pingatore, Commissioner  
Penelope Kirk, Commissioner

### **NHA Management**

Paul Dumouchel, Executive Director  
Gary Kuphal, Facilities and Maintenance Director

## **PROJECT TEAM:**

### **Prime Consultant**

Abacus Architects + Planners  
119 Braintree Street, #318  
Allston, MA 02134  
(617) 562-4446

### **Development Consultant**

Michael Jacobs  
MHJ Associates  
41 Coolidge Street  
Brookline, MA 02446  
617-232-7445

Our thanks to residents of all NHA developments and to the  
Linden Chambers Resident Association

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DRAFT



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# EXECUTIVE SUMMARY AND GUIDE TO THIS FACILITIES MASTER PLAN

This Master Plan identifies the Needham Housing Authority's (NHA) current facility maintenance, improvement and modernization needs. It also explores options for the replacement of some of the NHA's older properties, and assesses new development opportunities on land already owned by the NHA.

This draft of the Master Plan (the External Review Draft) has been issued so that NHA can solicit comments and input from all persons with a stake in low income affordable housing in Needham, or who might be affected by the planning proposals included in this document. Comments can be forwarded in writing to:

NHA Executive Director  
28 Robert Cook Drive  
Needham, MA 02494  
[masterplancomments@needhamhousing.org](mailto:masterplancomments@needhamhousing.org)

Once comments have been received and reviewed, the Needham Housing Authority will publish the final draft of this Master Plan.

## WHY IS A MASTER PLAN NEEDED?

The NHA manages 160 units of state subsidized housing and 176 units of federally subsidized housing occupying over 42 acres in Needham. The 336 NHA housing units are distributed among 114 of structures, ranging from single family residences to multi-unit apartment buildings with 2 additional buildings used for community services and maintenance.

- 60 buildings are more than 70 years old,
- 25 buildings are 55 years old,
- 10 buildings are 36 years old, and
- 20 buildings are 10 years old.

Few of the structures meet contemporary standards for accessibility, sustainability or resident amenities, and most need significant capital funds for improvements and modernization. The 6 Captain Robert Cook Drive buildings have major defects in their exterior wall construction requiring well over \$1,000,000 in immediate repairs if the major water infiltration problems experienced at Seabeds Way – and now repaired – are to be avoided. Additionally, since 2003 the Town of Needham has articulated a goal of redeveloping the Linden Street and Chambers Street properties, perhaps the most prominent of the NHA's dated facilities. The shortage of affordable housing in Needham for seniors has also received attention in the press and the community. All of these needs and conditions take place in a broader local and regional context where there is a severe shortage of housing, especially for low income and very low income residents.

NHA FACILITY MASTER PLAN

EXTERNAL REVIEW DRAFT

## EXECUTIVE SUMMARY

A year ago the NHA did not have a comprehensive inventory of its buildings, nor an assessment of their needs for their repair, improvement and modernization, urgent or otherwise. It did not have a vision for how to create new development or replace existing buildings to meet the needs of the community. This Master Plan is intended to address these issues, paving the way for intelligent planning and decision-making in the months and years ahead.

There is tremendous competition for funding for affordable housing modernization and new construction. This Master Plan also provides an inventory of possible funding sources that could be applied to its facility improvement and development needs, and identifies which sources could be used for which purposes. This information will help the NHA establish priorities and assess which funding sources are most achievable so that urgent facilities needs can be mapped to funding realities.

The Master Plan identifies two promising and feasible modernization projects in the pages which follow, using Department of Housing and Urban Development (HUD) Rental Assistance Demonstration Program (RAD) funds:

1. Exterior envelope replacement at the 6 Capt. Robert Cook buildings as recommended by Russo Barr Associates.
2. Major Modernization of Seabeds Way and Capt. Robert Cook Drive buildings and site incorporating recommendations outlined in Section 5 of this master plan.
3. Major Modernizations of Linden Street and Chambers Street buildings and site incorporating recommendations outlined in Section 5 of this master plan.

The Master Plan assesses what can and cannot be done with respect to new construction and replacement of existing building across the NHA's 42 acres of property. The Master Plan findings are:

1. Redeveloping/replacing Linden/Chambers is very challenging at the current time due to the lack of funding for development with very low income residents and limited rents. Given the changing funding landscape and the age and condition of the buildings we recommend that the NHA continue to monitor funding opportunities and build the case for replacement as outlined in Section 6 of this master plan.
2. A new 61 unit senior apartment building at the Seabeds/Captain Robert Cook site, as outlined in Section 6, is possible given the higher income residents anticipated, but will require significant efforts for planning and applications.

3. Continued replacement of High Rock single family homes with duplexes is also possible, again requiring significant planning and application efforts.

The Findings and Recommendations section of this Master Plan suggests a number of key areas for the Board and executive staff consideration:

- Funding programs change; the NHA should monitor programs that may emerge and have priorities and plans in place to take advantage of them.
- Staffing and Governance will be required if funding is to be pursued.
- Public and Regulatory Engagement is important if plans and applications are to be successful.
- Preserving and Broadening the NHA's Knowledge Base will put the Authority in a position to plan and apply more successfully.
- Planning Initiatives can clarify goals and opportunities that will form the basis for funding applications

## GUIDE TO THIS REPORT

The following is an annotated guide to the remaining sections of this report outlining the key content elements.

### Section 2 Background for This Report:

To meet current the needs of current NHA residents and keep facilities in good repair, to significantly improve the character and quality of its housing, and to add affordable housing to its portfolio, it is helpful to understand the local and regional economic, social and physical context for the NHA's mission and the recommendations in this report. This section provides background information that will be helpful in evaluating the costs and benefits of options that the NHA can pursue.

### Section 3 Description of Existing Developments:

Any repairs beyond the most minimal benefit from existing conditions site plans and plans. More comprehensive improvements that require an architect or engineer's input need scaled plans to begin the design effort. This section includes site plans and floor plans for the entire NHA portfolio prepared by Abacus based on original paper drawings.

The accompanying text provides factual, photographic and subjective evaluations of the buildings and sites suggesting shortcomings that warrant consideration. This information provides a context for considering small repairs and larger changes that may be desired. Plans have also been provided to the NHA in digital form.

**Section 4 Repairs and Improvement Options:**

Buildings and sites require ongoing maintenance and repairs, and HUD and DHCD provide ongoing funding so that this work can take place. NHA personnel understand the work that has recently been done and needs to be done in the foreseeable future. This section documents this information to broaden the understanding of required work, provides an institutional record if there are changes in personnel, and puts individual work items in the context of overall building and site plans. These listings provide a basis for setting priorities.

**Section 5 Major Modernization Options:**

The work and money required to maintain buildings and sites often precludes looking at the broader kinds of improvements that would improve the character, durability and functionality of its development. This section outlines more comprehensive scopes of work that can make substantive improvements in resident quality of life and the character of their communities. Recommendations grow out of existing conditions documentation in Section 3. Illustrations suggest the kind of improvements being recommended.

**Section 6 New Development Options:**

The NHA owns underutilized land that could support the development of new housing. Site plans three dimensional views and the accompanying narrative suggest the kind of development that could be integrated into the surrounding community while meeting the growing need for affordable housing. The work being proposed has minimal impact on NHA residents and abutters, and is designed to meet contemporary standards.

**Section 7: Funding Sources:**

Although the demand for affordable housing funding greatly outstrips resources available, there are opportunities for funding major modernizations and new development that will allow the NHA to expand the benefits it provides its residents, the Needham community, and the region. In this section, funding programs and resources are laid out with an outline of the challenges, risks and rewards associated with each of them, and makes suggestion on how funding sources can be combined to meet needs in a more ambitious way.

**Section 8: Cost Estimates and Pro Formas:**

This section examines the costs and financial structure of proposed new developments to provide a very preliminary outline of the costs and benefits associated with the work recommended in Sections 4, 5, and 6.

**Section 9: Findings and Recommendations:**

In this section, the consultants recommend that the NHA incrementally move forward to pursue a series of possible projects with a variety of funding sources to avail themselves of a full range of opportunities to improve their portfolio. These projects are summarized in narrative form, and build off of the work laid out in previous sections.

This work will require the input of a number of professionals and a sustained outreach effort by the NHA board and staff, but offers very significant rewards. This section also outlines the government staffing and public engagement initiatives needed to move forward.



# NHA FACILITY MASTER PLAN

EXTERNAL REVIEW DRAFT

## BACKGROUND FOR THIS REPORT

### INTRODUCTION

**The NHA's Mission:** The Needham Housing Authority (NHA) was formed during a special meeting of the Needham Board of Selectmen on May 7, 1948. It was organized under the provisions of Massachusetts General Laws, Chapter 121B, as amended by Chapter 574 of the Acts of 1946 and by Chapter 200 of the Acts of 1948. Chapter 121B enables a local housing authority (LHA) to provide housing for low income families, elderly persons and disabled persons, and to engage in redevelopment projects. At the highest level, the Needham Housing Authority's Board and staff define their mission as 1) to be an excellent landlord, and 2) to advocate for more low-income affordable housing units in Needham. To achieve this mission, the NHA must pro-actively look for opportunities to repair and modernize our existing housing stock, as well as investigate possibilities to develop additional low income units.

**NHA Request for Proposals:** Faced with the competing demands that the NHA's five developments make on their limited resources, the Needham Housing Authority issued a Request for Proposals in late Summer, 2017. The RFP was titled "Plan to Achieve Modernization and/or Redevelopment & Obtain Required Funding" – a clear statement of the NHA's goals. The successful responder was the team of Abacus Architects + Planners and Michael Jacobs - MHJ Associates.

**The Consultant Team:** As architects, Abacus has over \$100,000,000 of new and renovated affordable housing completed or under construction, and as planners have done affordable housing master plans for cities and towns throughout the region. Abacus has worked with housing authorities throughout Massachusetts on new development, major modernizations, and repairs and renovations. Mike Jacobs has over 3 decades of experience working with housing authorities and affordable housing developers as a consultant, and is on the Board of the Brookline Housing Authority. Abacus and Jacobs worked together on the development of 61 affordable apartments and community spaces for Jewish Community Housing for the Elderly in Brighton now under construction. The team was retained to provide the full range of expertise – planning, design, funding and approvals that modernization and redevelopment requires.

**The Report:** This report represents the Team's findings and recommendations with input from the Board of Commissioners of the Needham Housing Authority and NHA staff, including Executive Director Paul Dumouchel, Karen Sunnarborg, Needham Community Housing Specialist, Needham Planning Director Lee Newman and other stake holders in the Needham Community. It is intended to lay out a series of options for how the NHA's aspirations for facility modernization and redevelopment can be met: immediately; medium term; and long term. These options are presented as Repairs and Improvements, Major Modernization, and New Development to align with the time frames for funding and the urgency of required work. The report notes costs/benefits, pros/cons, and risks/rewards associated with different allocations of funding and NHA time and effort. Some options may require years of planning effort – while other options are more immediately achievable. The report is intended to address the complexity of how these options may or may not be related so that the Board and staff can make the best possible decisions for the future. By focusing on immediate needs, long term possibilities and the realities of the funding landscape we anticipate that this report will remain a useful document for years to come. Illustrations bring opportunities to life while documentation of existing conditions helps convey the experiences from a resident perspective. The goal is to facilitate the kinds of conversations between the NHA staff, board, and residents, Needham officials and citizens, and local and state funders that are critical to the success of the NHA's mission.

# THE AFFORDABLE HOUSING CHALLENGE

## Challenges and Opportunities:

The Needham Housing Authority, like many Authorities in the Commonwealth, is faced with tremendous challenges and opportunities. On the one hand, their aging portfolio of buildings and sites do not meet contemporary accessibility, apartment size and energy conservation standards, and require ongoing replacement of major assemblies and systems with very limited money for renovation. And on the other hand, the Authority is a major land owner with underutilized properties in its asset base. Like many suburban communities Needham land values are rising at an accelerating rate. Land available for development is rapidly disappearing, and development of affordable housing is particularly challenging.

Forming the background for these contrasting challenges and opportunities is the increasing need for affordable housing in Needham and throughout the region. A series of reports have suggested that the lack of affordable housing is holding back economic development in the region, with many young workers and professionals leaving the region to find housing that will meet their budgets. Many Needham families understand that the town that provides them with so many opportunities may not be affordable for their children, or for the teachers, police, retail workers and service personnel who have always been a fundamental part of the community.

A particular challenge for the Needham Housing Authority is that their mission is to provide housing for the most vulnerable individuals and families. This is typical of housing authorities through the Commonwealth and the country. During the 1950's and 1960's public housing was constructed for returning veterans and retirees who often moved on to better options. Today most housing authorities provide "housing of last resort" - for those with the least resources and the most challenges.

Those earning 80% of area median income (AMI) are generally considered low income. Housing for those between 80% and 100% of AMI is often termed "workforce housing" and might include beginning teachers, and those in manufacturing or service industries who are competing with professionals for a limited supply of housing in desirable communities (like Needham). 50% of AMI is considered very low income, and 30% of AMI is extremely low income. The NHA's focus has been on providing housing for those at 50% and below, which means that rental income and funding are extremely limited.

## The Need for Affordable Housing:

From one perspective, Needham is doing well compared to other communities in the region. Of the 11,047 year round housing units in the town 1,387, or 12.56%, have been determined to be affordable by the Commonwealth of Massachusetts. This is significantly higher than many otherwise comparable municipalities. And on the other hand, this housing does not come close to meeting the real need for affordable housing from both a local and regional perspective.

Many housing authorities focus all of their efforts on maintaining their existing portfolio of housing. Meeting resident, management and facility needs is very demanding. Very few authorities have the resources and expertise found in Boston, Cambridge, or Brookline, to develop new housing to replace existing housing, or add to their portfolio on parking lots or other underutilized parcels.

Community Development Corporations, of which there are over 300 in Massachusetts, have taken the initiative for developing affordable housing. Increasingly, they compete with private developers building market rate housing for open parcels of land. In towns with less than 10% affordable housing Massachusetts General Law Chapter 40B allows developers to override local zoning if they include a certain percentage of affordable units. Needham's 12.56% affordability means that 40B is not a mechanism that developers can utilize to increase density, and their profits, in return for providing affordable housing - reducing the incentive for private entities to meet a broader social need.

40B can still be useful in facilitating affordable housing development in 10%+ towns. A Local Initiative Program (LIP) or "Friendly 40B" proposal allows an affordable housing developer to work with the municipality to override zoning through a Comprehensive Permit that from which a broad range of local constituencies benefit. If the NHA were to develop new housing they would likely use this mechanism.

Given this background, the Needham Housing Authority has chosen to take a proactive stance through the issuance of the Modernization/Redevelopment RFP and the findings and recommendations presented in this report. The NHA already plays a significant role in addressing the need for affordable housing, and may be in a position to increase that role.

### Barriers to Affordable Housing Construction:

**ZONING** Another background reality for this report, and for the housing crisis in the region, is that many or most municipalities have restrictive zoning that makes it difficult to develop the kind and density of housing that is needed to meet the need for affordable housing. Cities and towns want to protect the character of existing neighborhoods to prevent apartments or condominium buildings from being squeezed into communities in inappropriate ways. And at the same time, zoning and community concerns can prevent the development of sensitively designed multi-family housing in appropriate locations.

**COMMUNITY IMPACT** Although NHA owned properties offer potential developable land within their developments with minimal impact on neighbors and the broader community, many neighborhoods and neighbors have a tendency to resist multi-family development in proximity to where they live, and affordable housing is often resisted even more than market rate development. The work presented in this report is intended to illustrate the kind of planning and design that recognizes the character of existing neighborhoods and that can garner public support. As “design guidelines” for possible NHA development it can help structure productive planning efforts in the future.

**FAMILY VS. SENIOR HOUSING** Early design explorations looked at a variety of parcels in Needham that might be available for development, and family housing in addition to senior housing. Because of the high cost and level of competition for buildable sites, as well as the availability of under-utilized NHA owned land, the report only considered development on NHA owned land. New senior housing has the potential to allow “over housed” seniors to move out of two, three and four bedroom houses, apartments, and condos, making them available for families.

### Setting a Direction for Repairs and Modernization:

The shortage of affordable housing in Needham makes the maintenance of existing housing all that much more important. Funding for maintenance is very limited. NHA has used that funding effectively so that its apartments are all in reasonable condition. Severe weather related conditions in 2015 at the Seabeds Way buildings that threatened livability were addressed with emergency funding (see the next section) but such funds are generally not available for routine upgrades – as important as they might be. This report lays out funding options for renovation, as well as more significant modernizations that will not only maintain the existing buildings, but allow them to approach contemporary standards for accessibility and livability. Keeping existing NHA buildings and sites in good condition is absolutely essential to meeting Needham’s need for high quality senior and family housing.

### Redevelopment Opportunities:

The five NHA developments are different not only in their funding streams (Linden and Chambers are State funded, Captain Robert Cook, Seabeds and High Rock are Federally funded) but in their future viability. It is anticipated that Captain Robert Cook and Seabeds, with appropriate maintenance, will continue to serve the NHA and residents for 20 years or more. (This maintenance includes envelope improvements to avoid the kinds of problems experienced at Seabeds in 2015.) Although the facilities do not meet all contemporary standards their unit sizes and overall design and construction are not out of line with what is being built today.

Linden and Chambers, perhaps because of their prominent sites, or perhaps because of appearances that are often associated with public housing, are viewed negatively by many in the community and have been suggested for redevelopment. The studio apartments are relatively small and accessibility requirements cannot easily be met. Although Linden and Chambers may also have a 20 year or more lifespan, and have been well maintained, these perceptions, and the underutilized NHA owned land nearby, suggest that replacement is an option to be explored.

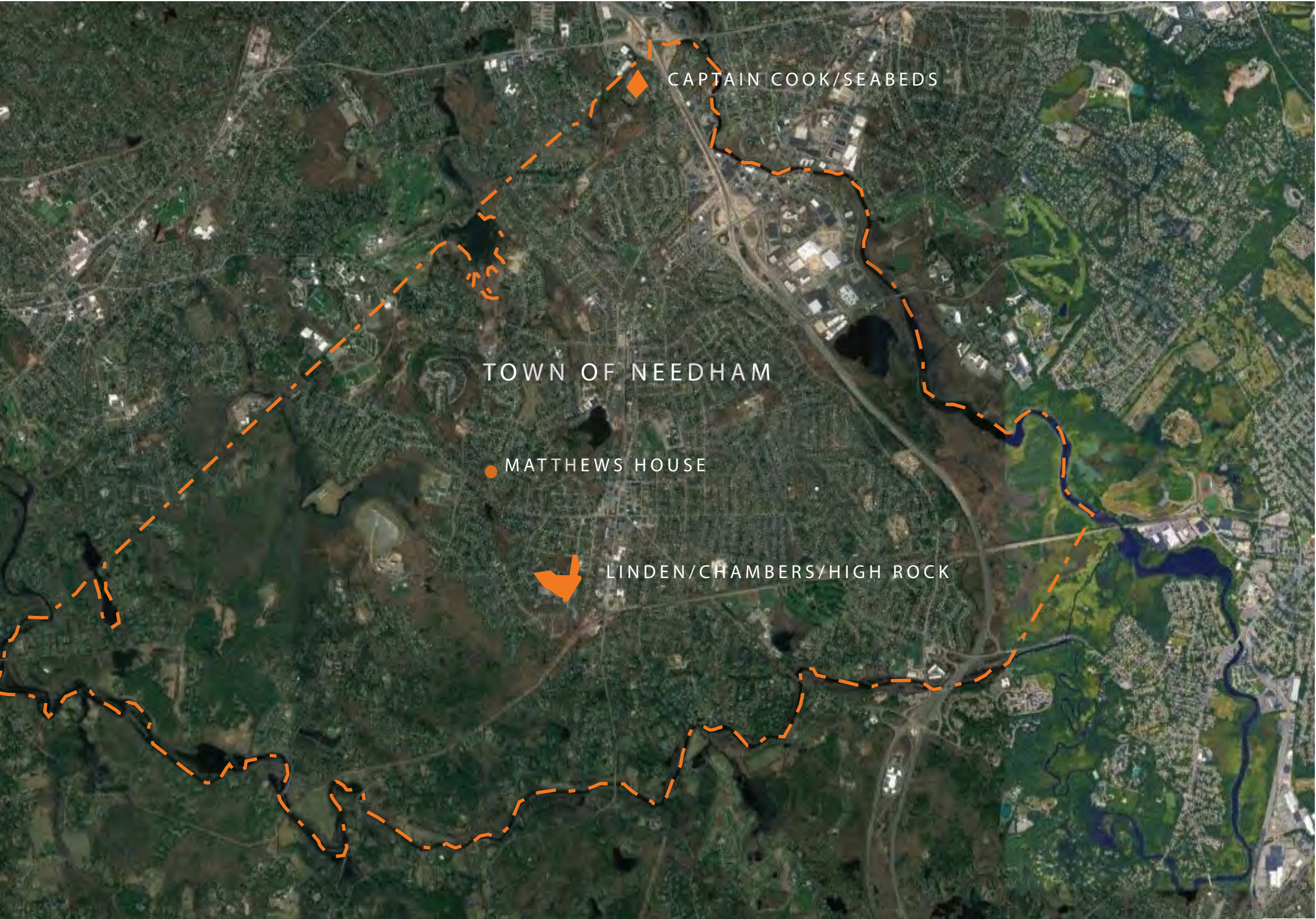
In the work that follows we have assumed that replacement of Captain Robert Cook and Seabeds by denser development should not be considered, especially since there is developable land that could accommodate denser development between them. Because of the potential interest of developers in the prominent Linden and Chambers properties, and underutilized NHA land that could accommodate denser development adjacent to them, the replacement of these developments with higher quality and higher income housing is considered.

This report does not presuppose that such new development will take place. Additionally, repairs, renovations, and new development options on NHA properties are not limited to the design solutions provided in this report.

20 of the original High Rock single family homes have been recently replaced with duplex homes as an “as-of-right” redevelopment within existing zoning. For the 60 remaining single-family units (which are 70 years old), seeking funding for additional replacement is recommended in the report. High Rock lots can also be incorporated into a redevelopment of the adjacent Chambers Street site by combining these NHA owned properties.



# NHA DEVELOPMENTS IN CONTEXT



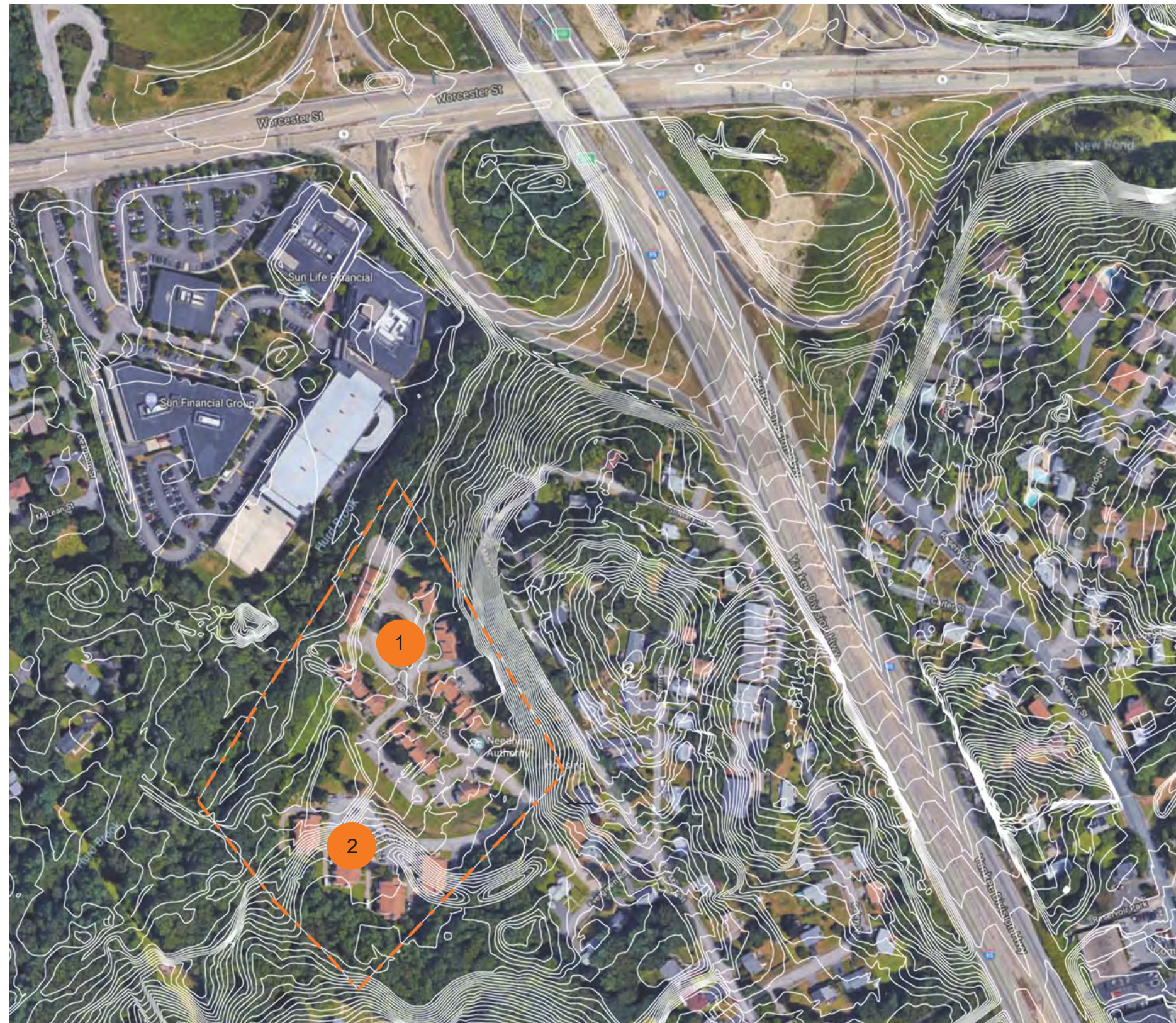
The five NHA developments are clustered into two areas; one at the very north end of the town, the other towards the south end. Like many housing authority developments throughout the Commonwealth they are on properties cut off from the center of town by topography, highways or railroad tracks.

The Captain Robert Cook Drive and Seabeds Way developments, built in the early 1980's, are likely to remain relatively isolated because of surrounding wetlands and limited access to streets and highways. They are relatively far from retail and other community amenities in a secluded and relatively attractive enclave.

The Linden Street and Chambers Street developments, built many years earlier, are across from a new school and closer to retail and services, although railroad tracks prevent easy access to them. They have a relatively large frontage on well traveled Linden Street and back up to wetlands on the opposite side. High Rock is adjacent to Linden and Chambers but is very different in character. The development is composed of familiar, if small, single family homes built in the late 1940s and early 1950s on relatively small 10,000 SF lots with significant ledge and sloping terrain. 20 of the single family homes were replaced with new duplexes a decade ago.

All of the NHA properties, with the exception of High Rock, are multi-unit buildings and have more units per acre than most of Needham. They are all one and two story –like most neighborhoods in town – in recognition of the neighborhood contexts.





## CAPTAIN ROBERT COOK DRIVE / SEABEDS WAY DEVELOPMENT CLUSTER

The Captain Robert Cook Drive and Seabeds Way developments occupy adjacent sites which appears to be on a single property. They each have their own distinct architectural character, have separate entry drives, and serve different populations (Seabeds Way consists of one bedroom apartments for seniors, Captain Robert Cook consists of townhouses for families). They are separated by a significant change in grade and an earthen berm running between them.

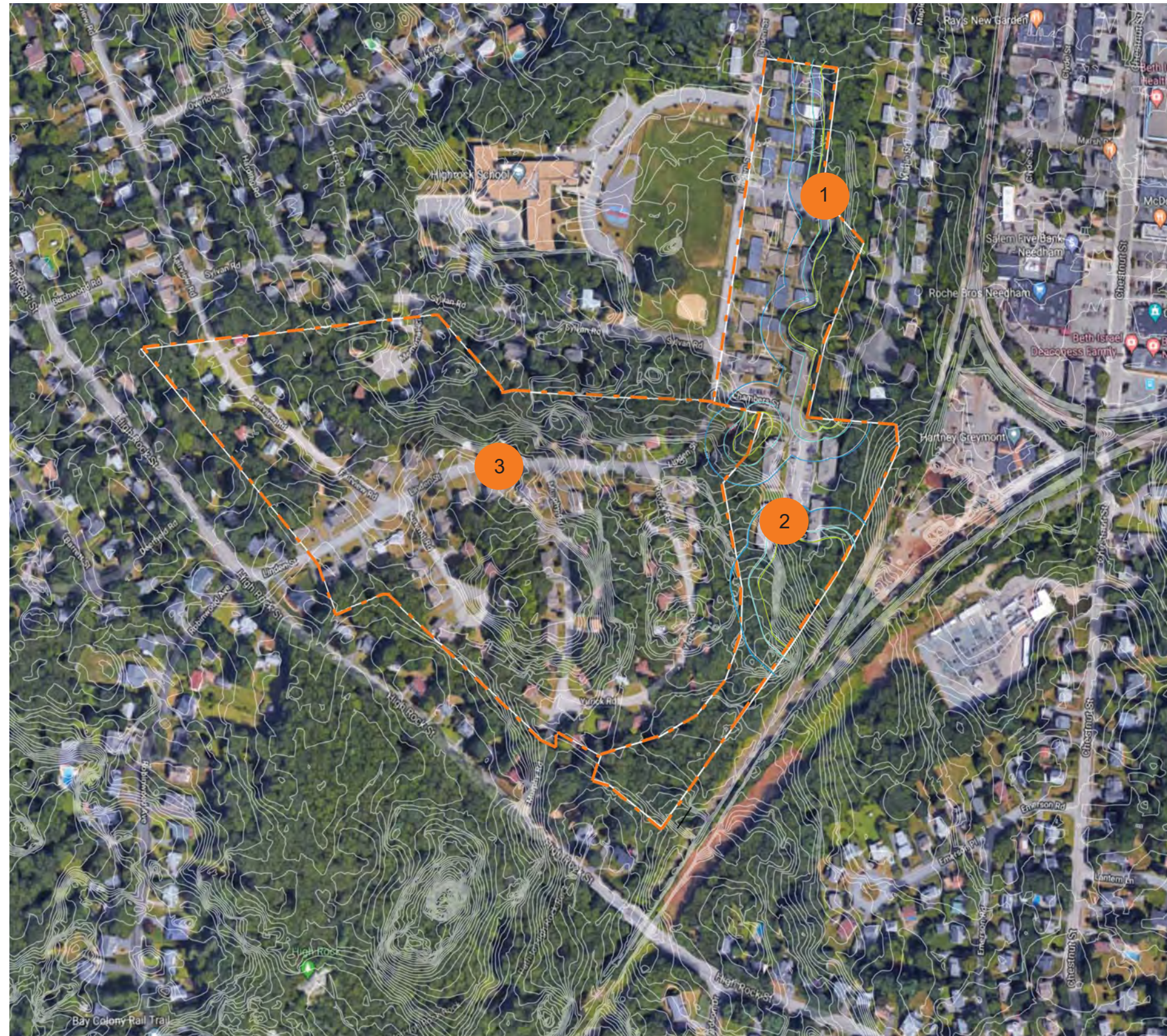
Nevertheless, Cook and Seabeds are visually and spatially connected by the open space between them, and the dense tree coverage that surrounds them on all sides. The topography, tree coverage and limited access highways buffer this area from virtually everything else around it.

Improvements for the two developments have been on separate tracks - primarily because of the emergency envelope reconstruction at Seabeds in 2015 and Captain Robert Cook's remaining need for similar work. Other needs - updated mechanical systems and kitchen and bath replacements - are similar at the two developments.

Between the two developments where the berm currently rises there is the opportunity for major development on underutilized land. The steep topography in other areas limits where redevelopment could take place to this central area. The surrounding trees limit the impact on adjacent neighborhoods.

**1-Captain Robert Cook Drive Development**  
**2-Seabeds Way Development**





## LINDEN STREET / CHAMBERS STREET / HIGH ROCK DEVELOPMENT CLUSTER

Although Linden Street, Chambers Street and High Rock have very different characters, have very distinct access points, are spatially quite separate, and are generally perceived to be quite independent, they are on adjacent sites that together form a very significant piece of property.

Improvements for each of the three developments could be funded independently in consideration of their individual needs. Linden Street and Chambers Street are composed entirely of quite small studio apartments for similar populations and require similar improvement, but have very different building organizations. High Rock, with its primarily single family homes on individual lots, invites house by house improvements, continuation of the replacement of single family homes with duplexes, or aggregation of lots for denser development on the High Rock properties.

Given the proximity of the three developments it is also worth considering their futures together. Linden Street and Chambers Street are served by a community center between them and have interconnected pedestrian pathways. Wetlands and topography run by and through all three, limiting where redevelopment can effectively take place. Major redevelopment could take place in the underutilized areas between the developments to minimize the impact of construction on existing occupied housing and take advantage of the flattest and driest areas.

Portions of these sites are quite isolated from adjacent neighborhoods suggesting less community opposition to major redevelopment than on more prominent areas on these or other sites.

- 1-Linden Street Development**
- 2-Chambers Street Development**
- 3-High Rock Development**



# DESCRIPTIONS OF EXISTING DEVELOPMENTS

## INTRODUCTION

In order to properly evaluate the opportunities to repair, modernize or redevelop the NHA properties presented in later sections, it is important to understand the existing conditions of all developments involved. This section presents the existing conditions of the NHA's five properties.

The plans that follow were prepared by Abacus Architects + Planners based on the sources noted below. Previous to the preparation of these plans, only the original construction drawings were available, on paper and in relatively poor condition. The CAD files for these plans have been given to the NHA and will be a valuable asset to the Authority and their consultants if significant planning and design work is contemplated. Only architectural plans have been redrawn in digital form. Relatively complete sets of drawings including engineering drawings, elevation and details are available on paper. These plans have not been field verified to confirm that what is shown was built or incorporates changes made over the decades, but in general they appear to conform to what is seen on site. Original construction topographic site plan information was augmented with information from MassGIS on-line.

### **Captain Robert Cook Drive Family Housing: rental**

- Turnkey Housing Developer: DiMeo Construction Company.
- Architect: Chisholm Washington Associates, Inc.
- Plan Date: September 15, 1981

### **Seabeds Way Senior One Bedroom Apartments - rental**

- Turnkey Housing Developer: DiMeo Construction Company.
- Architect: Chisholm Washington Associates, Inc.
- Plan Date: September 15, 1981

### **Linden Street Studio Apartments - rental**

- Developer: Massachusetts Department of Community Affairs
- Architect: William Hoskins Brown Associates, Inc.
- Plan Date: November 12, 1970

### **Chambers Street Studio Apartments- rental**

- Developer: Massachusetts Department of Community Affairs
- Architect: William Hoskins Brown Associates, Inc.
- Plan Date: October 27, 1969

### **High Rock Single Family Homes Original Construction - rental**

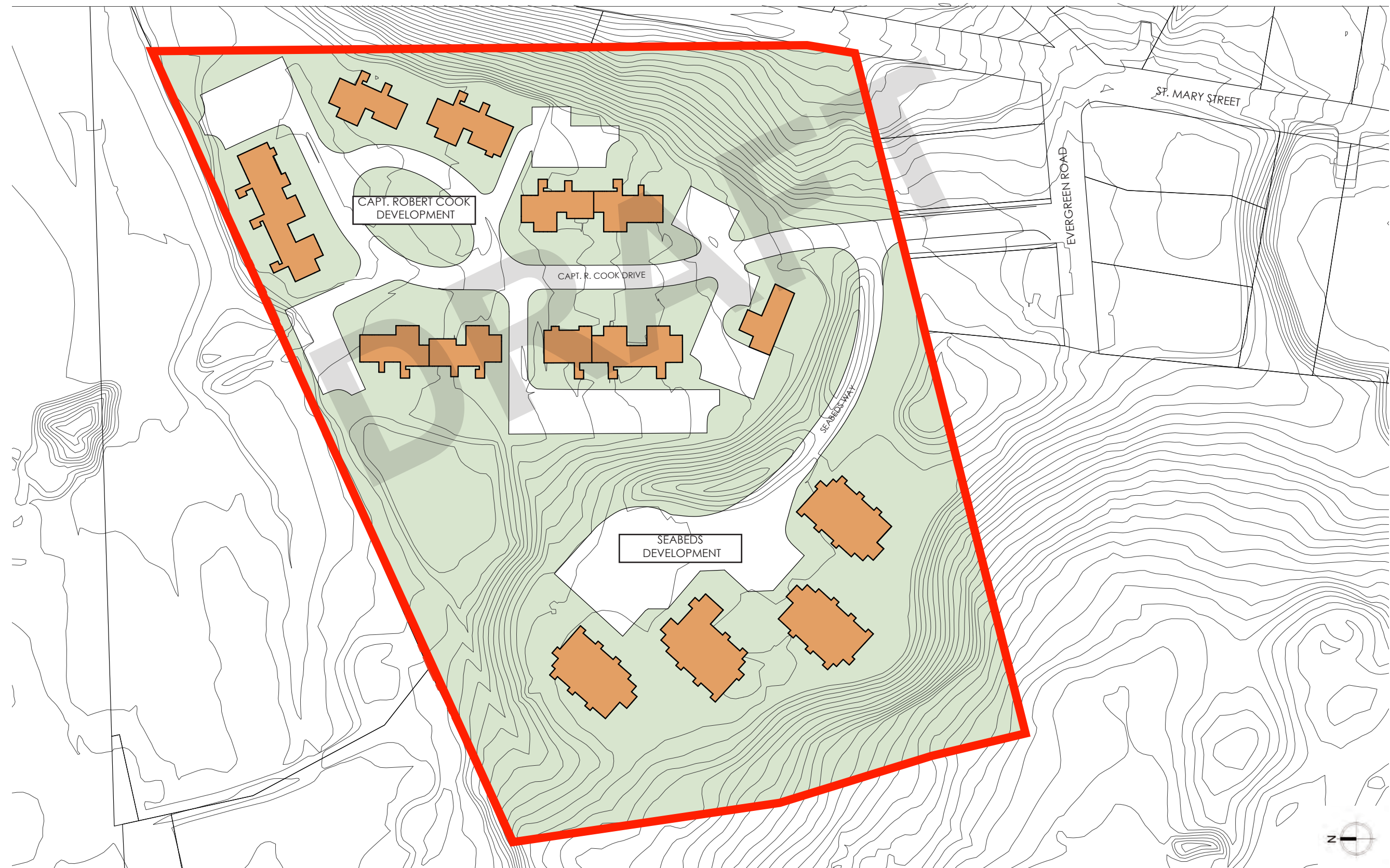
- Developer: Unknown
- Architect: Unknown. No Plans available
- Date: Unknown Post WW II Veterans Housing

### **High Rock - Replacement of 20 single family homes with duplexes (one rental one ownership)**

- Developer: Needham Housing Authority
- Architect: Blackstone Block Architects
- Date: 2007-2009

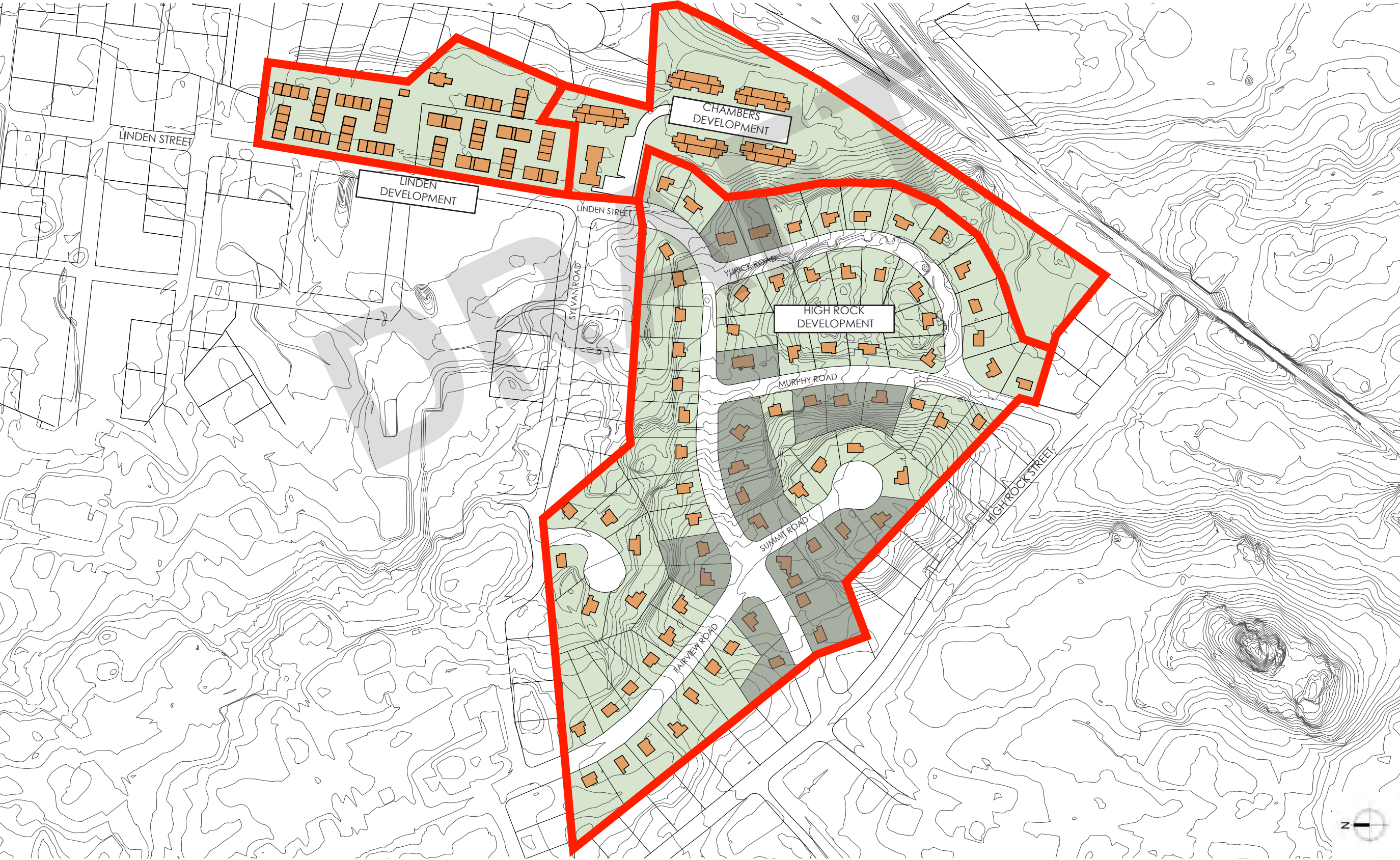
### **Matthews House**

# OVERALL TOPOGRAPHIC SITE PLAN - CAPT. ROBERT COOK AND SEABEDS





OVERALL TOPOGRAPHIC SITE PLAN - LINDEN, CHAMBERS AND HIGH ROCK



# DEVELOPMENT NARRATIVE - CAPT. COOK DRIVE

## Development Profile:

Financing:	Federal
Zoning:	Single Family Residence B; Chapter 40B permitting
Density:	5.7 Acres site: 5.3 units per acre
Site:	Adequate parking and open space, cul-de-sac, sloping topography
Residents:	Families
Buildings:	6 buildings; side by side one story and two story apartments
Construction:	Wood framed walls on slab on grade; fiber cement siding, batt insul.
Apartments:	30 apartments: 5 two-bedroom; 20 three-bedroom; 5 four-bedroom
Access:	Site mostly accessible - not all curb cuts compliant; 1st floors visitable
Common:	Playground area, NHA offices
Amenities:	Yards and rear terraces for each apartment
Parking:	In scattered lots around site more than adequate

## Development History:

Built in 1982, apartments have been renovated on a one-off basis but most need substantial improvements. Roofs were replaced 20 years ago. Siding, windows, doors, gypsum sheathing, heating system and interior finishes are all original except for the few that have been renovated. Repairs of construction flaws similar to the flaws that led to ice damming and water infiltration at Seabeds are anticipated to cost \$900,000 in a report issued by Russo Barr Associates.

## Site Layout:

Captain Robert Cook Drive is accessed from Evergreen Road, a short, dead end street off of St. Mary's Street, which is itself a fairly quiet street. The entire neighborhood is relatively cut off from the remainder of Needham and Wellesley by Interstate 95 to the east, Route 9 to the north and Hurd Brook to the west and south. Along with the NHA Seabeds development it is almost completely surrounded by forest. The Sun Life Financial Parking garage is about 200 feet to the north; but virtually invisible through the trees.

Two relatively small houses flank Captain Robert Cook Drive just outside the NHA property line but are behind a fairly dense stand of trees. A one story NHA office building is located just after the spur road to Seabeds. To the southwest a linear berm separates the Captain Robert Cook development from the Seabeds development – rising up about 18 feet, and then down 8 feet to the elevated level of Seabeds.

Six buildings line the Drive – four larger buildings and two smaller building. The Drive ends in a cul-de-sac with a playground in the middle. All 30 apartments are built side by side with a fire wall between them; some are one story and others two story. Buildings all have front and back yards. Front yards are continuous without fences defining ownership or providing privacy. Front doors are generally at grade. Back yards have projecting exterior storage areas and mechanical rooms that help define private terraces and are often close to the rising landscape adjacent to them.

The curving drive and trees provide a pleasant quality. Although there are benches scattered throughout the site and a playground, they have not been developed to provide gathering places that could help facilitate a sense of community for families. Curbs and sidewalks are provided along Captain Robert Cook Drive. Dumpsters are located in several locations throughout the development and are not screened from view. Mailboxes are at a single ganged pedestal just past the offices. Although the site layout is very different from most of Needham where most of the housing is single or two family, the development is not visible from public ways and is never seen in contrast with smaller scale housing.

Five parking lots, some larger, some smaller, are tucked in next to or behind buildings, partially screened from view by the buildings. Another small parking lot is associated with the NHA office building. Overall, there appears to be a lot of paving on site – perhaps more than necessary. Paving is in poor condition throughout the development as are some of the curbs and curb cuts.

## Building Character and Layout:

Buildings alternate between one and two story and step forward and back, giving each unit a sense of individuality within each of the 6 buildings. Front doors to each townhouse, each with its own walk, reinforces the sense of ownership. Eaves and ridges run parallel the front walls of each building giving the buildings a 1982 version of contemporary – while recognizing a simple pitched roofed New England vernacular. Chimneys for the heating systems in each unit animate the massing at the rear, along with projecting exterior storage. Siding, roofing, soffits, doors and windows are in relatively poor condition and near the end of their useful lives. Given the construction flaws noted and the serious ice dam and water infiltration problems experienced by Seabeds in 2015, a complete envelope improvement project should be funded as soon as possible. This priority recommendation is noted in later sections of this report.



### Apartment Layouts:

There are 6 different apartment layouts:

Two bedrooms on one floor with one bathroom - 750 SF  
Two bedrooms on two floors with one bathroom - 810 SF  
Three bedrooms on one floor with one bathroom - 900 SF  
Three bedrooms on two floors with 1.5 bathrooms - 960 SF  
Four bedrooms on one floor with 1.5 bathrooms - 1,220 SF  
Four bedrooms on two floors with 2 bathrooms - 1,280 SF

The differences in size and configuration animate the massing of the buildings and give each unit a sense of individuality. The buildings and apartments are clustered around the drive and playground to suggest a typical suburban neighborhood with individual entries, yards and terraces accessed off the street. The planning and design suggests a sense of individual “ownership” of each apartment - a reaction against the institutional character of public housing design and planning from the 1950’s and 1960’s.

Three and four bedroom flats have an oversized bathroom to address accessibility requirements. Apartment sizes are relatively small by contemporary standards:

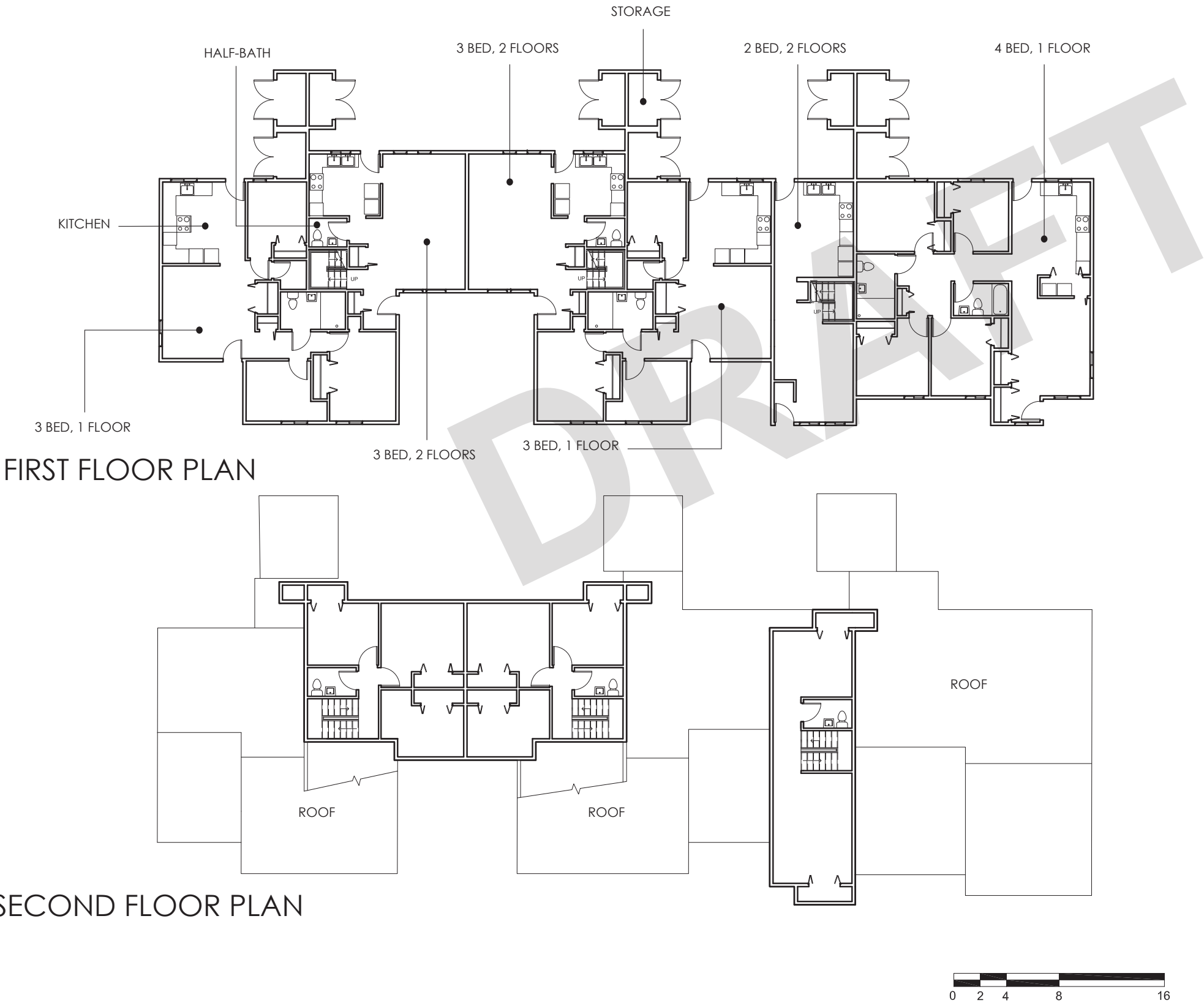
Kitchens and bedroom sizes are adequate but living/dining room spaces are relatively small in relation to the needs of family house. All apartments have a front and back doors. The projecting outdoor storage rooms helps define rear terraces with storage and mechanical rooms between pairs of apartments.



# TOPOGRAPHIC SITE PLAN - CAPT. ROBERT COOK DRIVE DEVELOPMENT



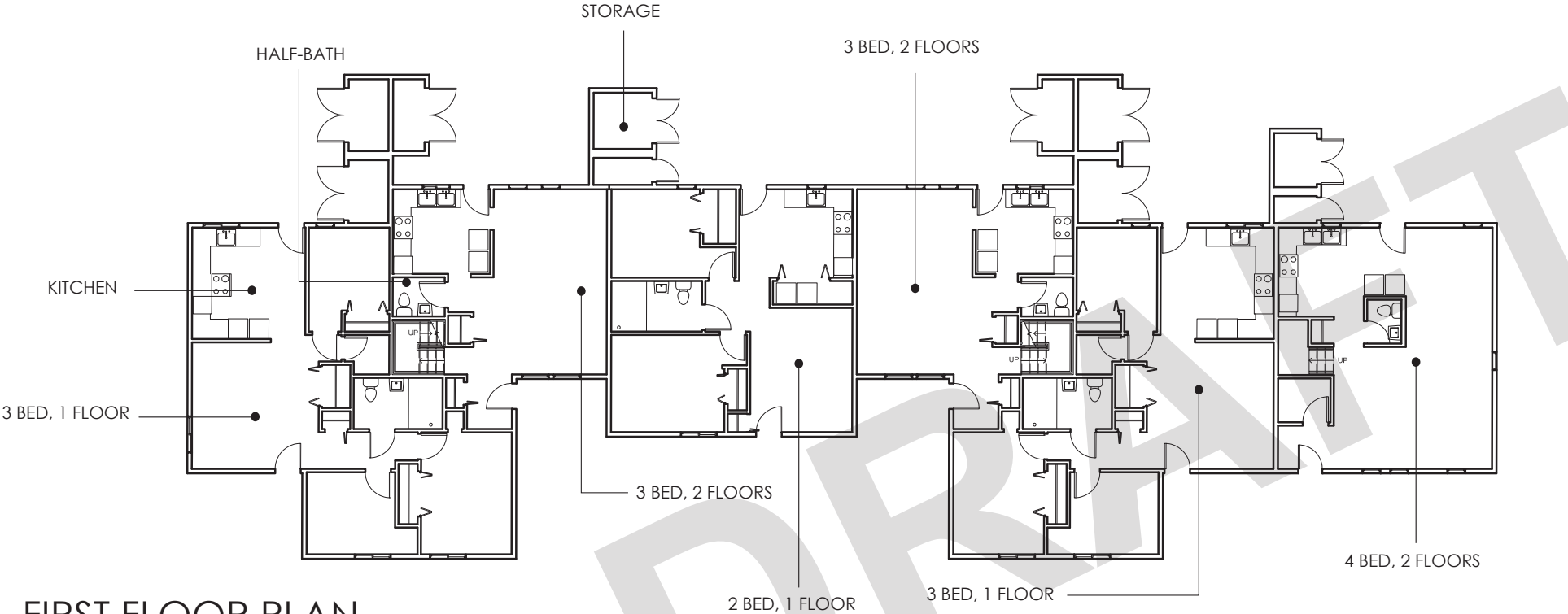
BUILDING PLANS - CAPT. ROBERT COOK DRIVE BUILDING TYPE A



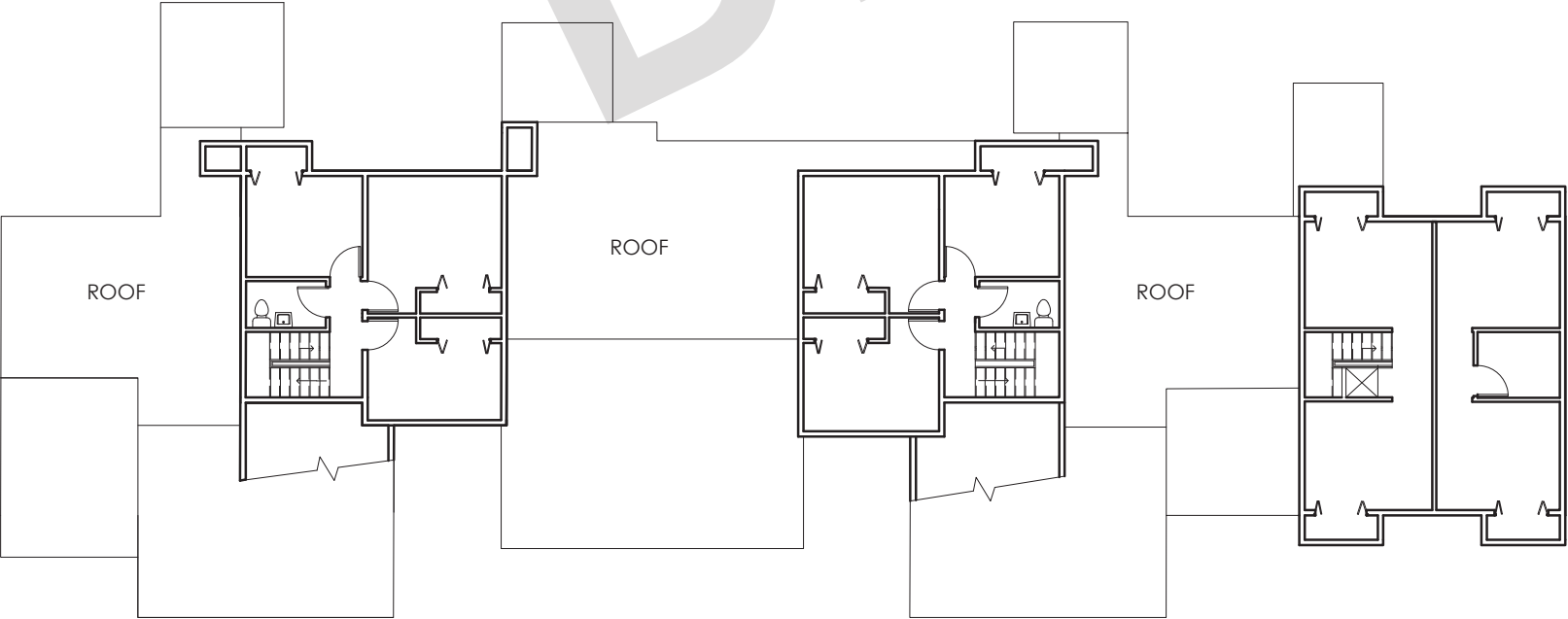
<b>BUILDING:</b>	Captain Robert Cook Drive Unit Building Type A - 6 Units
<b>UNIT TYPES:</b>	1 four-bedroom apts on 1 floor 2 three-bedroom apts on 1floor 2 three-bedroom apts on 2 floors 1 two-bedroom apts on 2 floors
<b>NO. OF FLOORS:</b>	One Floor - partial second floor for two story apartments;
<b>NO. OF BUILDINGS:</b>	2 buildings out of 6 this configuration
<b>COMMON SPACE:</b>	None
<b>ENTRIES:</b>	Individual front and back entries
<b>WINDOWS:</b>	Double hung windows throughout
<b>LIVING ROOM:</b>	Small living room
<b>BATHROOM:</b>	4 bedroom 1 Floor: 2 bathrooms 3 bedroom 1 floor: 1 bathrooms 3 bedroom 2 Floor: 1.5 bathrooms; 2 bedroom on 2 Floors: 1 bathroom
<b>KITCHEN:</b>	U or L-shaped eat-in kitchen
<b>STORAGE:</b>	Coat, broom and bedroom closets
<b>EXTERIOR:</b>	Rear terraces with exterior storage
<b>CONSTRUCTION:</b>	2X4 wd frame with fiber cement sid- ing, fiberglass insul; slab on grade
<b>ACCESSIBILITY:</b>	One story apartments are accessi- ble from grade: Oversize bathrooms in one story apts approach MAAB requirements. Doors & Kitchens not MAAB compliant.
<b>UTILITY ROOMS:</b>	One utility room for two apartments
<b>LAUNDRY:</b>	Hook-ups in each apartment
<b>HVAC:</b>	Gas fire boiler; fin tube radiators



BUILDING PLANS - CAPT. ROBERT COOK DRIVE BUILDING TYPE B



FIRST FLOOR PLAN

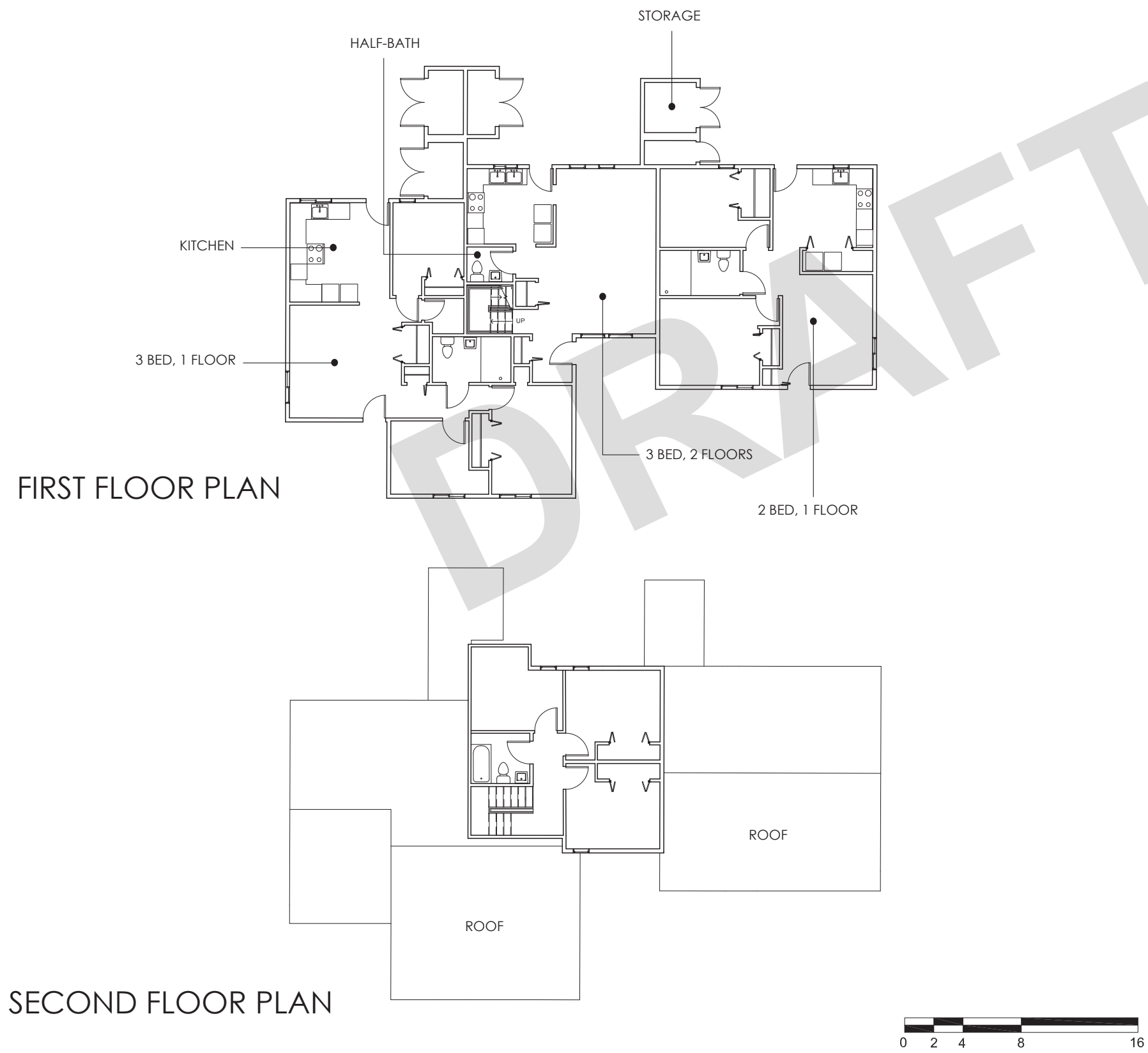


SECOND FLOOR PLAN



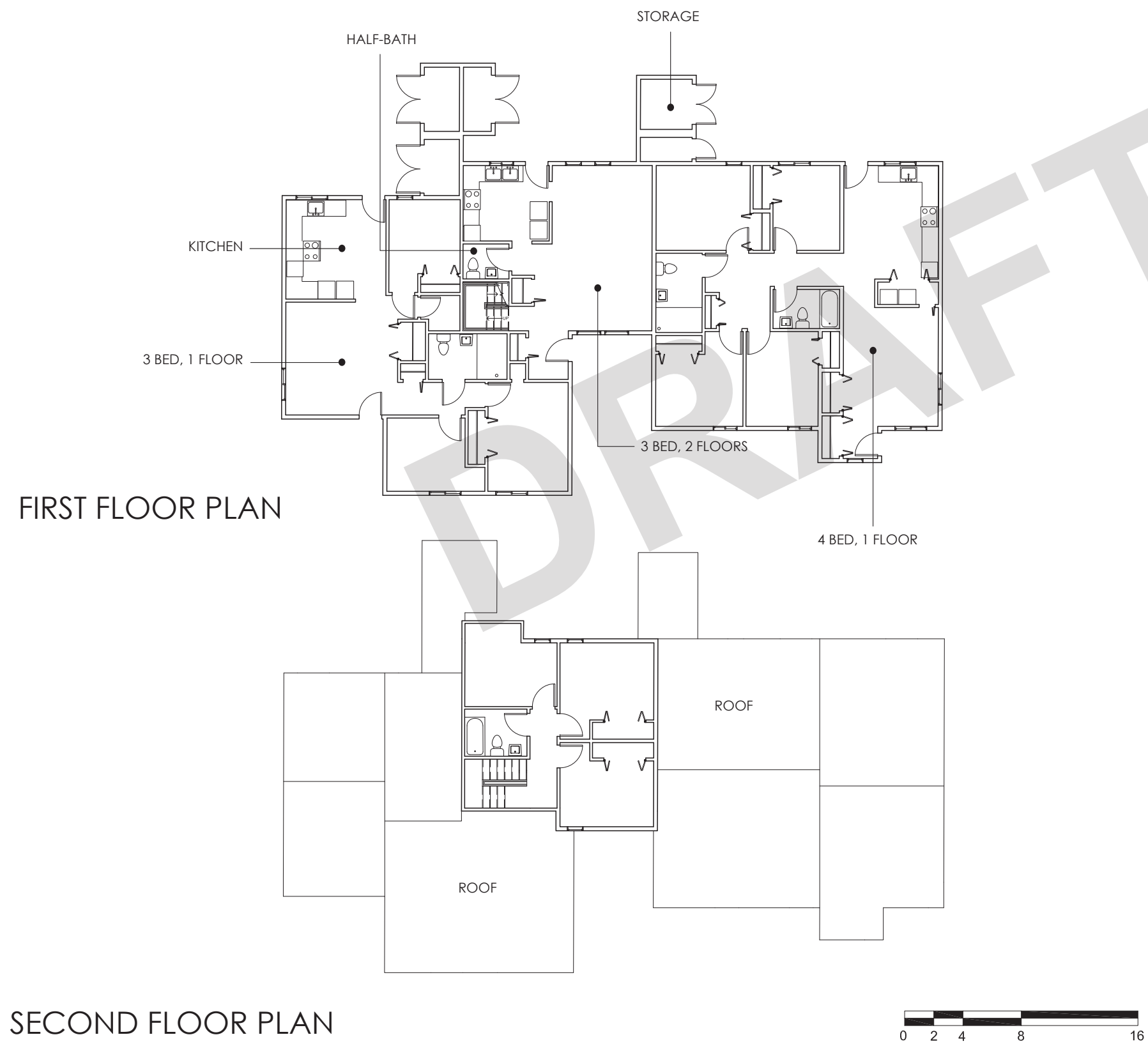
BUILDING:	Captain Robert Cook Drive Unit Type B- 6 units
UNIT TYPES:	2 three bedroom on1 floor 1 two bedroom on1 floor 2 three bedroom on 2 floor 1 four bedroom on 2 floors
NO. OF FLOORS:	One Floor - partial second floor for two story apartments;
NO. OF BUILDINGS:	2 buildings out of 6 this configuration
COMMON SPACE:	None
ENTRIES:	Individual front and back entries
WINDOWS:	Double hung windows throughout
LIVING ROOM:	Small living room
BATHROOM:	3 bedroom 1 floor: 1 bathroom 2 bedroom 1 floor: 1 bathrooms 3 bedroom 2 floor: 1.5 bathrooms 4 bedroom 2 floors: 1.5 bathrooms
KITCHEN:	U or L-shaped eat-in kitchen
STORAGE:	Coat, broom and bedroom closets
EXTERIOR:	Rear terraces with exterior storage
CONSTRUCTION:	2X4 wd frame with fiber cement siding, fiberglass insul; slab on grade
ACCESSIBILITY:	One story apartments are accessible from grade: Oversize bathrooms in one story apts approach MAAB requirements. Doors & Kitchens not MAAB compliant.
UTILITY ROOMS:	One utility room for two apartments
LAUNDRY:	Hook-ups in each apartment
HVAC:	Gas fire boiler; fin tube radiators

BUILDING PLANS - CAPT. ROBERT COOK DRIVE BUILDING TYPE C



<b>BUILDING:</b>	Captain Robert Cook Drive Unit Type - 3 units
<b>UNIT TYPES:</b>	1 three bedroom on 1 floor 1 two bedroom on 1 floor 1 three bedroom on 2 floors
<b>NO. OF FLOORS:</b>	One Floor - partial second floor for two story apartments;
<b>NO. OF BUILDINGS:</b>	1 building out of 6 this configuration
<b>COMMON SPACE:</b>	None
<b>ENTRIES:</b>	Individual front and back entries
<b>WINDOWS:</b>	Double hung windows throughout
<b>LIVING ROOM:</b>	Small living room
<b>BATHROOM:</b>	3 Bedroom 1 floor - 1 bathroom 2 bedroom 1 floor - 1 bathroom 3 bedroom 2 floor - 1.5 bathrooms
<b>KITCHEN:</b>	U or L-shaped eat-in kitchen
<b>STORAGE:</b>	Coat, broom and bedroom closets
<b>EXTERIOR:</b>	Rear terraces with exterior storage
<b>CONSTRUCTION:</b>	2X4 wood frame w/ fiber cement siding, fiberglass insul; slab on grade
<b>ACCESSIBILITY:</b>	Flats are accessible from grade. Oversize bathrooms in one story apts approach MAAB requ. Doors & Kitchens not MAAB compliant.
<b>UTILITY ROOMS:</b>	One utility room for two apartments
<b>LAUNDRY:</b>	Hook-ups in each apartment
<b>HVAC:</b>	Gas fire boiler; fin tube radiators

BUILDING PLANS - CAPT. COOK DRIVE BUILDING TYPE D



<b>BUILDING:</b>	Captain Robert Cook Drive Unit Type D - 3 units total
<b>UNIT TYPES:</b>	1 three bedroom on 1 floor 1 four bedroom on 1 floor 1 three bedroom on two floors
<b>NO. OF FLOORS:</b>	One Floor - partial second floor for two story apartments;
<b>NO. OF BUILDINGS:</b>	1 building out of 6 this configuration
<b>COMMON SPACE:</b>	None
<b>ENTRIES:</b>	Individual front and back entries
<b>WINDOWS:</b>	Double hung windows throughout
<b>LIVING ROOM:</b>	Small living room
<b>BATHROOM:</b>	3 bedroom 1 floor: 1 bathroom 4 bedroom 1 floor: 2 bathrooms 3 bedroom 2 floors: 1.5 bathrooms
<b>KITCHEN:</b>	U or L-shaped eat-in kitchen
<b>STORAGE:</b>	Coat, broom and bedroom closets
<b>EXTERIOR:</b>	Individual walks and rear terraces with exterior storage
<b>CONSTRUCTION:</b>	2X4 wd frame with fiber cement sid- ing, fiberglass insul; slab on grade
<b>ACCESSIBILITY:</b>	One story apartments are accessi- ble from grade. Oversize bathrooms in one story apts approach MAAB requ. Doors & Kitchens not MAAB compliant.
<b>UTILITY ROOMS:</b>	One utility room for two apartments
<b>LAUNDRY:</b>	Hook-ups in each apartment
<b>HVAC:</b>	Gas fire boiler; fin tube radiators



EXISTING CONDITIONS IN PICTURES - CAPT. COOK DRIVE



1. Captain Robert Cook and Seabeds are entered off of St. Mary Street, to Evergreen Road and then Captain Robert Cook Drive. Evergreen and Cook are quiet tree lined streets flanked by mid-market houses and are not through streets. The area is relatively isolated from the surrounding town by interstate 95, Route 9 and Hurd Brook.



2. The NHA office is at the entry to Captain Robert Cook. A spur road rises up on the left to Seabeds, with a berm separating the two developments. The surrounding landscape is relatively open with trees beyond the developments in all directions.



3. The open landscape is not unattractive, but offers little privacy to the fronts of the houses, or a clear definition of public, semi-public, semi-private and private outdoor space. Benches and mailboxes do not create a pedestrian zone around them that could become a center of community life.



4. Curbs, sidewalks and streets are in relatively poor condition and do not adhere to all accessibility requirements. Most areas do have asphalt sidewalks adjacent to the street, acknowledging the importance of pedestrian safety for family housing.



5. Trash is accommodated in dumpsters in the corners of the parking lots, which are scattered throughout the development. They are not screened and are relatively far from many of the homes.



6. The curving road lined by one and two story townhouses in six buildings of various sizes provides a relatively attractive street-scape that is sheltered, and perhaps isolated, from the rest of Needham. The drives are quite wide given the limited traffic, and children use them for play.





7. The land rises up behind the townhomes, providing wooded hillsides that separate the development from the surrounding townscape. They offer a sense of tranquility, but have not been developed with walking paths or other amenities.



8. Each townhouse has an outdoor storage and mechanical room extending off the back, with semi-private terrace space in between for each unit. Many are pushed up fairly close to the rising landscape. They appear to be well-used amenities. The chimneys are used to vent the heating and hot water systems.



9. Most townhouses are at grade with a roll in entrance. The sloping landscape is accommodated with occasional retaining walls where buildings step down along with the topography.



10. Captain Robert Cook Drive ends in a cul-de-sac with a playground in the center. Although the equipment is in relatively good condition, the overall layout of the open space does not support a strong sense of community.



11. Siding and many of the exterior finishes appear to be near the end of their useful life. The underlying construction is of poor quality and vulnerable to deterioration and should be replaced in the near future as indicated in recent reports.



12. Roofs, eaves, soffits and trim are all in relatively poor condition. Their construction is similar to Seabeds, which suffered damage from ice dams in 2015 requiring \$1.6 million dollars in emergency repair funding.



INTERIOR EXISTING CONDITIONS IN PICTURES - CAPT. COOK DRIVE



1. First floor living spaces are relatively open, which begins to make up for their relatively small size. Each apartment has laundry hook-ups in the vicinity of the kitchen.



2. The openness of the living areas allows multiple furnishing options depending on the needs of individual families. This is particularly true in the four bedroom apartments pictured here.



3. Many of the apartments are on two floors with bedrooms upstairs and living spaces downstairs. The second floor is accessed by fairly narrow stairs that tend to be dark.



4. Bedrooms are accessed off a landing. Apartments range from 2 to 4 bedrooms. A 4-bedroom second floor apartment is illustrated here.



5. Bedrooms are adequately sized with fairly large closets and generous windows. Many are large enough for two children with typical furnishings.



6. Bathrooms need upgrading. Some first floor bathrooms are accessible although they do not meet all MAAB requirements. Second floor bathrooms are relatively small.

# DEVELOPMENT NARRATIVE - SEABEDS WAY

## SEABEDS WAY

Financing:	Federal
Zoning:	Single Family Residence B; Chapter 40B permitting
Density:	4.5 Acres site: 10.2 units per acre
Site:	Adequate parking and open space, sloping topography
Residents:	Mixed elderly, disabled singles
Buildings:	Four @ two stories, double loaded corridors
Construction:	Wood framing on concrete slab on grade
Apartments:	46 one bedroom apartments @ approx. 540 SF
Access:	1st floors visitable; 2nd floor by stairs; apartments not MAAB compliant
Common:	Laundry and small lobby each floor; Community Room
Amenities:	Private terraces and balconies
Parking:	Parking along entry drive and at turnaround

### Development History:

Built in 1982, Seabeds was not renovated until ice damming and water infiltration in 2015 required roof and siding replacement and very significant interior repairs costing \$1.8 million. The entry drive was repaved in 2018 with new precast concrete curbing added. Apartments and common spaces have not been improved beyond repairs done in 2015. Additional site improvements are desirable. Although Seabeds and Captain Robert Cook share a single site and were developed by the same architects at the same time they are separate in terms of access, character, and location on the site.

### Site Layout:

Seabeds four buildings are virtually identical with the exception of one building with a small community center added on. They are oriented perpendicular to a relatively wide entry drive – Seabeds Way - that is a spur off of Captain Robert Cook drive. Seabeds Way terminates in a large swath of asphalt that functions as both a turnaround and a parking area. It appears to be used inefficiently – with more paving than is necessary to accommodate cars and parking. Five drives occupy the spaces between the four

buildings and the spaces on either side of each end building. Although these drives provide access for emergency vehicles and small storage buildings at the end of two of the drives, they appear to provide more paving than might actually be required for the functioning of the development. Dumpsters are located in prominent locations on site and are not screened from view.

Buildings are close to, but not at grade. A series of ramps have been added to building entries to provide accessibility. Most have been repaired but are in poor condition and could perhaps be eliminated if the site were regraded with less than a 1:20 slope up to entries. Every ground floor apartment has a terrace, which appear to be well used. Some have ramps, again in poor condition, for accessibility. Sidewalks and curbs are provided in some areas but not others.

The site is surrounded on the east, south and west with dense tree coverage and sloping topography that rises up steeply to the south and west, and down steeply to the west. With a few trees near building entries, and planting between buildings and provided on resident porches, the site has a verdant quality. Towards the north a grassy berm rises up about eight feet, and then drops down approximately 18 feet to the Captain Robert Cook development. The berm appears to be a landscape feature designed to screen the two developments from one another. It may also have been built so that excavated soil did not have to be brought off site because of cost. If redevelopment requires soil to be brought off site it should be tested for any contamination that could lead to significant disposal costs.

The site has a pleasant quality overall, with the surrounding trees and open space being a major asset. Although there are benches scattered throughout the site, it has not been developed to provide gathering places that could help facilitate a sense of community and bring residents, many who live alone, together. Much of the open space has a leftover quality to it, too close to apartments to be usable but not sheltered enough to feel like an extension of indoor space. Although the site layout is very different from most of Needham where most of the housing is single or two family, the development is not visible from public ways and is never seen in contrast with smaller scale houses.

### Building Character and Layout:

Although these are simple pitched roof buildings, the massing is articulated with projecting closets and balconies on either side and shed roofed bays at entries, common areas, and at the community center. They have a pleasant contemporary character that acknowledges New England vernacular architecture – now wrapped in new vinyl siding. Although the vinyl that replaced the original fiber cement siding in 2015 may not have the life span of brick, Seabeds does not immediately suggest “public housing” the way that brick clad buildings like those at the Chambers Street development often do. Buildings have a stair at each end and a double loaded corridor. There is a small two story common area at one end and laundries on both floors. Second floor lounges overlook the first floor common areas. These areas do not appear to be used very often by residents.



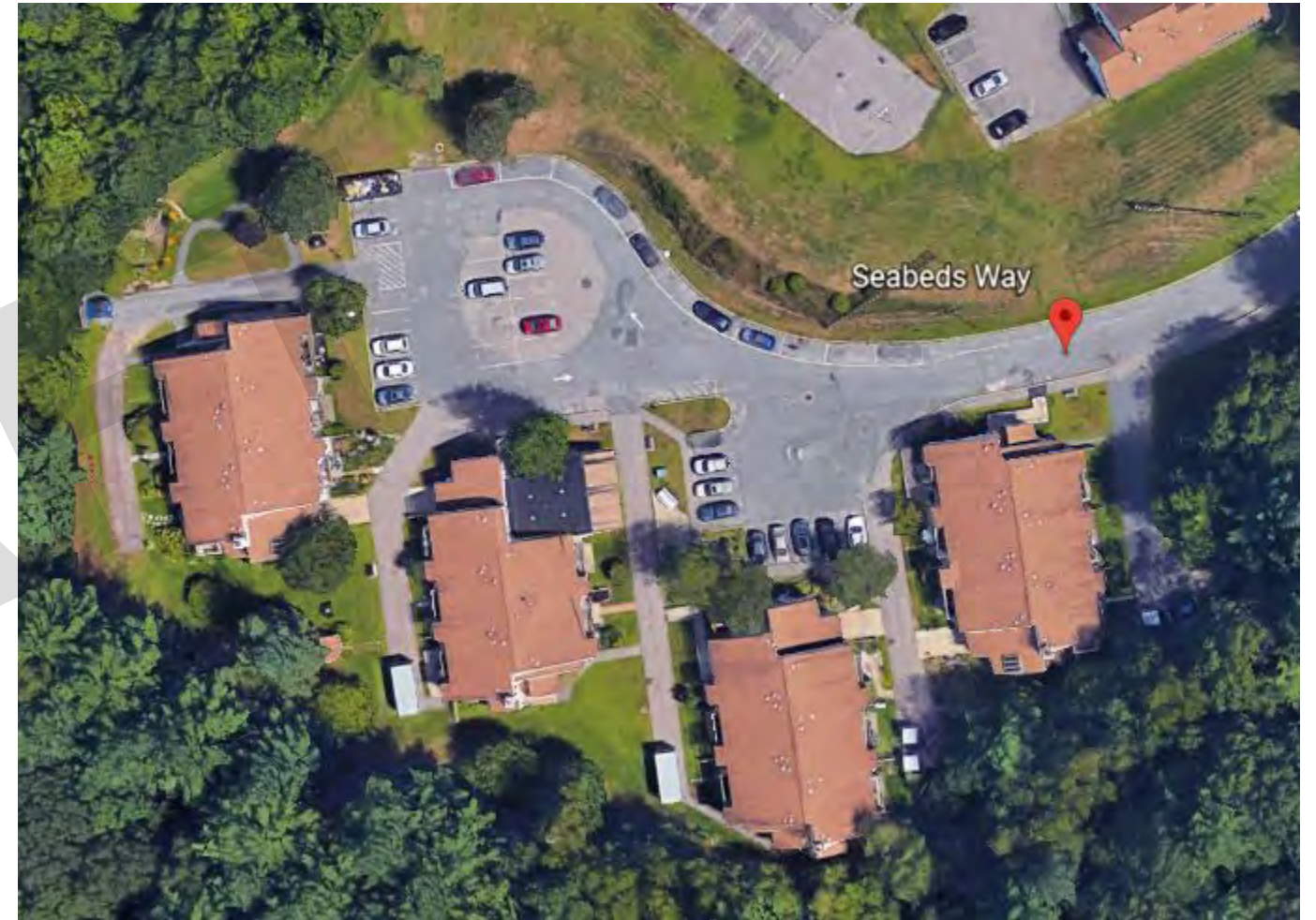
Kitchens and baths line the corridor with chase space between bathrooms and hallways. This organization helps buffer apartments from sounds in hallways.

#### Apartment Layouts:

The one bedroom apartments are all virtually identical. At 540 square feet they are smaller than the 600 SF typical of today's one bedroom affordable apartments, but are efficiently and effectively laid out. Bathrooms are accessed off of bedrooms, which is awkward if there are guests. Kitchens and baths are large in relation to bedroom and living room sizes – although they do not meet all accessibility requirements the space to meet MAAB/ADA is adequate. But this leaves limited furnishing options for the remaining spaces. Each apartment has 3 closets – which are adequate in size but not generous. Each has an outdoor space – a terrace on the ground floor, a balcony on the second floor.

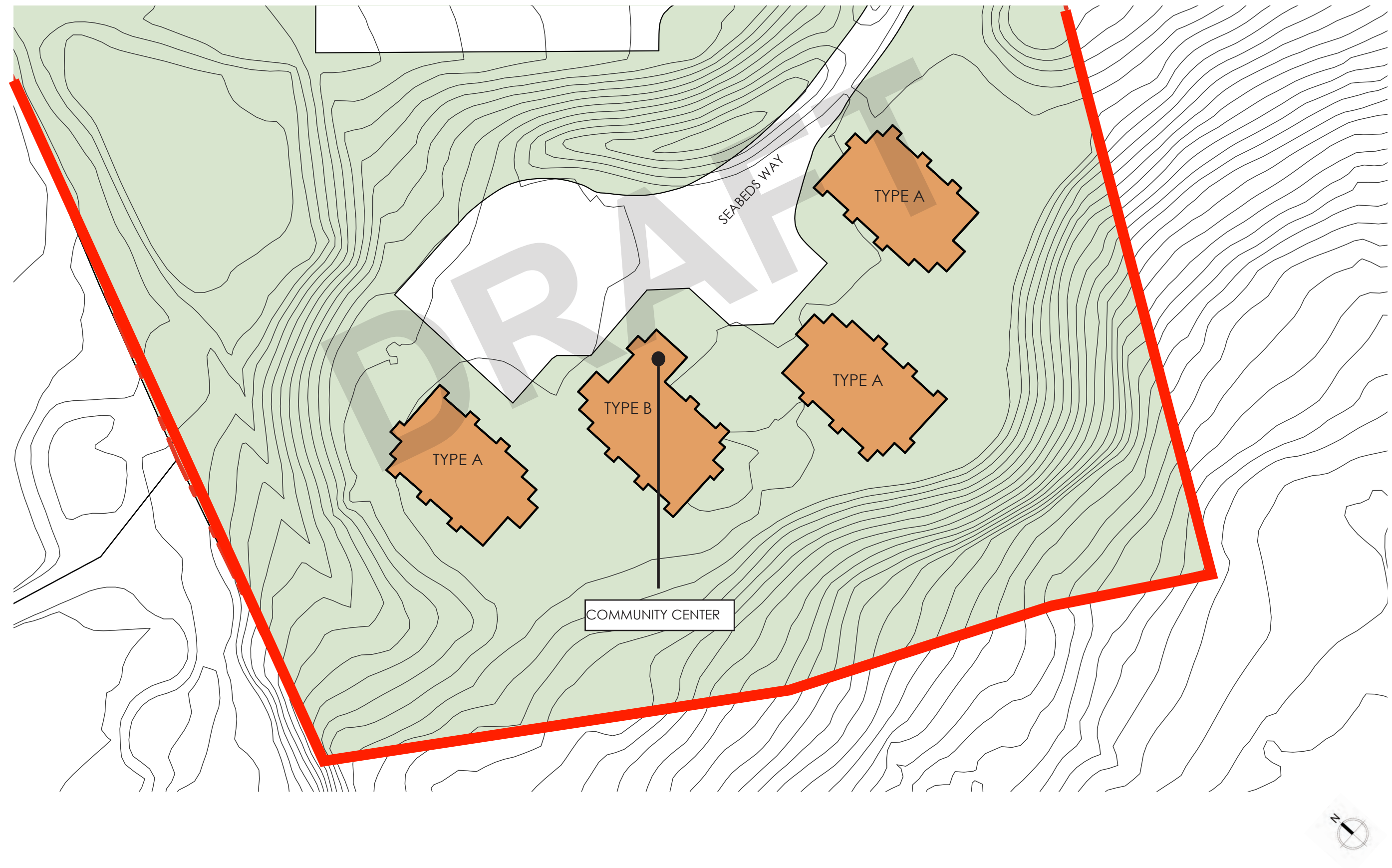
#### Design Challenges:

Because there is no elevator in any of the four buildings the second floors are not accessible. First floors are visitable with ramped access to each building, but bathrooms and kitchens do not meet MAAB requirements. There is a laundry and lounge on each floor so that first floor residents do not need to access the second floor. Nevertheless, the inaccessible second floors do not promote contemporary standards for “aging-in-place” that tends to suggest larger buildings with elevators.

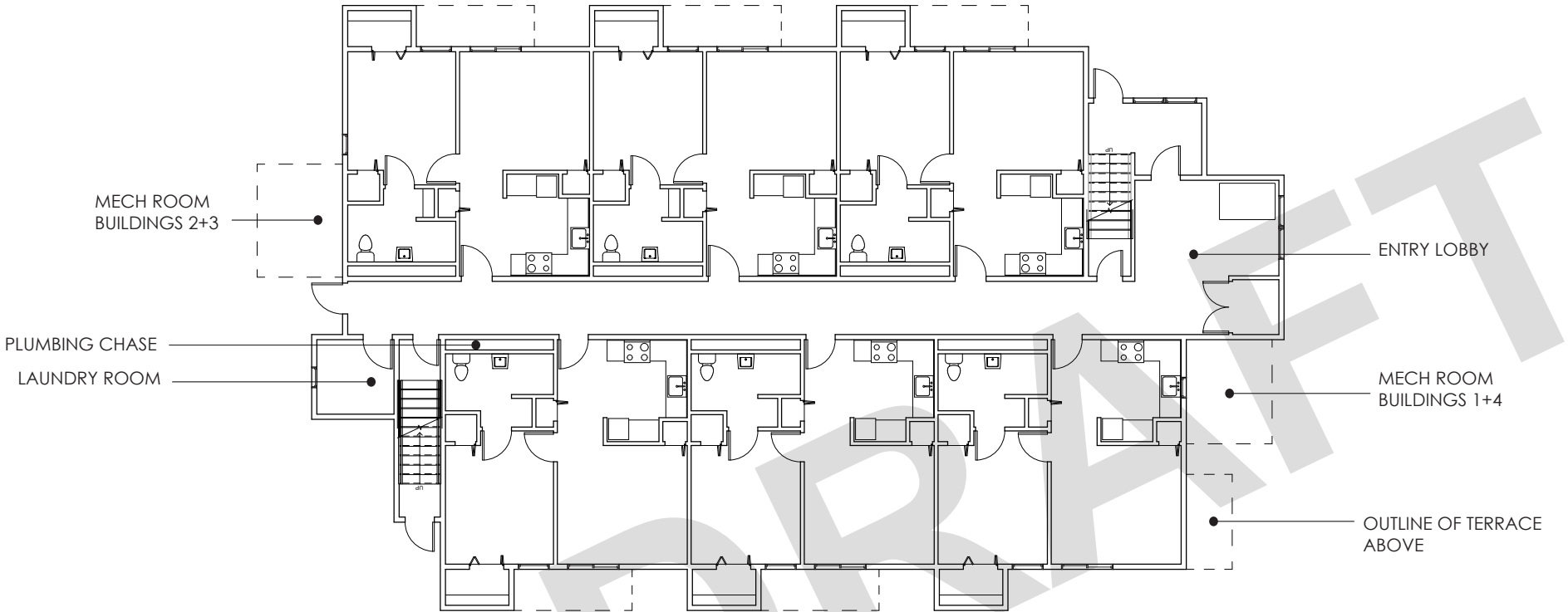




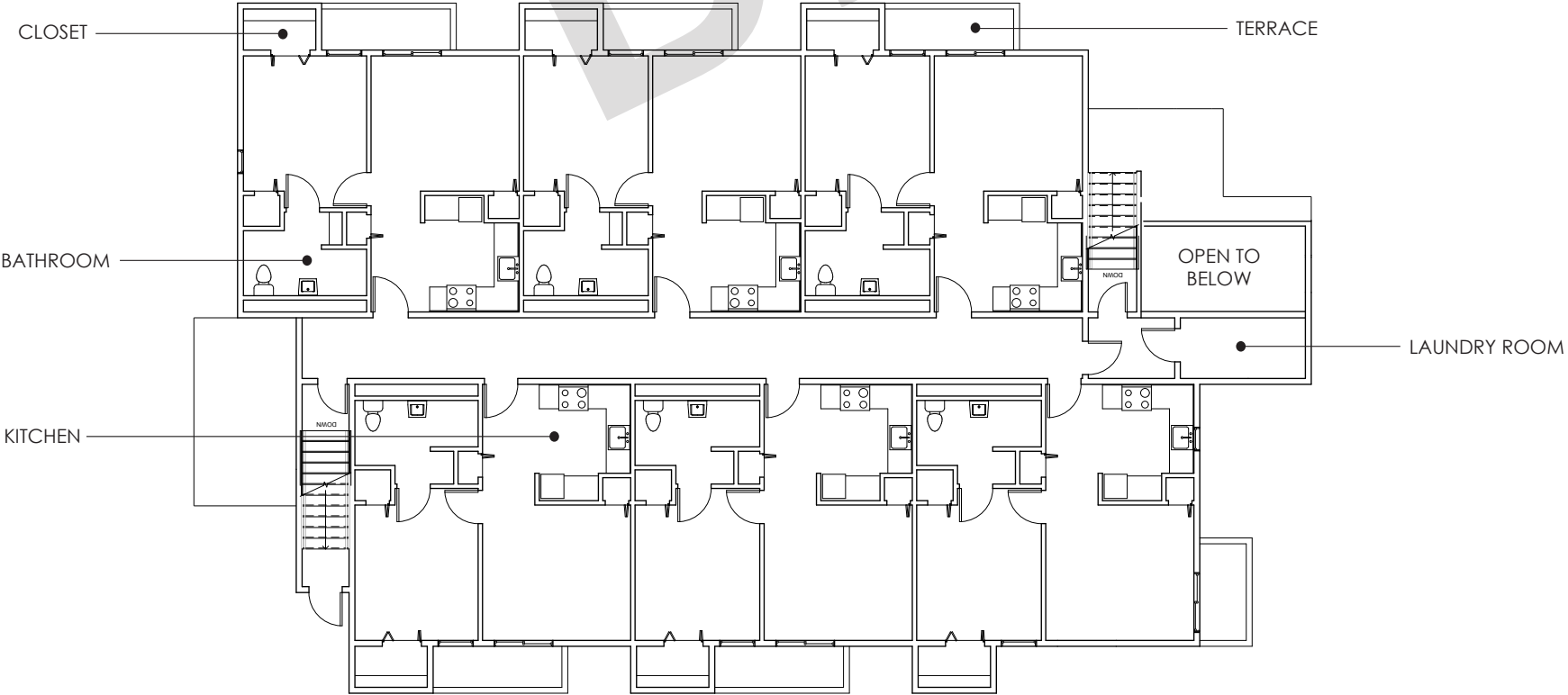
## TOPOGRAPHIC SITE PLAN - SEABEDS WAY DEVELOPMENT



BUILDING PLANS - SEABEDS WAY BUILDING TYPE A



FIRST FLOOR PLAN

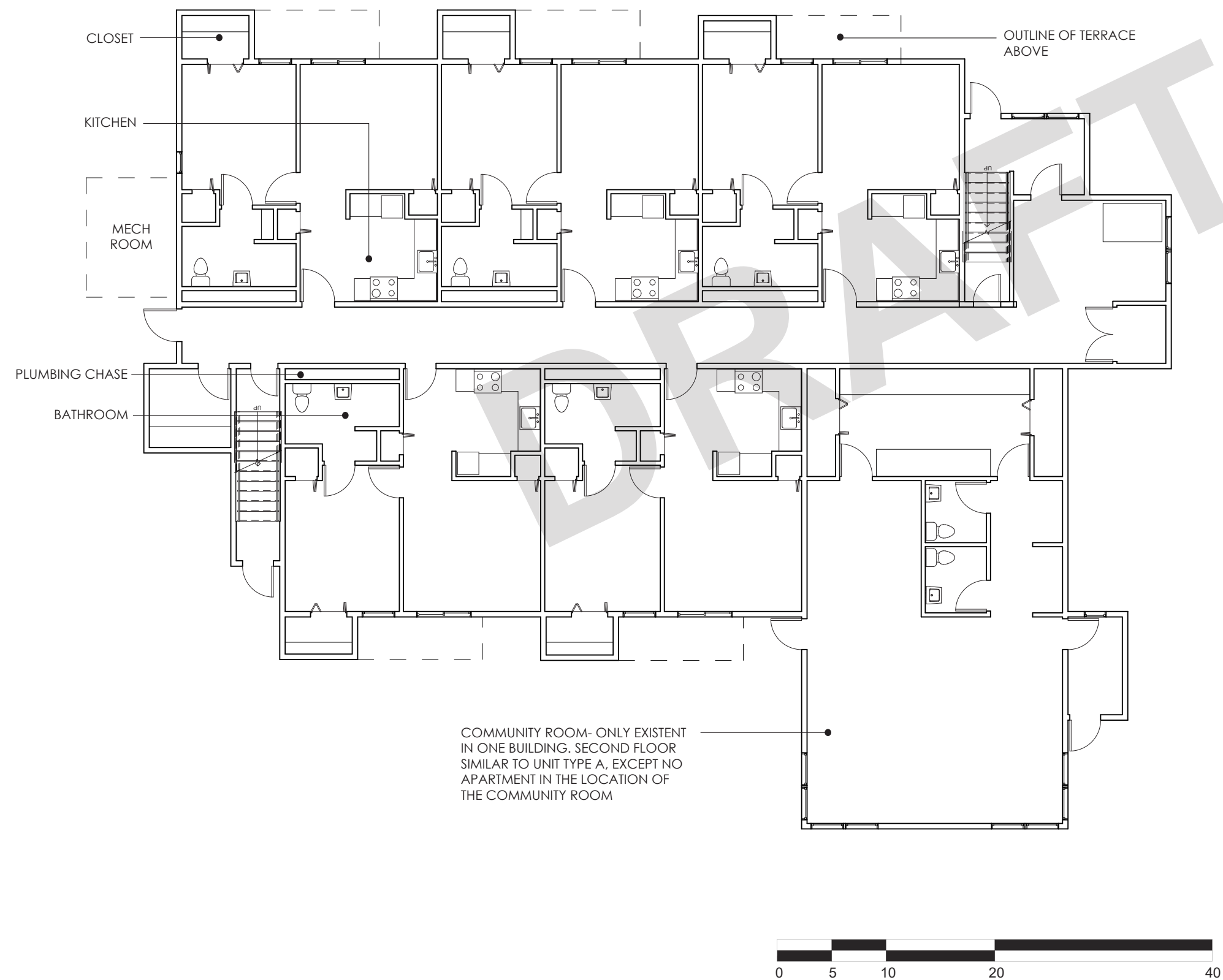


SECOND FLOOR PLAN



<b>BUILDING:</b>	Seabeds Way Building Unit Type A
<b>UNIT TYPES:</b>	One bedroom apartments - 580 SF
<b>NO. OF FLOORS:</b>	Two floors, 6 apartments per floor
<b>NO. OF BUILDINGS:</b>	3 identical buildings; fourth building has 10 apartments and a community room
<b>COMMON SPACE:</b>	Laundry and lobby/lounge on each floor
<b>ENTRIES:</b>	Double loaded corridor with doors and stairs at each end
<b>WINDOWS:</b>	Double hung window in bedroom, sliding glass door in living room
<b>LIVING ROOM:</b>	Small living room, and small bedroom
<b>BATHROOM:</b>	Oversize bathrooms approaches MAAB requirements
<b>KITCHEN:</b>	U-shaped kitchen is relatively generous
<b>STORAGE:</b>	Coat, broom, linen and bedroom closets
<b>EXTERIOR:</b>	First floor terrace and second floor balcony for each apartment
<b>CONSTRUCTION:</b>	2 X 4 wood frame with vinyl siding, batt insulation, slab on grade
<b>ACCESSIBILITY:</b>	Ramp access to common hallways
<b>UTILITY ROOMS:</b>	Two utility rooms serve 4 buildings
<b>LAUNDRY:</b>	Laundry on each floor
<b>HVAC:</b>	Gas fire boilers in utility rooms, fin tube radiators in apartments.

BUILDING PLANS - SEABEDS WAY BUILDING TYPE B



BUILDING:	Seabeds Way Unit Type B -
UNIT TYPES:	One bedroom apts at 580 sq ft.
NO. OF FLOORS:	2 floors, 5 apartments per floor
NO. OF BUILDINGS:	1 building; 3 other buildings have 12 apartments and no community room
COMMON SPACE:	Laundry on first floor, small lobby at entry; community room for Seabed
ENTRIES:	Double loaded corridor with doors and stairs at each end
WINDOWS:	Double hung windows
LIVING SPACES:	Small living room, and small bedroom
BATHROOM:	Oversize bathrooms in flats approach MAAB requirements
KITCHEN:	U-shaped kitchen is relatively generous
STORAGE:	Coat, broom, linen and bedroom closets
EXTERIOR:	First floor terrace and second floor balcony for each apartment
CONSTRUCTION:	2 X 4 wood frame with vinyl siding, batt insulation, slab on grade
ACCESSIBILITY:	Ramp access to common hallways
UTILITY ROOMS:	Buildings 2 and 4
LAUNDRY:	Laundry on each floor
HVAC:	Gas fire boilers in utility rooms, fin tube radiators in apartments.



EXISTING CONDITIONS IN PICTURES - SEABEDS WAY



1. Seabeds is entered off of a tree lined curving spur road near the entry to Captain Robert Cook. Paving and curbs have been replaced and accessible curbs provided in this area. The road rises up with a berm between Seabeds and Robert Cook on the right.



2. 60 apartments are in 4 parallel buildings with open space in between. Benches, tables and other site elements seem to be scattered on the site without defining semi-public spaces for community use. Dumpsters and other utility elements are not screened from view.



3. Asphalt roads are wide and paved areas used inefficiently for parking; a reorganization of these areas should be considered to provide more parking with less asphalt.



4. Apartments line both sides of a double loaded corridor; all residents have either a balcony or terrace.



5. Apartments between buildings have asphalt drives that dead end into hillsides. They facilitate emergency vehicle access and accessibility, but add to the amount of paving on the site.



6. The development is surrounded by open space and tree covered hillsides to the south that offer a sense of seclusion to the residents, but are underutilized as enhancements for livability and community use.





7. To the northwest the land slopes down, and is covered with vegetation that obscures neighboring properties.



8. Seabeds to the right is approximately ten feet above Captain Robert Cook to the left with a berm between them - rising up another eight feet.



9. Community space occupies the end of one of Building Type B, offering a meeting room and other facilities.



10. Ramps provide accessibility to some building entries and terraces. Many have been patched but are still in poor condition. Some could be eliminated with regrading of the site, making it more attractive and lowering maintenance costs.



11. Residents appear to enjoy terraces and balconies, personalizing them with planting, furniture and decorative elements.



12. Roofing, siding, soffits and trim were replaced in 2015 along with underlying sheathing. The envelopes are in reasonably good condition.



INTERIOR EXISTING CONDITIONS IN PICTURES - SEABEDS WAY



1. Two story lobby and lounge areas are located inside the front entrance of each building. They tend not to be used and do not offer many amenities.



2. Apartments are off of double loaded corridors with handrails that recognize the needs of the elderly. They are will lit with natural light coming in from the end.



3. Kitchens are adequately sized, but dated. They are separated from the living and dining areas by a wall with a pass through that limits furnishing options such as an eat in kitchen.



4. Living and dining areas are adequately sized and open onto a balcony on the second floor or a terrace on the first. There is enough room for eating and living areas.



5. Bedrooms are reasonably sized with relatively generous closet space on interior and exterior walls. Each bedroom has one window.



6. Bathrooms are dated but larger than minimal size. They do not have natural light and back up to the central corridor. Expansion of bathrooms to meet MAAB requirements would be difficult. Apartments do not have laundry hook-ups; there is a common laundry room on each floor.



# DEVELOPMENT NARRATIVE - LINDEN STREET

## LINDEN STREET

Financing:	State Chapter 667
Zoning:	Single Residence A, General Residence
Density:	3.5 Acres; 20.5 units per acre
Site:	Buildings tightly packed, inadequate parking, fragmented open space
Residents:	Mixed elderly, disabled singles
Buildings:	18 one-story buildings, 4 apts. per building,
Construction:	Wood framing with brick veneer on slab on grade
Apartments:	72 studio apartments, 405 SF each
Access:	Apartments are not visitable or compliant with MAAB
Common:	Community building and scattered laundries
Amenities:	Stoops front and back
Parking:	Parking in central lot deemed inadequate

### Development History:

Built in 1972-1973; repairs have been done over the years and buildings are in adequate condition. Roofs and mechanical systems were replaced in 2018.

### Site Layout:

The site layout deviates in substantial ways from typical neighborhood site design, and from typical public housing. It appears to be modeled on post war retirement communities is southern California where bungalow-style buildings alternate with green spaces to create a pedestrian oriented environment. At Linden Street 18 long, low buildings alternate between being parallel and perpendicular, forming a “basket weave” patterns with green spaces between buildings. This open space is too close to apartments to feel fully public, but isn’t associated sufficiently with individual apartments to create yards associated with individual apartments. The low density, out-of-character appearance and aging materials and systems have led to a perception by some in the Needham community that replacement is advisable.

There is one parking lot accessed from Linden Street near the center of the development. Offering 54 spaces for 72 apartments it has been noted as providing insufficient parking. It is in relatively poor condition. No overnight parking is allowed on the street. A series of asphalt walkways weave throughout the development providing access to front doors of each unit. The housing seems disassociated from the surrounding neighborhood, although the designer’s goal was clearly to make a separate neighborhood with its own spatial structure.

Across Linden Street to the west is the High Rock School. It is set back from the street with playing fields on front. To the west is a dense linear stand of trees 100+ feet wide separating Linden Street housing from single family houses along Maple Street. Even during the winter visibility from one development to the other is minimal. To the south is the NHA’s Chambers Street development, to which Linden Street is connected by pedestrian walkways, and the shared use of a community center building. To the north is a single family house behind a dense stand of trees. Individual trees are located through the open spaces giving the entire development a pleasant quality. Green spaces are relatively well maintained.

Eight of the buildings have laundry rooms and mechanical rooms located in the center of each of the buildings. Trash barrels are clustered through the development, often near the laundry rooms and associated clothes lines, and are not screened from view. Overall the development has no center or focused gathering areas that would support a sense of community. Benches seem scattered and the potential to develop shared common areas near laundry rooms or elsewhere has not been developed - which would realize the potential of this development’s original layout.

Although the development is close to the Chestnut Street commercial area it is cut off from it by railroad tracks and the Maple Street homes development. Residents have to go north to Oaks Street or South to High Rock Street to access Chestnut Street for shopping or the community services - nearly 3/4 of a mile away.

### Building Layout and Character:

Buildings are one story with low roofs sloping down in the long direction, and close to grade. They are predominately brick with wood infill above windows. Wood eaves project almost four feet beyond the building fronts on both sides supported by 5 wood and steel columns. The roof projections suggest porches, although every apartment is accessed by a small concrete stoop with several concrete steps, not by a porch. The stoops are too small to serves as porches and are cut off by handrails and their elevated position from the covered areas on each side in a somewhat odd juxtaposition of familiar architectural features.

Some of the covered areas have plantings and a few have chairs. A few buildings do not have stoops and steps but do have a step up at the front door so that none of the apartments are accessible or visitable creating challenges for elderly residents.

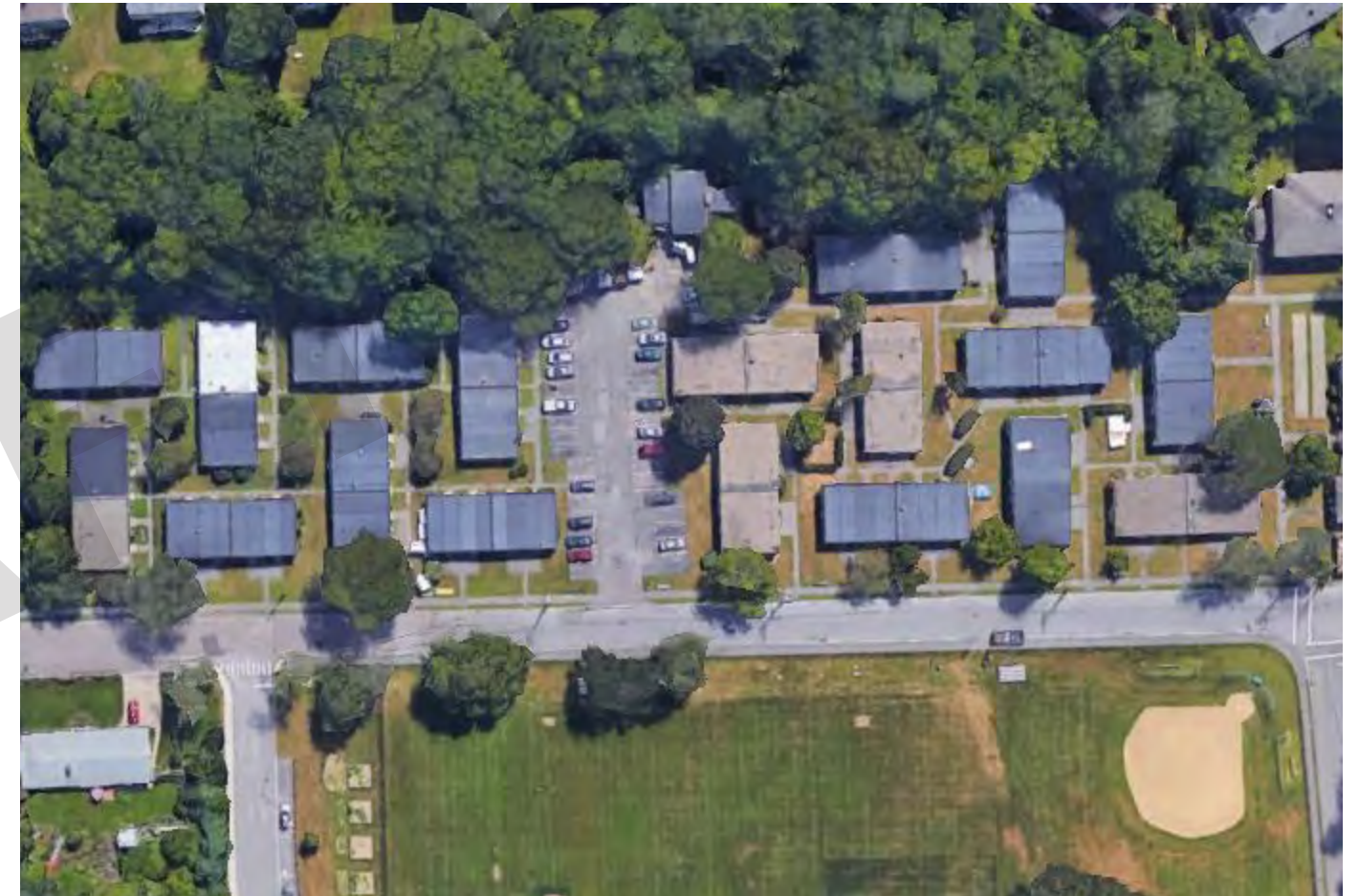
Although the red brick appears to be in good condition it is an unusual material in Needham where most houses are predominately wood. Along with the out-of-character site layout and the long low congregate buildings, Linden Street is likely to be perceived as public housing. In their small scale, pitched roofs, and conventional forms and materials used in unconventional ways, they do acknowledge the small scale suburban character of most of Needham adapted for affordable housing, and may be less out of context than other types of public housing.

Each building has four apartments that extend from front to back. Backs are nearly identical to fronts but without walks to main walkways. There is little to distinguish one apartment from the next, one building from the next, or one open spaces from the next, although some residents have taken modest steps to personalize their outdoor spaces. The lack of articulation of the laundry rooms and rear yards is a lost opportunity to create variety, suggest a shared public realm, and create semi private outdoor spaces for residents whose small apartments provide few amenities.

#### **Apartment Layouts:**

Apartments are all studios, and at 405 square feet are small by contemporary standards. Each one has an open living/dining/bedroom with a 6 foot tall storage unit that is used to divide the space in half. With windows and doors at both the front and back, and with windows in the kitchens and bathrooms, there is a fair amount of light throughout the main and adjacent spaces. Kitchens and bathroom are quite small – and do not come close to meeting accessibility requirements, nor is there enough space in the apartments to renovate them to meet these requirements. A single walk in closet is small and is supplemented by the storage units.

When the Linden Street development was built its site layout, building layouts and apartment design were probably seen as being innovative in the way that they provide intimately scaled living tied to the surrounding landscape at a modest cost. In general they do not seem to be perceived in this kind of a positive light today, although a significant modernization effort could build on the development's attributes.

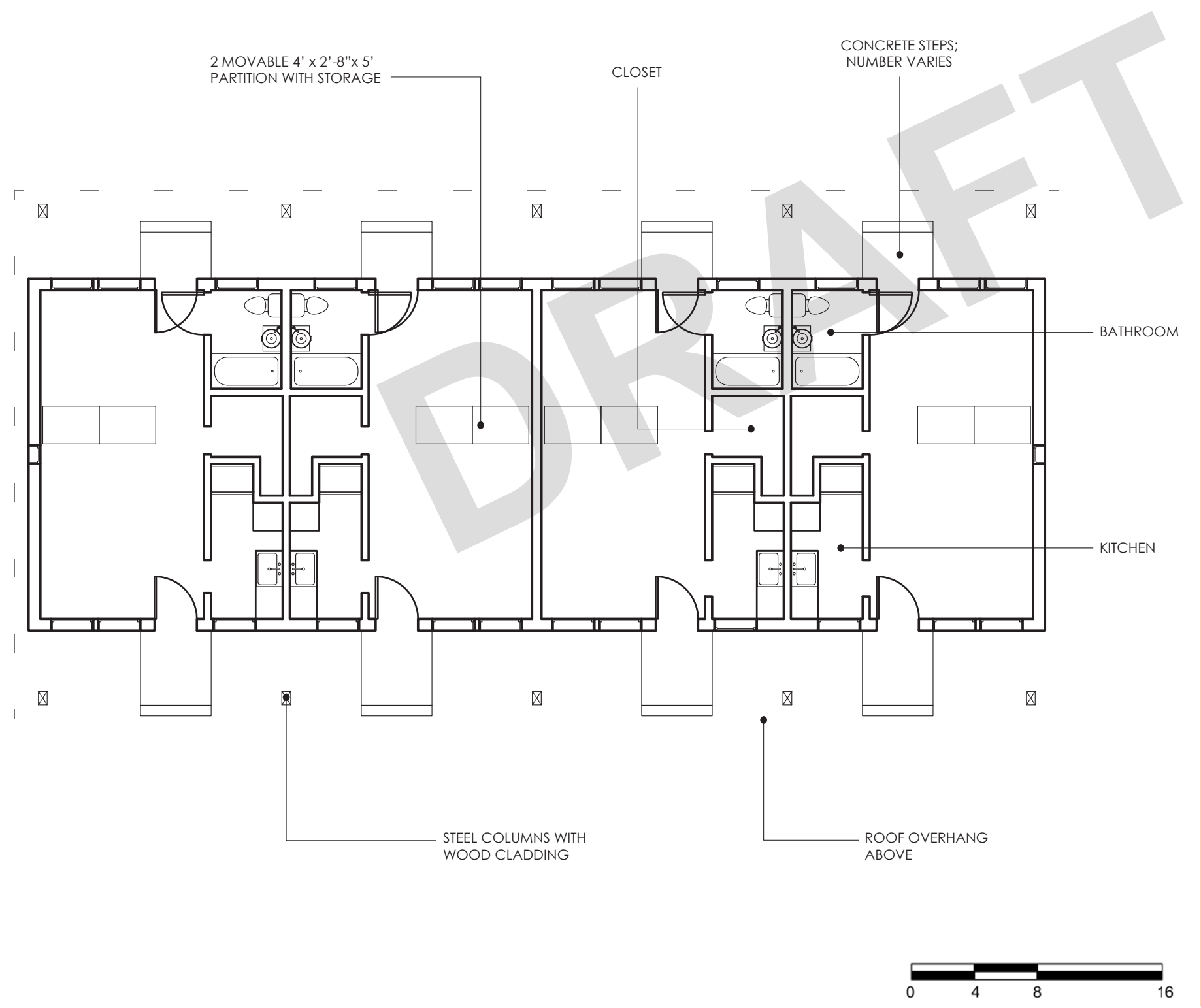




TOPOGRAPHIC SITE PLAN - LINDEN STREET DEVELOPMENT

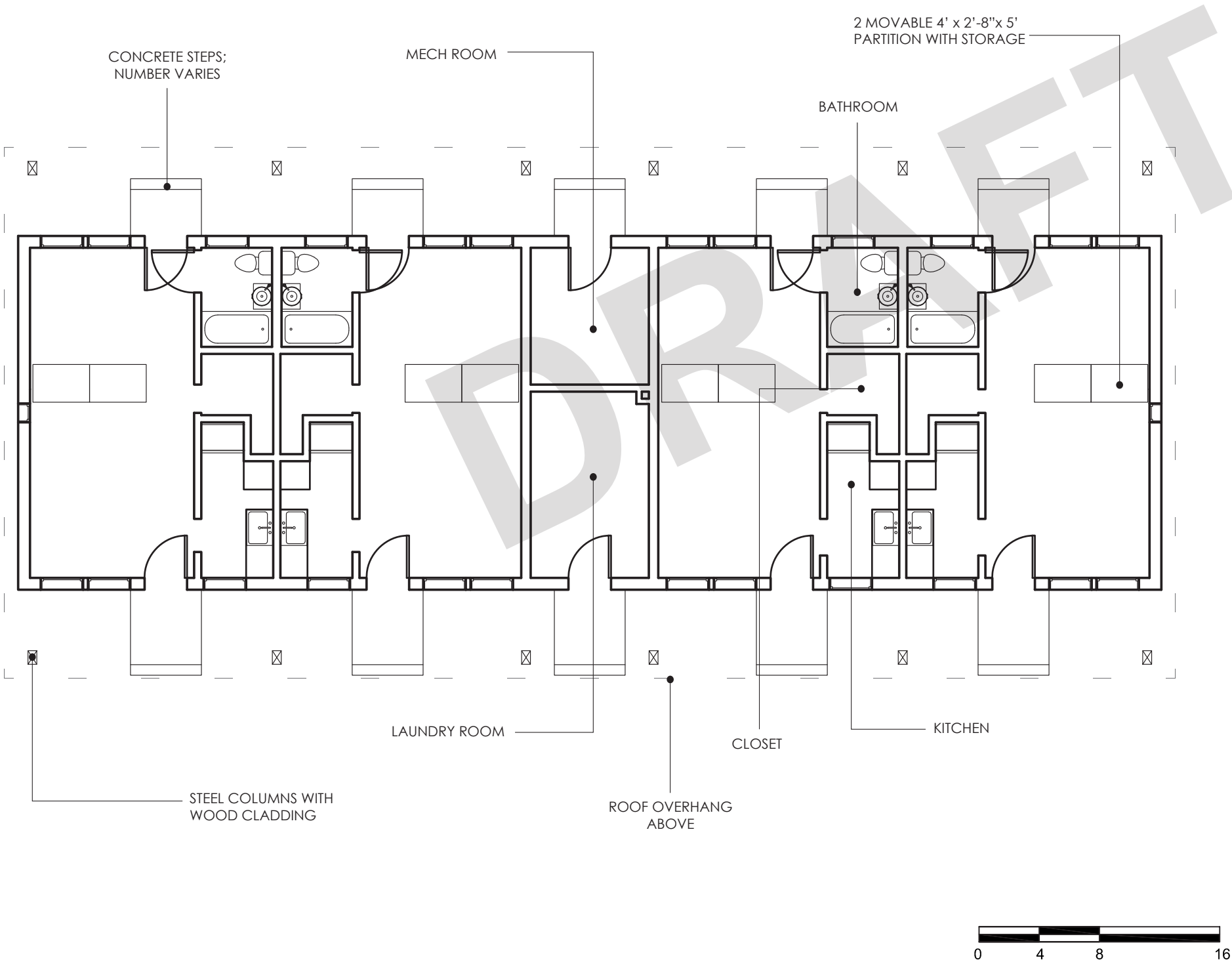


BUILDING PLANS - LINDEN STREET BUILDING TYPE A



<b>BUILDING:</b>	Linden Street Type A
<b>UNIT TYPES:</b>	Studio apartments at 405 SF
<b>NO. OF FLOORS:</b>	One floor, 4 apartments per floor
<b>NO. OF BUILDINGS:</b>	10 (plan B is similar but includes mechanical room and laundry)
<b>COMMON SPACE:</b>	None
<b>ENTRIES:</b>	Through units with doors front and back
<b>WINDOWS:</b>	Window front and back and in bathroom and kitchen
<b>LIVING ROOM:</b>	Open space with rolling storage unit dividers
<b>BATHROOM:</b>	5' X 7'-minimal size, not accessible
<b>KITCHEN:</b>	Minimal galley kitchen, non-accessible
<b>STORAGE:</b>	One walk-in closet and rolling storage
<b>EXTERIOR:</b>	Non-accessible entry stoops over continuous overhang
<b>CONSTRUCTION:</b>	2X4 wood frame w/ partial brick cladding, batt insul. Slab on grade.
<b>ACCESSIBILITY:</b>	Apartments are not accessible
<b>UTILITY ROOMS:</b>	Located in 8 Type B buildings
<b>LAUNDRY:</b>	Located in 4 Type B buildings
<b>HVAC:</b>	8 gas fire boilers installed in 2018, radiators in units

BUILDING PLANS - LINDEN STREET BUILDING TYPE B



BUILDING:	Linden Street Type B
UNIT TYPES:	Studio apartments at 405 SF
NO. OF FLOORS:	One floor, 4 apartments per floor
NO. OF BUILDINGS:	8 (plan A is similar but does not include mechanical room & laundry)
COMMON SPACE:	Mechanical room and laundry room accessed from exterior
ENTRIES:	Through units with doors front and back
WINDOWS:	Window front and back and in bathroom and kitchen
LIVING ROOM:	Open space with rolling storage unit dividers
BATHROOM:	5' X 7'-minimal size, not accessible. Wall hung sink and bathtub
KITCHEN:	Minimal galley kitchen, non-accessible
STORAGE:	One walk-in closet and rolling storage
EXTERIOR:	Non-accessible entry stoops over continuous overhang
CONSTRUCTION:	2 X 4 wood frame with partial brick cladding
ACCESSIBILITY:	No accessibility
UTILITY ROOMS:	Serves Type A and B buildings
LAUNDRY:	Serves Type A and B buildings
HVAC:	Gas fire boilers, radiators



EXISTING CONDITIONS IN PICTURES - LINDEN STREET



1. Low one story brick and wood buildings line Linden Street. Across the street are the playing fields for the High Rock School, with the school itself set back from the street. Linden St. is not a major thoroughfare, but traffic picks up at the beginning and end of the school day.



2. Half the buildings are oriented parallel to the street and half are oriented at 90 degrees, forming a kind of basket weave pattern in the overall layout. The brick buildings have overhanging roofs on both sides supported by steel columns clad in white painted wood.



3. The site layout creates a series of interstitial green spaces that don't feel either public or private – they have a “leftover” character. Although the overhanging roofs and columns have a porch like character, the small concrete stoops prevent the apartments from using them as porches.



4. One parking lot towards the center of the development provides all of the parking. A network of pedestrian pathways lead to apartments, some a fair distance away. Parking tends to be insufficient to meet the perceived need.



5. Overwhelmingly, apartments do not have accessible entries. Concrete stoops are several steps up from the walks in most locations. All of the 18 buildings have the same articulation and colors giving a sameness to every apartment, building and adjacent green space.



6. Some apartments have stoops at walkway level, but the first floor is still a step up so that none of the apartments are accessible or visitable (someone in a wheelchair can't visit).





7. Of the 18 buildings, 8 have laundries in a center bay. Trash barrels and close-lines are often grouped near the laundries, suggesting the possibility of developing social spaces.



8. Although the building scale, green spaces and tree-lined walkways create a pleasant scale. There is a homogeneous quality to the materials of the development with no center around which social activities could coalesce.



9. The backs of buildings are virtually identical to the fronts, but without walkways leading to back stoops. Like the building fronts, the backs do not facilitate private use for residents that could expand the space available to them.



10. Buildings are in relatively good condition. Roofs were replaced in 2018. Masonry is in good shape. Some of the wood trim and windows need to be replaced.



11. Paving is in relatively poor condition, especially in the parking areas. Walks are adequate but warrant ongoing maintenance.



12. A maintenance building at the rear of the site is the only non-residential building at the development. Linden St. residents share the community center building facing the adjacent Chambers St. development with Chambers Street residents.



INTERIOR EXISTING CONDITIONS IN PICTURES - LINDEN STREET



1. Studio apartments are small by contemporary standards with one living/dining/sleeping space with a half height storage wall defining two areas.



2. Glazing at each end of the main space brings in sufficient light and helps extend the interior to the outside. The storage walls are useful for subdividing spaces and storage but reduce the sense of openness.



3. Kitchens are cramped and in poor condition. Because of the spatial structure of the apartments, alternative layouts are unlikely to be possible.



4. A relatively large walk in closet is the only storage (besides the half height storage wall). Contemporary standards suggest separate closets for clothes and cleaning/utility supplies.



5. Both bathrooms and kitchens have windows - which is unusual for studio housing. This is made possible by the front-to-back apartment layout, in contrast to apartments that are on each side of a double loaded corridor.



6. Bathrooms are minimally sized, and like the kitchens, would be difficult or impossible to reorganize or enlarge. They are outdated in terms of finishes and fixtures.



# DEVELOPMENT NARRATIVE - CHAMBERS STREET

## CHAMBERS STREET

Financing:	State Chapter 667
Zoning:	Single Residence A, General Residence
Density:	4.7 Acres; 17 units per acre
Residents:	Mixed elderly, disabled singles
Buildings:	5 two-story bldgs, double loaded corridors
Construction:	Wood w/brick veneer, crawl space below wood framed first floor
Access:	1st floor visitable; 2nd floor by stair; not fully compliant w/ MAAB
Apartments:	80 studio apartments. 430 SF; 8 per floor
Common:	Community Building on site, laundries & decks on second floors
Amenities:	Common porches at entries
Parking:	Inadequate parking and open space with wetlands on site

### Development History:

Built 1963, the Chambers Street development has undergone a series of upgrades and repairs over the years and buildings and site are in relatively good condition. Roofs and boilers were replaced in 2018. The low density, out-of-character appearance and aging materials and systems have led to a town-wide perception that replacement is advisable – possibly in conjunction with Linden Street redevelopment.

### Site Layout:

The Chambers Street development site layout is typical of public housing. Chambers Street is a small spur road off of Linden Street with a parking area and community center/ maintenance facility just off of Linden and five buildings beyond around a parking lot parallel to but screened from Linden Street. Four buildings flank the parking lot on either side, east and west, with their ends 30 feet apart. A fifth building to the north is tucked behind the community center to the east.

The development is surrounded by dense tree coverage to the south, east and west that comes quite close to the buildings. To the north is the NHA's Linden Street development.

Unlike the Linden Street housing, the Chambers Street housing is removed from the public streets, with the exception of the one story community center / maintenance building adjacent to Linden Street which does not have a strong street presence. There are wetlands adjacent to the development on the south and east sides, and a small stream runs in a culvert under the parking lot, daylighting at the northeast and northwest corners and at the south end of the developed area.

There are entries at either end with simple one story porches with wood columns. They are approximately 12" above grade; one porch on each building has a ramp. Trash barrels are grouped throughout the development with no screening. The community center perhaps provides a focus for the development, but in general there are no developed gatherings spaces or significant accommodation on site that might encourage people to congregate.

The real focus for Chambers Street is the parking lot, although at the south end there is a central green space beyond the end of the parking lot that could be developed further. Brick walls and asphalt dominate the perception of the development to a greater extent than at other NHA developments. The paving is in poor condition throughout. Parking spaces should be clearly marked to insure that all asphalt is being effectively used for pedestrian access, vehicular access or parking, and if not utilized, removed. 62 spaces are provided for the 80 apartments which is considered inadequate. Overnight on street parking is not allowed.

Although the development is close to the Chestnut Street commercial area it is cut off from it by railroad tracks and the Hartney Greymont property adjacent to them, so that residents have to go north to Oaks Street or South to High Rock for shopping and the community services that they may need - nearly a mile.

Only a small portion of the Chambers Street site is developed. The property stretches to the south between the High Rock Homes to the west and the railroad tracks to the east. Although the NHA owned land is narrow there are portions that are free of wetlands and relatively flat. If this land were aggregated with a portion of the High Rock Homes land there would be a significant site for additional development.

### Building Layout and Character:

The buildings lack the articulation of Linden Street housing, and are more or less bland two story brick boxes with hip roofs. The porches at either end soften the character of the buildings in a modest way. They lead to stairs to the second floor and to a double loaded corridors with four studio apartments on each side on each floor. There is a center recess at each building with a balcony off of the second floor laundry and a mechanical room on the first floor serving each building. The laundry location is a challenge for those with difficulty going up stairs. The mechanical rooms are not a particularly attractive focus for

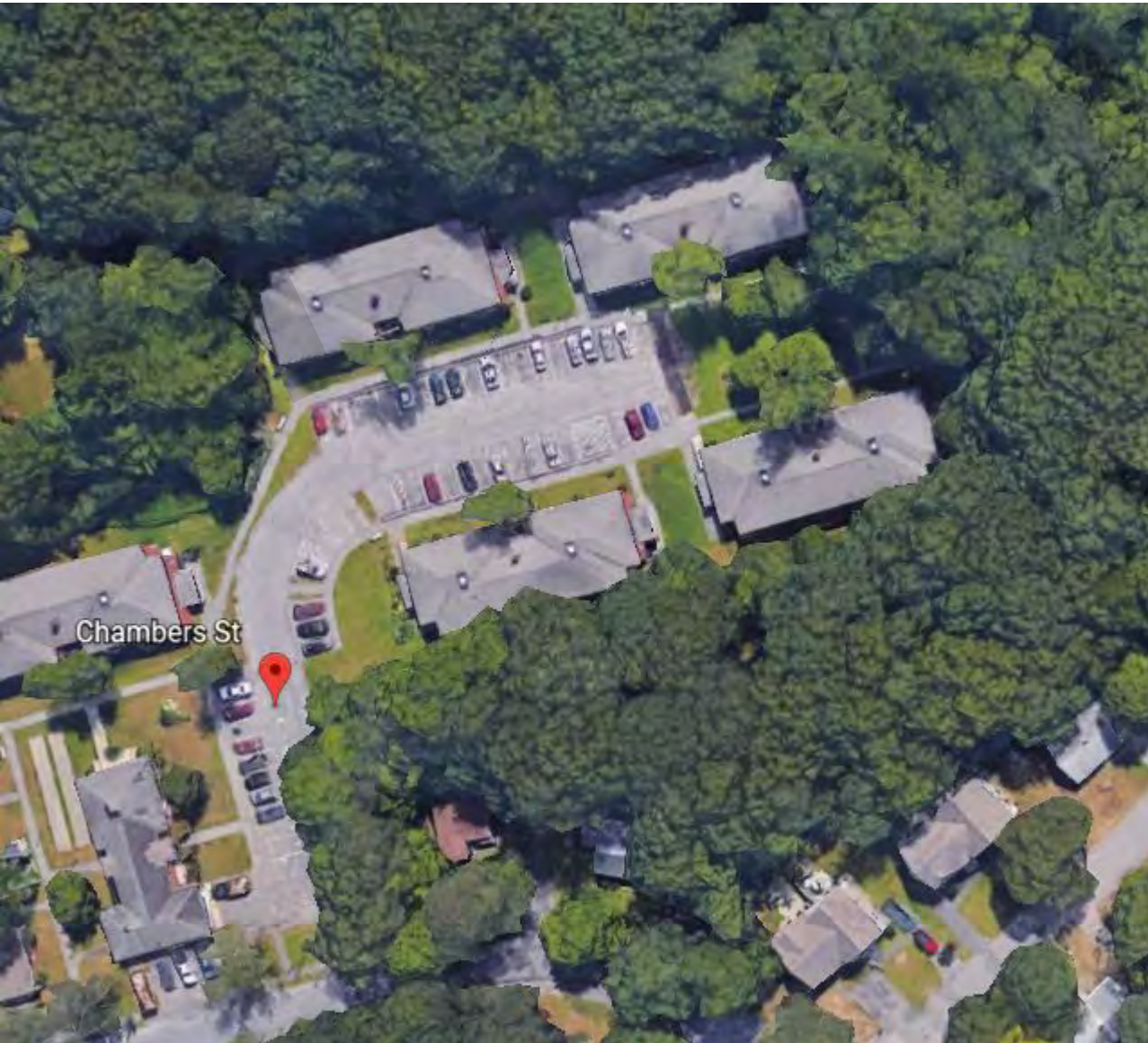
the center of each building facing the public. They now appear to be oversized after the replacement in 2018 of the boilers and water heaters, and could perhaps be re-purposed as first floor laundry areas.

The buildings are in relatively good condition. The brick does not appear to be spalling or cracking and roofs were replaced in 2018. Windows and doors are in need of replacement. The primary flaw inherent in the building organization is that half of the apartments are only accessible by going up stairs, and everyone needs to go to the second floor to do laundry.

**Apartment Layouts:**

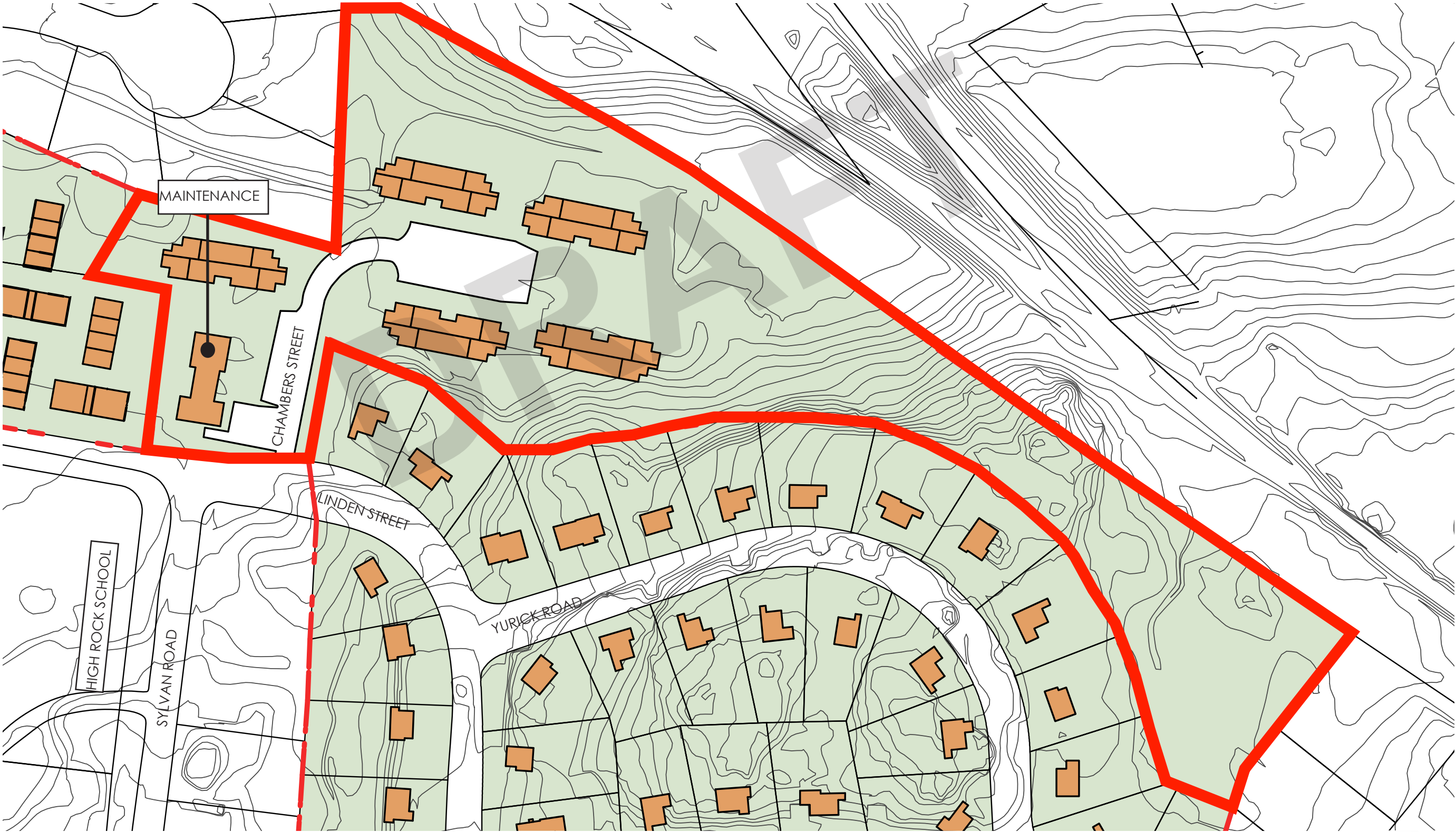
At 430 square feet the studio apartments are a bit bigger than those at Linden Street but are undersized by contemporary standards. They have fewer windows which are located just along one wall. A second door to the corridor was added at some point in time, pushing refrigerators into the living space. These doors are not required by code and are an unusual feature that detracts from the usability of the space. The 5' x 7' bathroom is minimal in size and the kitchens are a single run along one wall with the refrigerator displaced in an awkward way because of the added door. A single 2' x 7' closet provides limited storage space, supplemented by movable six foot tall storage units. Apartments are generally in good condition.

The remainder of the apartment is a single 11'-6" x 23'-3" open space large enough for various furnishing options. The movable storage units allow this space to be divided into two use areas with a modest amount of privacy between them. Some residents appreciate this option; others do not. Unlike the partial height storage units at the Linden Street development these can be pushed to the side to open the space up.

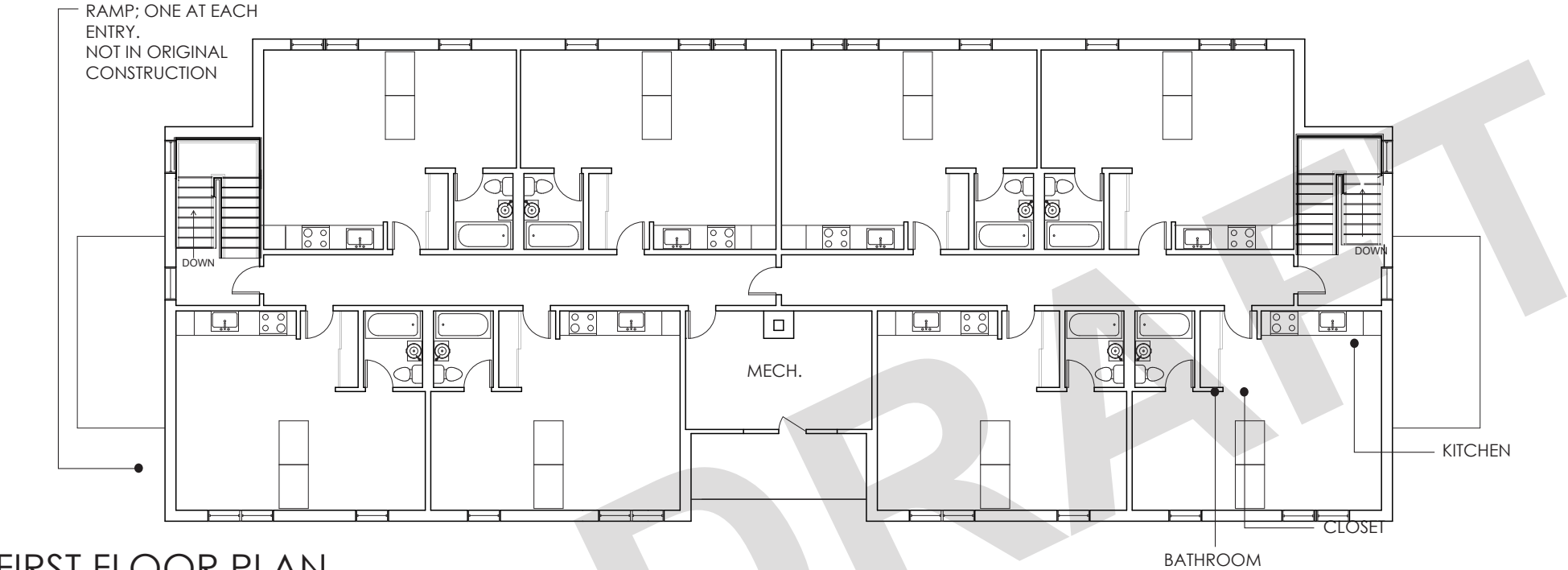




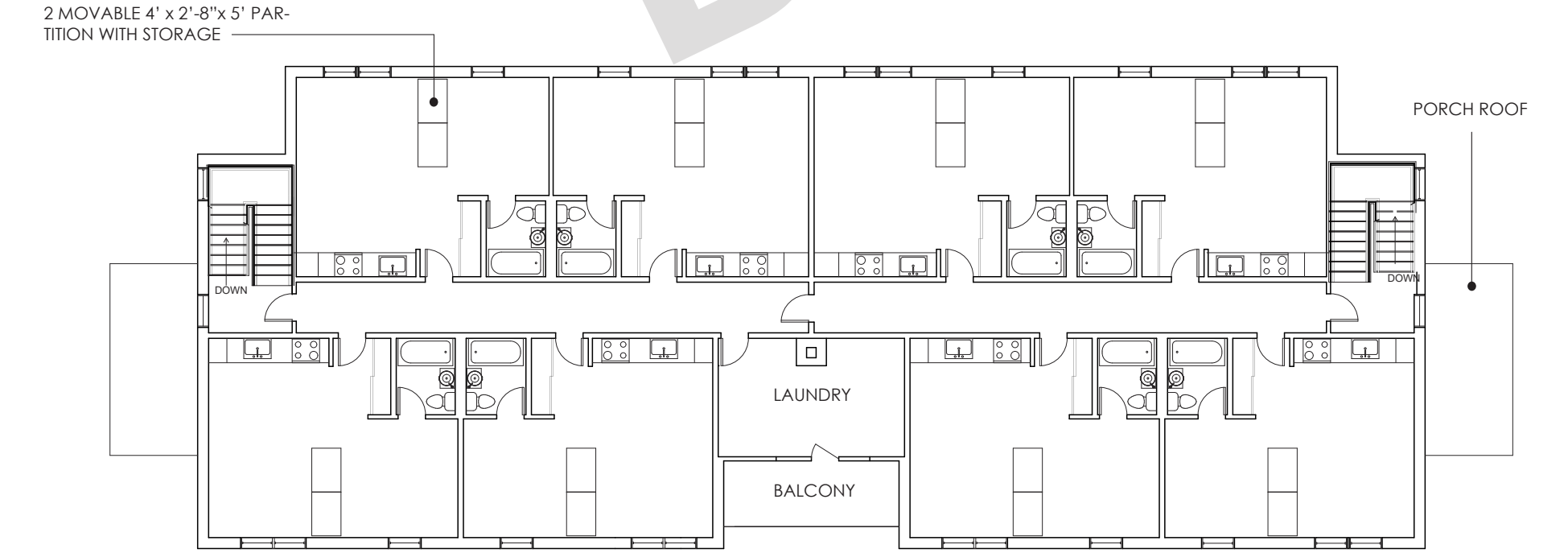
TOPOGRAPHIC SITE PLAN - CHAMBERS STREET DEVELOPMENT



BUILDING PLANS - CHAMBERS STREET BUILDING TYPE



FIRST FLOOR PLAN



SECOND FLOOR PLAN

BUILDING NAME:	Chambers Street Unit
UNIT TYPES:	Studio apartments at 430 SF
NO. OF FLOORS:	2 Floors, 8 apartments per floor.
NO. OF BUILDINGS:	5 identical buildings
COMMON SPACE:	Mechanical room on ground floor, laundry on 2nd floor (not accessible)
ENTRIES:	Double loaded corridors with stairs at each end
WINDOWS:	Double and Single Window in living space
LIVING ROOM:	Open space with rolling storage unit space dividers
BATHROOM:	5' X 7'-minimal size, not accessible. Wall hung sink and bathtub
KITCHEN:	Minimal galley kitchen, non-accessible
STORAGE:	One 2' closet & rolling storage units
EXTERIOR:	Porch at each end at shared building entries; porch at 2nd flr. laundry
CONSTRUCTION:	2 X 4 wood frame with brick cladding, batt insulation, crawl space
ACCESSIBILITY:	Ramp access to common hallways; no units meet MAAB requirements
UTILITY ROOMS:	One per building on first floor
LAUNDRY:	One per building on second floor
HVAC:	Gas fire boilers installed in 2018, fin tube radiators in units



EXISTING CONDITIONS IN PICTURES - CHAMBERS STREET



1. This 5 building two story development lines Chambers Street, a small spur road off Linden Street owned by the NHA. A one story maintenance and community center building is located at the corner of Linden and Chambers.



2. The spur road is a wide swath of asphalt in relatively poor condition. Parking spaces should be more clearly laid out so that the paving is used more effectively.



3. The five 16 unit buildings wrap a central parking lot. The facades are relatively bland with entries on both ends of each building. A second floor balcony at the center of each building is entered off of the second floor laundry room.



4. Entries on each end are similar- several steps up with a porch roof and railings. One entry at each building has a ramp up from grade that was not part of the original construction.



5. Three sides of the development are wrapped by dense woods. To the north, the ground slopes up to abandoned railroad tracks. To the south, (shown here) the ground slopes down to a wet area.



6. The entire site is relatively low and adjacent to the wetlands. Running water is culverted under the development, daylighting in three locations.





7. The Chambers Street and Linden Street developments are adjacent to one another, sharing walkways and the community center building. All apartments are studios, although the Chambers Street apartments are slightly larger than the Linden Street apartments.



8. Although there are a few benches and a fair amount of green spaces, there are a few other site amenities, or featured spaces that could attract residents. The parking lot and drive take up most of the open space, although there is a grassy lawn just beyond the end of the parking lot.



9. Mechanical rooms in each building on the first floor beneath the laundries face the central parking area and tend to be unattractive. The new boilers and water heaters are smaller than the originals, leaving extra space in these rooms, which perhaps could be repurposed as first floor laundry areas.



10. Trash is handled with groups of trash barrels that are scattered around the site. They are not screened or associated with other site features.



11. The Chambers Street development is flanked by the Linden Street development on one side, and the High Rock development on the other- around the bend in Linden Street.



12. Paving is in poor condition, and the site is undeveloped in terms of offering resident amenities. The surrounding trees and topography shelter the Chambers Street buildings from the surrounding neighborhood. Recent paving has improved some areas.



INTERIOR EXISTING CONDITIONS IN PICTURES - CHAMBERS STREET



1. Each end of the building has an entry space and an attractive stair that feels welcoming, if not accessible.



2. Laundry rooms are large and open out to a balcony but are on the second floors. Potentially, laundries could be located on the first floors carved out of the mechanical rooms.



3. Apartments are off of double located corridors with light coming in from windows at the end. Handrails line one side.



4. Kitchens are adequately sized but need updating. They are open to the main living space of the apartment.



5. Living/Dining/Sleeping areas are in one open space, with a movable storage unit used to subdivide it into separate areas at the discretion of residents.



Bathrooms are minimally sized and are out of date. Expansion would be difficult.



# DEVELOPMENT NARRATIVE - HIGH ROCK HOMES

## HIGH ROCK STREET HOMES

Financing:	State Chapter 200 funding later federalized by NHA
Zoning:	Rezoned from Single Residence B to General Residence
Density:	25 Acres; Originally 3.2 units per acre, now 4 units per acre
Site:	Houses along private streets on steeply sloping topography
Residents:	Families
Buildings:	Free standing houses 60 rental single family, 20 duplexes with 1 rental unit & 1 ownership unit in each duplex
Access:	Each unit is accessed by steps; not visitable or accessible
Common:	Streets - several are private ways owned by the NHA
Amenities:	Yards associated with each building
Parking:	Each home has a driveway

### Development History:

Built in 1948, 80 small single family homes on 10,000 square foot lots line private streets on this hillside site. Houses are small and in adequate condition. 20 were replaced with two-family duplex buildings in 2009. Additional replacements are being considered contingent on funding.

### Site Layout:

High Rock Homes have been built on a topographically active site with steeply rising hills and protruding ledge in places. Some of the homes are up to 8' above the street, accessed by steps. Most are much closer to the surrounding grade. The entire site and surrounding area, where not cleared for homes and streets, is covered with dense mature trees.

A series of private streets owned by the NHA wind through the site: Yurick Road, Murphy road, Summit Road, Memorial Circle, Fairview Road and Sylvan Road. Neither the street design nor home construction suggest public housing – they are similar to starter home neighborhoods in many communities. One side of Linden Street has curbs and a sidewalk; other streets do not. Every home has a driveway extending 25' to 40' into the yard.

In 2008 20 of the original one story single family homes were replaced with two family homes that are two story and have front porches and exterior storage in back. The 20 new buildings are scattered throughout the site, sometimes clustered, sometimes not. They alter the character of the site but stay within the original lots lines.

The original density of the High Rock Homes site is a little less dense than surrounding neighborhoods, altered by the replacement with duplexes. Both the original layout and the new duplex homes are within the areas base zoning. The development is accessible to the Chestnut Street commercial district from High Rock St. that crosses over the railroad track that run along the west side of the High Rock and Chambers Street NHA developments.

### Building Layout and Character:

The original one story homes have a modest character – wood siding, hip and gable roofs, and front stoops a step or two above grade, and occasionally shutters. They are in relatively good condition with some landscaping and trees along the street. Landscaping around the duplexes should be improved with trees and shrubs at a minimal cost. There has been a minimum of recent investment given the success of the replacement with duplexes that has been considered successful and will hopefully continue. If replacement were not an option, the addition of bays and porches would be useful amenities for residents that would raise the perceived value of the homes and the character of the neighborhood.

There is no common space other than streets and the sidewalks that exist, which are in adequate condition. Renters generally respect the character of their homes and yards which appear to be well maintained. Houses have a fair amount of variety in massing, roofs, windows and colors – so that they do not have a “cookie cutter” quality.

Interiors of the original home of have been relatively well maintained. They are adequately sized but far from generous. Some have had kitchens and baths replaced. They have front and back doors. The 20 new duplexes are two stories with porches and dormers that add character and outdoor space for residents. They are further off the ground making them less accessible but giving them a dignity that the original homes lack. Landscaping is minimal. Rooms are larger, there more closets, and buildings are in very good condition.

### Governance Issues

All of the roads are private ways that are owned and maintained by the NHA. The NHA has an agreement with the Town of Needham for snow plowing in the winter. The combination of rental and ownership units in the 20 new duplexes provides governance challenges and makes obtaining loans difficult. The NHA anticipates that new development at High Rock that would continue the replacement of single family homes with duplexes, and that these duplexes would be rental only.

Note that drawings for the 60 remaining homes are not available. Drawings for the 20 replacement duplexes are shown on the following pages.

TOPOGRAPHIC SITE PLAN - HIGH ROCK HOMES\*



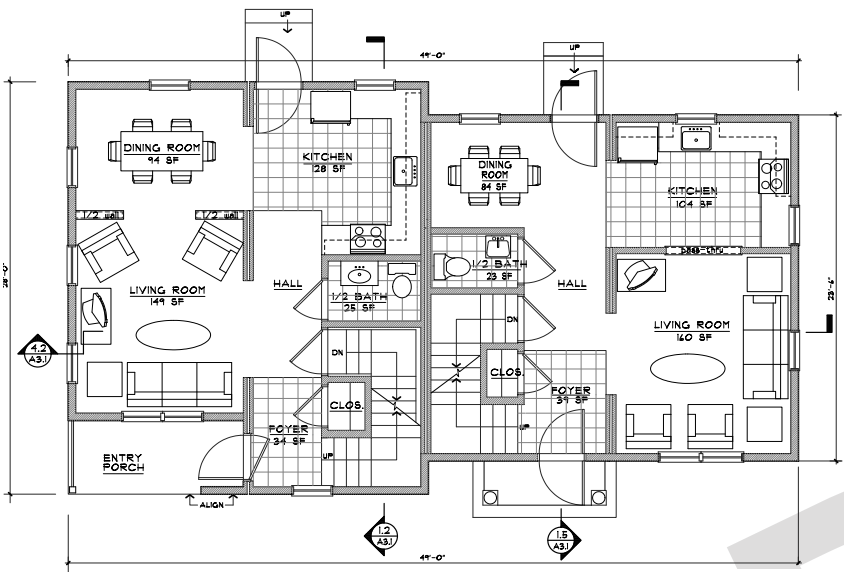
\*LOTS IN GREY ARE LOTS WHERE SINGLE-FAMILY HOMES THAT HAVE BEEN REPLACED BY DUPLEXES.



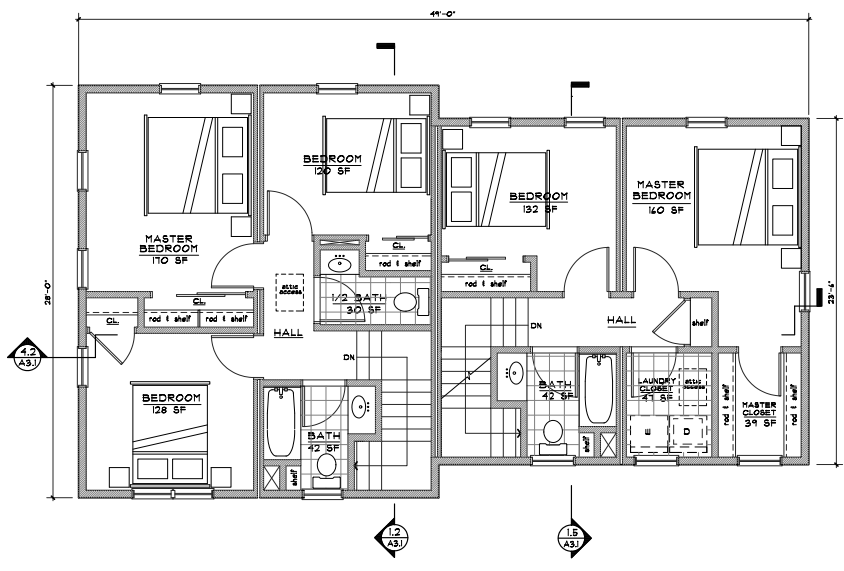
UNIT TYPE A

UNIT TYPE B

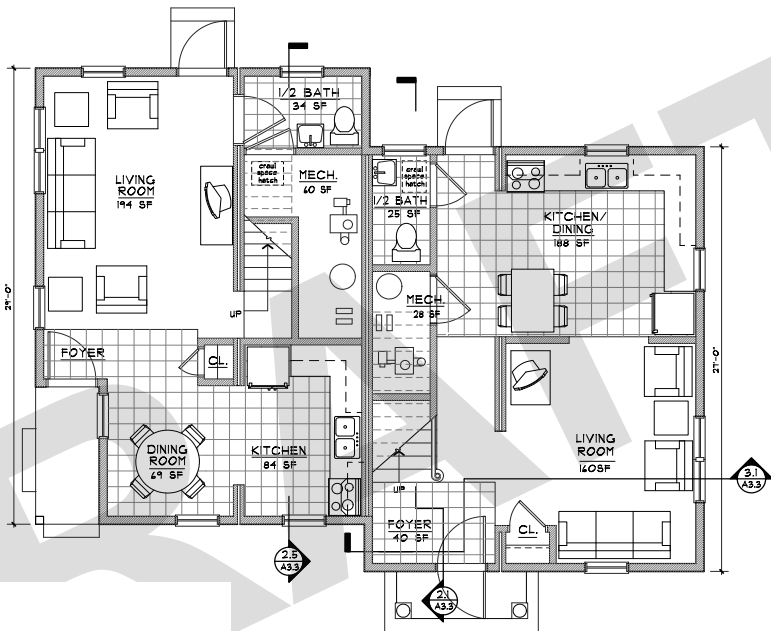
UNIT TYPE C



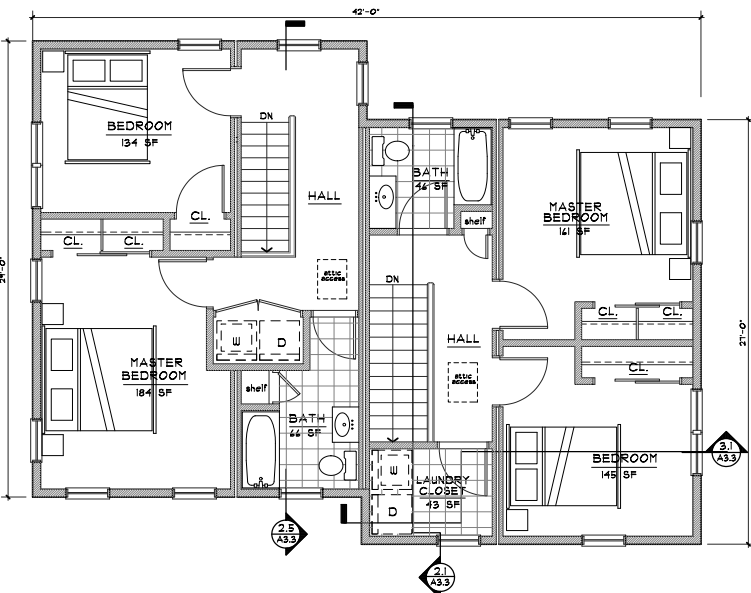
FIRST FLOOR PLAN



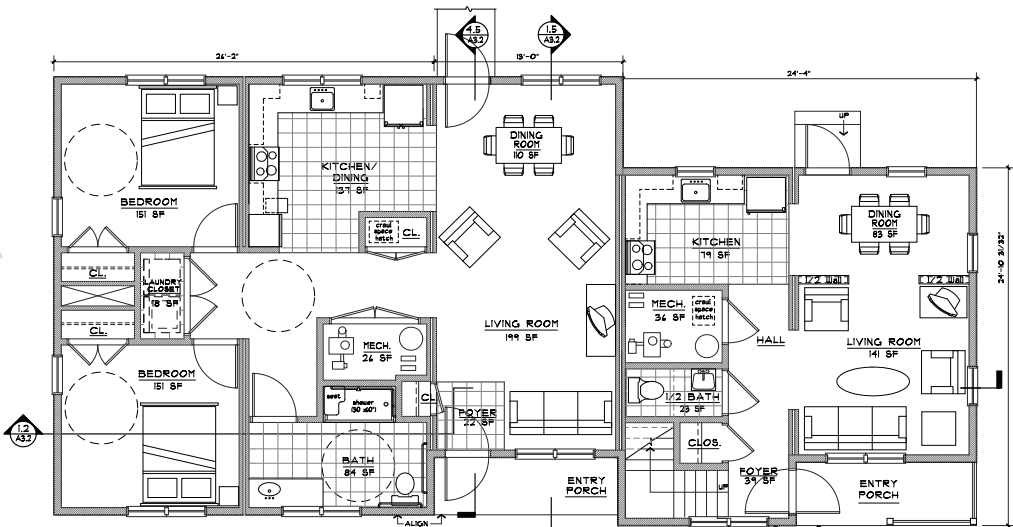
SECOND FLOOR PLAN



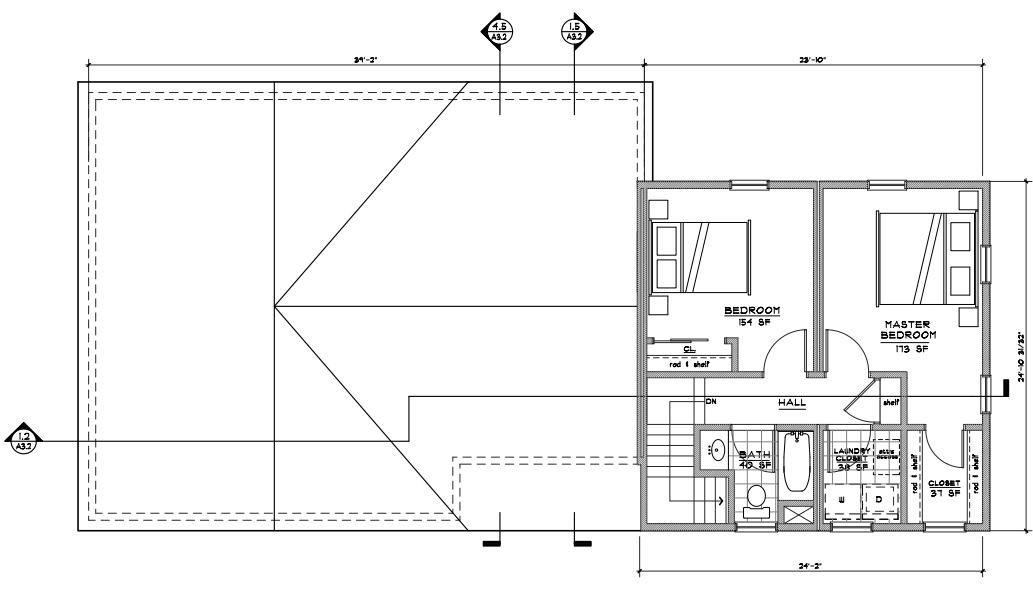
FIRST FLOOR PLAN



SECOND FLOOR PLAN



FIRST FLOOR PLAN



SECOND FLOOR PLAN

NOTE: PLANS ARE FOR REPLACEMENT DUPLEXES: SINGLE FAMILY HOME PLANS NOT AVAILABLE.





## EXISTING CONDITIONS IN PICTURES - HIGH ROCK HOMES



1. This development originally consisted of 80 small 2 and 3 bedroom single family homes, 60 of which remain. They are arrayed along a series of private curving streets owned by the NHA, Streets are lined with tall trees.



2. Part of the 25 acre site is flat, with houses very close to grade. Most houses have fairly dense tree coverage behind them.



3. Parts of the site are quite hilly with protruding ledges. Houses may be up a series of steps from the roads down below.



4. 20 of the small houses were replaced by two two-story family houses to double the density on the lots. Each unit has its own porch up a number of steps with small storage buildings in the rear.



5. At the corner of Yurick and Linden there are two of the duplexes, establishing a new scale for the neighborhood. Although larger than the original High Rock homes they are consistent with most of the private homes in the surrounding neighborhoods.



6. In other locations the duplexes abut the bungalows, suggesting divergent scales but adding variety to the neighborhood.





7. Trash is collected from barrels associated with each home or unit. Because of the topography, the character of the streetscape changes from location to location.



8. Paving is in relatively poor condition. In some areas there are curbs and sidewalks, but most areas have only vehicular paving and no curbs. The NHA owns and maintains most of the roads. By agreement the Town of Needham plows in the winter.



9. Each home or unit has a driveway off the road extending a limited distance into the front yard.



10. Fairly large new homes line High Rock Street near Murphy Road before it transitions to NHA owned property. The surrounding properties are buffered from the NHA High Rock development with large trees.



11. An abandoned railroad line and dense tree coverage runs behind High Rock homes and the Chambers Street developments, cutting both off from the Chestnut Street commercial area, but separating them from surrounding residential neighborhoods.



12. Tall trees and relatively plentiful space suggests that the High Rock site is underutilized in terms of providing opportunities for affordable housing.



# INTERIOR EXISTING CONDITIONS - ORIGINAL HIGH ROCK HOMES



1. Houses vary in size and layout but all are one story. They have open living/dining areas that offer furnishing options



2. A back hallway connects bedrooms to the living/dining areas of the house.



3. Some of the houses have a mechanical room right at the center, which tends to separate kitchens from other parts of the house.



4. Bedrooms are adequately sized with adequate closets and windows on two sides.

# DEVELOPMENT NARRATIVE - MATTHEWS HOUSE

## MATTHEWS HOUSE

Matthews House is a group home funded under the Massachusetts “Chapter 689”, which provides housing for persons with mental illness, or developmental or physical disabilities. Located on Great Plain Avenue a mile from Needham center, this 8 unit building is owned and maintained by the NHA, with managed living services provided by the Department of Mental Health. Ongoing maintenance, repairs and modernization will be required, and possible resources beyond DHCD formula funding can be explored in the same way as the 5 other NHA developments.



1. The Matthews House building appears to be a fairly typical home in a residential neighborhood. Because of the number of residents and their need for services there is a fairly large drive and parking area.



2. The wide drive and ramp distinguish Matthews House from others in the neighborhood suggesting fencing and planting to help integrate it into the neighborhood.



# REPAIR AND IMPROVEMENT NEEDS FOR NHA PROPERTIES

## INTRODUCTION

This section 4 summarizes work that has been done at each development over the past decade and identifies work that needs to be accomplished in the next few of years to better facilitate the setting of priorities. Over the past decades the Needham Housing Authority has been able to maintain its existing housing stock and associated sites and keep them in reasonable repair. Although the State and Federal funding has become increasingly limited, roofs have been replaced as needed, finishes improved when they reach the end of their useful life, mechanical systems replaced when they no longer function as intended, and the most damaged paving replaced. But because of funding limitations, there is always more work to be done, and maintenance is always a step or two behind what is needed. Buildings will continue to age and needs will increase.

Larger sums of money are available through the programs noted in later sections of this report, but there is competition for funding and sources are limited. It is important for the authority to look comprehensively at current and anticipated needs across all of their developments so that staff time and limited funding can be allocated as effectively as possible. The federal developments - Seabeds, Captain Robert Cook and High Rock, have different funding sources from the state developments - Linden and Chambers, although local funding can be allocated to either.

The NHA will need to evaluate which work items can wait for the yearly allocation of State and Federal funding, and what work may be part of a larger scope funded by HUD's Rental Assistance Demonstration Program (RAD), Massachusetts High Leverage Asset Preservation Program (HILAPP) or other programs noted in this section, or by Community Preservation Act (CPA) funding. It is critical for the NHA to maintain a nimble and wide-ranging search for repair/improvement funding options.

NHA has recently received grants for boiler replacement through the DHCD sustainability program and these have been installed at Chambers Street and Linden Street developments. Utilities may provide rebates or fixtures/replacement at no cost, and state funds may be available for sustainability improvements such as LED lighting, high efficiency boilers and low flow sinks and toilets.

The next section 5 describes more ambitious modernization projects that can make substantial improvements in buildings and sites and section 6 describes redevelopment options for Seabeds/Cook and Linden/Chambers/High Rock. Although repairs that protect residents and the value of properties should be made on a timely basis, the potential for substantial redevelopment should be kept in mind when allocating funds for more limited repairs that might be affected by a larger modernization effort.

REPAIRS AND IMPROVEMENTS NEEDED: CAPTAIN ROBERT COOK DEVELOPMENT

Site:	Continue patching and/or replacement of paving and curbing and bring into compliance with accessibility requirements. Improve landscape.
Security:	Install cameras at strategic locations.
Showers:	Replace 100% of showers with new fiberglass showers 3 handicap bathrooms roll in.
Exterior Walls:	Serious deficiencies to be remedied ASAP.
Roofs:	Replace along with Exterior Wall remediation.
Kitchens:	100% of plastic laminate on particle board cabinets and counters need replacement.
Vanities:	Replace 100% of plastic laminate/particle board vanities.
Toilets:	Replace all with 1.28 GPF.
Living and Bedroom Flooring:	90% of flooring has been replaced with VCT. Replace remaining 10%.
Kitchen Flooring:	Replace existing with sheet vinyl in 100% kitchens.
Bathroom Flooring:	Replace existing with new sheet vinyl in 100% of bathrooms.
Wall finishes:	Patch and paint plaster and trim as required.
Interior Doors:	Replace all hollow core doors with new solid core doors and new hardware to meet contemporary standard.
Heating Plant:	Replace boilers for each unit with gas fired forced hot water high efficiency boilers. Note that boilers for two units are paired in sheds behind buildings. Remove chimneys if possible.
Distribution:	Replace fin tube radiators with new fin tube.
Hot Water:	Replace existing water heaters, one per unit, with new SuperStor or equal system integral to system.

Air conditioning:	All units have sleeves; units by residents. No change required. Coordinate with envelope work.
Common Areas:	No interior common areas. Improve playground and create exterior common areas for resident use.
Electric Service:	100 amps inadequate – upgrade to 200 amp service to meet contemporary standard.
Lighting:	Replace existing with LED. Utilize utility rebates.
Accessibility:	Bring curb cuts and walks into compliance with MAAB requirements. Most units have accessible entries. Considerer upgrading 5% of kitchens, baths and doors to full MAAB compliance.
Solar Photovoltaics:	Many roofs face southwest. Although south is ideal, roofs may still provide enough solar insolation to warrant consideration. Investigate third party solar and other options.

REPAIRS AND IMPROVEMENTS NEEDED: SEABEDS WAY DEVELOPMENT

Site:	Continue patching and/or replacement of paving, curbing, and ramps. Entry drive repaved in 2018
Security:	Install cameras at strategic locations.
Exterior Walls:	Siding, insulation, sheathing, air and vapor barrier and exterior doors replaced in 2016.
Roofing:	Roofing, coping and flashing replaced in 2016 along with exterior wall work noted above.
Kitchens:	100% of plastic laminate on particle board cabinets and counters need replacement.
Vanities:	Replace 100% of plastic laminate/particle board vanities.
Toilets:	Replace all with 1.28 GPF.
Showers:	Replace 100% of showers with new fiberglass units.



Living and Bedroom Flooring:	80% of flooring has been replaced with VCT. Replace remaining 20%.
Kitchen Flooring:	Replace existing with sheet vinyl 100% of kitchens
Bathroom Flooring:	Replace existing w/ new sheet vinyl in 100% of bathrooms.
Wall finishes:	Patch and paint plaster and trim as required.
Interior Doors:	Replace 100% hollow core doors with new solid core doors and hardware to meet contemporary standard.
Heating Plant:	Replace boilers, 1 per building, with gas fired forced hot water high efficiency boilers.
Distribution:	Utilize existing radiators in good condition.
Hot Water:	Replace existing water heaters, one per building, with new SuperStor or equal system integral to heating system.
Air conditioning:	All units have sleeves; units by residents. No change required.
Common Areas:	Patching and painting in entries, hallways and laundries. Replace finishes to improve character and quality of spaces. Reconsider how space is being utilized.
Electric Service:	100 amps adequate.
Lighting:	Replace existing with LED. Utilize utility rebates.
Accessibility:	Continue patching of ramps and curb cuts. First floor units have accessible entries. Considerer upgrading 5% of kitchens, baths and doors to full MAAB compliance.
Solar Photovoltaics:	All roofs face east and west; south is ideal. West facing roofs may still provide enough solar insolation to warrant consideration. Investigate third party and other options.

### REPAIRS AND IMPROVEMENTS NEEDED: LINDEN STREET DEVELOPMENT

Site:	Continue patching and/or replacement of paving and curbing. Improve landscape.
Security:	Install cameras as strategic locations.
Exterior walls:	Brick and wood siding in good condition. Point, patch and paint as necessary.
Roofs:	Replaced except for 3 in 2018. Replace final 3.
Kitchens:	100% of plastic laminate on particle board cabinets and counters need replacement.
Toilets:	Replace all with 1.28 GPF.
Showers:	Replace 100% of showers with new fiberglass showers; roll in on first floor.
Living and Bedroom Flooring:	100% replacement required.
Kitchen Flooring:	Replace existing with sheet vinyl in all kitchens.
Bathroom Flooring:	Replace existing with new sheet vinyl in all bathrooms.
Wall finishes:	Patch and paint plaster as required.
Interior Doors:	Replace all hollow core doors with new solid core doors to meet contemporary standard.
Heating Plant:	Heating plants replaced in 2018 in 10 utility rooms serving 18 buildings.
Distribution:	Existing baseboard radiators in good condition.
Hot Water:	Hot water replaced in 2018 with SuperStor system integral to heating plants note above.
Air conditioning:	Window air conditioners by tenants. No change required.
Common Areas:	Improve laundry room finishes.
Electric Service:	100 amps adequate.

Lighting:	Replace existing with LED. Utilize rebates.
Accessibility:	No apartments have accessible entries. Kitchen and bathroom layouts make compliance with ADA/ MAAB requirements virtually impossible.
Solar Photovoltaics:	25% of roofs face south, which is ideal Given the low slope of all roof panels panels may be able to be positioned on more than 25% of roofs in a way that makes panels worth consideration. Investigate third party and other options.

REPAIRS AND IMPROVEMENTS NEEDED: CHAMBERS STREET DEVELOPMENT

Site:	Continue patching and/or replacement of paving and curbing. Improve landscape.
Exterior Walls:	Brick and wood trim in good condition. Point, patch and paint as necessary.
Roofs:	Replaced in 2018.
Kitchens:	100% of plastic laminate on particle board cabinets and counters need replacement.
Toilets:	Replace all with 1.28 GPF
Showers:	Replace 100% of showers with new fiber glass showers: roll in on first floor.
Living and Bedroom Flooring:	Replace 100%.
Kitchen Flooring:	Replace existing with sheet vinyl in all kitchens
Bathroom Flooring:	Replace existing with new sheet vinyl in all bathrooms.
Wall finishes:	Patch and paint plaster as required.
Interior Doors:	Replace all hollow core doors with new solid core doors to meet contemporary standard.

Heating Plant:	Boilers, 1 per building, replaced with gas fired forced hot water high efficiency boilers.
Distribution:	Original baseboard radiators re-utilized.
Hot Water:	Replaced 2018, one per building, with SuperStor water heaters integral to heating plant.
Air conditioning:	Window air conditioners by tenants. No change required.
Common Areas:	Patching and painting in entries, hallways and laundries. Replace finishes to improve character and quality of spaces. Reconsider how space is being utilized. Laundries are on second floors which make them inaccessible to those with mobility impairments - consider laundry on first floor utilizing excess utility room space.
Electric Service:	100 amps adequate.
Lighting:	Replace existing with LED.
Security:	Install cameras as strategic locations.
Accessibility:	Continue patching of ramps at entries and curb cuts. Integrate current MAAB and ADA requirements in replacement of doors, bathrooms and kitchens. Install laundry on ground floor of one or more buildings.
Solar Photovoltaics:	Hip roofs, most facing east and west, and fairly tall trees to the east, west and south make installation of panels at Chambers Street unlikely to be worth considering.



REPAIRS AND IMPROVEMENTS NEEDED: HIGH ROCK HOMES DEVELOPMENT

The work noted below is for the 60 remaining original homes. The 20 replacement duplexes are less than a decade old and do not need work at this time other than routine maintenance. Drawings for the original homes are not available, making it more difficult to plan and design improvements. Buildings vary in size and layout. Window or door replacement, mechanical, kitchen or bathroom upgrades or virtually any other kind of improvement would require measuring each house. Sites vary as well. Replacement of driveways, porches, stoops or walks would vary from home to home.

Site:	Continue patching and/or replacement of roads, and driveways at each house. Improve landscaping. Enlarge or improve porches, patios and stoops.
Building Envelope:	Siding, insulation, windows, exterior doors are in good condition but ongoing maintenance is required. Consider weather-stripping envelope sealing and attic insulation to improve solar performance with state or federal subsidies.
Kitchens:	Kitchens were replaced approximately 10 years ago and are in good condition.
Bathtubs:	40 tubs need replacement.
Living and Bedroom Flooring:	Partial replacement; replace remainder.
Kitchen Flooring:	Kitchens were replaced approximately 10 years ago and are in good condition.
Bathroom Flooring:	Replace
Wall finishes:	Patch and paint plaster as required.
Interior Doors:	Replace hollow core doors with solid core doors. Replace hardware to meet contemporary standard.
Heating Plant:	58 original boilers need replacement with high efficiency gas fire boilers.
Distribution:	Utilize existing fin tube baseboard radiators.
Hot Water:	Replace 58 water heaters, one per building,

Air conditioning:	Window air conditioner by tenants. No change required.
Common Areas:	No common areas.
Electric Service:	Current electric service (assumed to be 100 amps/unit) adequate.
Lighting:	Replace existing with LED.
Security:	None provided or required.
Accessibility:	Homes vary in their level of accessibility. Consider upgrading homes now at or near grade to accessible homes with MAAB compliant kitchens, entries and bathrooms.
Solar Photovoltaics:	The small size and varying orientation of roofs and tree cover make solar panel installations unlikely to be worth considering.
Sustainability:	Weatherstrip and air seal houses. Upgrade windows, doors and insulation with high performance products. Replace boilers.

REPAIRS AND IMPROVEMENTS NEEDED: MATTHEW HOUSE DEVELOPMENT

Kitchens:	Replace both upstairs and downstairs with kitchens that meet or exceed MAAB, ADA and other applicable requirements. This should be a top priority.
Windows:	Replace windows with high performance units meeting or exceeding current code requirements.
Bathroom and Laundries:	Upgrade bathroom and laundry area with new fixtures, accessories and spacing that meets or exceeds MAAB, ADA and other applicable requirements.
Site:	Add fencing and planting along the sidewalk to screen the driveway and parking from view.

DRAFT



# MAJOR MODERNIZATION OPTIONS

## INTRODUCTION

The Needham Housing Authority's aging portfolio of housing and surrounding sites will continue to need routine maintenance. Both the federal and state developments receive a yearly allocation of funding intended for basic repairs and upkeep. This routine maintenance is discussed in section 4, and the annual funding sources are described in section 7. However, this yearly allocation of funds are generally not sufficient to upgrade apartments, buildings or sites – just maintain them in acceptable condition. This section 5 addresses opportunities for major modernization, including projects such as:

1. Development-wide replacement of kitchens – which tend to get a lot of wear and tear on finishes and appliances and can be replaced more economically across a whole development.
2. Development-wide replacement of bathrooms – that like kitchens, are subject to wear and tear in an environment easily degraded by water and moisture.
3. Improvements inside apartments to meet accessibility requirements that were not in place when developments were built. This can include accessible closets, kitchens, bathrooms, dimensional requirements in apartments and buildings, accessible building entries, and laundries in accessible locations.
4. Upgrades to building envelopes, including insulation, to meet contemporary sustainability and energy use requirements. Note that significant work is required at Captain Robert Cook.
5. Additional or modified common spaces to meet resident needs.
6. Grading and landscaping to make sites more accessible and attractive.
7. Replacement of paving and curbs throughout a development
8. Significant emergency repairs – like those required at Seabeds due to faulty construction and associated ice dams in 2015.
9. Additional units added to existing buildings.
10. Added elevators to make second floors accessible.
11. Photo-voltaic panels and other renewable energy efforts.
12. Sustainability and energy consumption improvements.
13. Landscaping, fencing, regrading of sites for accessibility, outdoor community space, repainting and other efforts to improve the appearance and functionality of NHA properties.

Although some of this work has been done over the years – including the emergency work at Seabeds Way and the upgrades to the bathrooms at High Rock– it is generally done on a unit by unit or driveway by driveway basis due to the limited funding available. Ideally the work noted above – and below – is best and most economical when done on a development wide basis, but requires more extensive funding than what is included in the yearly allocations. In section 7 of this report we outline sources of funding that might allow this larger scale work to be done. Refer also to section 3 of this report for documentation of the existing conditions of the NHA developments, sites, buildings and apartments.

Note: In Section 6 we propose new development on existing sites that is more extensive in scope than what would be considered in a major modernization program.

## MAJOR MODERNIZATION OPTIONS: CAPTAIN ROBERT COOK DRIVE DEVELOPMENT

### Remedy deficiencies in building envelopes:

This development was constructed at the same time as Seabeds and was designed by the same architect utilizing the same construction materials and details. An analysis of Captain Robert Cook design and construction by Russo Barr Associates, architects and envelope consultants, after the ice dam damage at Seabeds, recommended replacement of the siding, wall sheathing, insulation, soffits and trim throughout the development. This is the same body of work performed at Seabeds and is anticipated to cost \$1,200,000 if publicly bid in 2019. (See Appendix for the Russo Barr report on anticipated costs). Because the repairs were made to Seabeds after significant water infiltration, not only the exterior building assemblies required replacement, but interior finishes as well. We highly recommend that envelope work be done at Captain Robert Cook before there is significant water infiltration so that work can be confined to the exterior. This work should be able to be done from the exterior so that no resident displacement will be required, and there is minimum resident inconvenience. (See image 1)

### Replace windows and entry doors:

Doors and windows throughout the development are original. When installed they did not meet today's standards, and glazing, weather-stripping, and frames have deteriorated over time. Replacement will reduce air infiltration and associated heating and cooling costs. Although an energy savings payoff date is fairly far off into the future, there are resident comfort and convenience payoffs as well, and replacement will reduce staff time required for routine maintenance.

Given that windows and entry doors are an integral part of the building envelope they should be tied into the air and vapor barrier on top of the sheathing and under the siding. It is advantageous to do the replacement at the same time as the envelope work noted above. This will save money through incorporation into a single bid package, eliminate the need to install window trim twice, and provide tighter buildings with

less air and water infiltration that can impact comfort and the integrity of building systems.

### Kitchen Replacements:

Cabinets, counters and flooring are original and nearly 40 years old. Although some are in reasonable shape, and a few have been replaced, they are reaching the end of their useful lives. Replacement could be done through yearly allocation of maintenance funds, but a major modernization kitchen replacement project for all apartments should be considered.

### Bathroom Replacements:

Vanities, showers, and flooring are original. Although most are serviceable, and a few replaced, most are reaching the end of their useful lives. While replacement could be done through yearly allocation of maintenance funds, a major modernization bathroom replacement project for all apartments should be considered. (See image 2 for an example)

### Site improvements:

Although the site is relatively attractive and has been adequately maintained compared to other housing authority developments throughout the Commonwealth, there are a series of improvements that would be beneficial to residents – primarily families with children - and staff. All of these should be pursued with site planning professionals – a landscape architect and civil engineer – to insure that the result is an attractive and easy to maintain exterior environment. They can bring creative ideas to the challenge of using limited funding to make the greatest improvements in the lives of children and their parents. They understand the kinds of materials that are most effective in meeting today's needs. Possible improvements are noted in 1,2,3, and 4 below:

#### 1. Paving

Streets, curbs and sidewalks are in relatively poor condition. Repaving will allow all elements of the site circulation system



1. Problems caused by a damaged building envelope and outdated doors or windows can be remedied with exterior improvements and replacements, resulting in a high-quality facade and protecting residents from repairs requiring displacement in the future.



2. A replacement project involving the remodeling of all apartments would allow for some units to become handicap accessible; additionally, all other units would increase in value and appeal to present and prospective residents.



to be in compliance with accessibility requirements, improve safety, and improve the appearance of the development. The existing parking should be reconsidered by a site planning professional in concert with NHA residents and the staff, with goal of insuring that paving is used effectively. Is there more parking than necessary? Are there places where lot parking can be reduced and replaced by on street parking – which utilizes paving more efficiently, tends to slow down driving speeds, and creates a more traditional sense of neighborhood. These issues should be reviewed as part of an overall reconsideration of the site layout and open space to improve the character and quality of the development.

## 2. Yards

Although every apartment has its own front yard, there is no separation between adjacent yards, and between public sidewalks and private yards. Fences and landscaping can be used to define the boundaries between public and private spaces, making the Captain Robert Cook environment more comfortable for residents. These elements will make the development more like traditional neighborhoods – and less like public housing. Improved landscaping should be investigated as part of an overall site design strategy that considers the other issues noted above and below. (See image 3 for an example)

## 3. Community Space

Just as there are no fences or landscape elements defining front yards, there are no elements in the landscape defining community spaces. Open space is undifferentiated with no indications of the kind of public, semi-public, semi-private and private spaces that create a recognizable community fabric. There are shared elements like dumpsters, ganged mailboxes, benches, and the playground in the center of the turnaround, but none are defined in a way that creates comfortable neighborhood gathering spaces like the ones found in most traditional neighborhoods. A better located playground, a grouping of benches, a paved terrace or gazebo could create the kind of community center that would provide cohesiveness to the development. It could be associated with the NHA offices marking the entry to the residential area. The development of community spaces should be part of an overall site design strategy. In addition, screening of dumpsters should be considered, along with

alternative locations where they are convenient for access but less prominently placed. (See image 4)

## 4. Community Gardens

Gardens provide a number of advantages in family developments. They are a source of high quality and low cost food. They become a center for community life with efforts that bring people together. And they can be part of an educational effort that teaches kids about cooperation and responsibility, as well as an understanding of how food is grown. There is adequate space on site for community gardens; setting aside space should be considered.

### Sustainability Upgrades:

There are a series of reasons for housing authorities to consider “greening” their developments. For energy related issues there are long term cost savings. Recycling has a positive impact on the environment. And “green” materials are better for resident health. Energy improvements are often supported through grants or rebates, or third party installers. Options to consider include:

- Solar PV on roofs or elsewhere on site – third party installation (See image 5) Many roofs face southeast or southwest with minimal shadowing from trees. Ground mounted panels could also be considered.
- Replace windows and doors with high performance units.
- Replace current heating system with combined heat and power (co-generation) system that produces both electricity and heat efficiently. Minimum system size would require both Captain Robert Cook and Seabeds Way to be included.
- Replace all lighting with LED lighting within apartments and on the exterior. Rebates may be available.
- Utilize storm water for site irrigation
- Add air and vapor barrier to exterior assembly
- Although insulation will likely be replaced if there is a major envelope improvement project like that at Seabeds Way in 2016, replacement may be limited to R9 in walls and R19 in attics. Additional insulation will decrease energy usage if there is the opportunity to add it, 1” of continuous rigid insulation outboard of the sheathing should be considered.
- Encourage recycling.



3. Fences and hedges can help define yards which offer a sense of “ownership” to residents and give shared open space a more public character.



4. A relocation and remodeling of a designated playground area would encourage communal, family-friendly activity throughout the Captain Robert Cook development.



5. The installation of solar panels makes houses within the development significantly more environmentally conscious, while simultaneously providing a long term cost-effective energy source.



## MAJOR MODERNIZATION OPTIONS: SEABEDS WAY DEVELOPMENT

Note that Seabeds Way was designed by the same architect, and built in a similar way and at the same time as Captain Robert Cook so many of the recommendations are similar.

### Replace doors:

Doors throughout the development are original. When installed they did not meet today's standards, and glazing, weather-stripping, and frames have deteriorated over time. Replacement will reduce air infiltration and associated heating and cooling costs. Although an energy savings payoff date is fairly far off into the future, there are resident comfort and convenience payoffs as well, and replacement will reduce staff time required for routine maintenance. Siding and windows were recently replaced at Seabeds; and effort will need to be made to tie new doors into the existing air and vapor barrier to provide a tight building envelope.

### Kitchen Replacements:

Cabinets, counters and flooring are original and nearing 40 years old. Although some are in reasonable shape, and a few have been replaced, they are reaching the end of their useful lives. Replacement could be done through yearly allocation of maintenance funds, but a major modernization kitchen replacement project for all apartments should be considered.

### Bathroom Replacements:

Vanities, showers, and flooring are original. Although most are serviceable, and a few replace, most are reaching the end of their useful lives. Replacement could be done through yearly allocation of maintenance funds, but a major modernization bathroom replacement project for all apartments should be considered.

### Site improvements:

Although the site is relatively attractive and has been

adequately maintained compared to other housing authority developments throughout the Commonwealth, there are a series of improvements that would be beneficial to the primarily older residents and to staff. All of these should be pursued with site planning professionals – a landscape architect and civil engineer – to insure that the result is an attractive and easy to maintain exterior environment suited to the older residents in this development. They can bring creative ideas to the challenge of using limited funding to make the greatest improvements in the lives of residents.

### 1. Paving

Although streets, curbs and sidewalks were replaced along the entry drive in 2018, the remaining paving sits in poor condition. Repaving will allow all elements of the site circulation system to be in compliance with accessibility requirements, improve safety, and improve the appearance of the development. The existing parking should be reconsidered by a site planning professional in concert with NHA residents and staff, with goal of insuring that paving is used effectively. The turnaround is a large paved area with parking at its center, but could be used more effectively. The parking lot between the first two buildings also appears to be oversized giving the amount of parking it allows.

There are five drives – between each of the 4 buildings and at each end - that lead south down the entire length of each building. Although these may support accessibility and emergency vehicle access, and lead to small storage sheds, they appear to add more paving than is necessary. These issues should be reviewed as part of an overall reconsideration of the site layout and open space to improve the character and quality of the development.

### 2. Pedestrian Zones

Drives thread their way throughout the development. Although there are sidewalks, pedestrian zones appear to be overwhelmed by paving set aside for motor vehicles. Pedestrian areas can still accommodate emergency vehicles and support accessibility while providing more pleasant places for residents and visitors. By reorganizing parking and drives around pedestrian areas – rather than the other



6. Changes in paving can help define pedestrian zones that are more comfortable, and safer, for residents.



7. Benches, planters and other site elements can create comfortable pedestrian oriented gathering places.



way around - Seabeds Way development can become a better place for residents. (See image 6 for an example)

3. Community Space

The development of improved pedestrian areas can provide gathering places for residents if properly defined with paving and landscape. There are currently benches and dumpsters that seem to be scattered around the site rather than positioned to facilitate social activities. Although open space is defined by the berm to the north and by buildings, none are given the kind of identity that encourages people to meet or to be outdoors. Outdoor terraces and balconies associated with every apartment help to animate the buildings and provide useful private outdoor space, but they have an ambiguous relationship to the adjacent open spaces – that aren't really public or private but in a kind of uncomfortable limbo.

A small plaza defined by paving and hedges, or a well-designed gazebo are the kind of traditional elements use to provide neighborhood centers – although they don't need to replicate traditional designs. The development of community spaces should be part of an overall site design strategy that is more responsive to resident needs. In addition, screening of dumpsters should be considered along with alternative locations where they are easy to access but less prominent. (See images 7 and 8)

4. Community Gardens

Gardens provide a number of advantages in elderly developments. They are a source of high quality and low cost food. They become a center for community life with efforts that bring people together. And they can be an incentive for older residents to leave their homes and meet neighbors and enjoy the outdoors. There is adequate space on site for community gardens; setting aside space should be considered.

5. Accessible Entries

Buildings meet accessibility requirements where ramps have been added to entries and to terraces. Every building has a ramped entry; a few terraces have ramps. Ramps are in

relatively poor condition and most have been patched several times. Concrete ramps and steel rails tend to fare poorly in the New England climate where freeze-thaw cycles and the use of salt degrades these materials. Given that all buildings are fairly close to grade, the site can probably be regraded to eliminate the need for ramps. A slope of less than 1:20 is not considered a ramp and does not require handrails on both side that often interfere as much as help with making an entry welcoming. Regrading and sidewalk replacement to eliminate the need for ramps should be considered as part of a comprehensive site design strategy.

Accessible Second Floors:

Seabeds Way is intended for older residents but the second floors are accessed only by stairs, making it difficult for anyone with mobility limitations to live there or visit. Elevators could be added to the existing buildings to provide wheelchair access to second floors and help those with difficulty climbing stairs, however there are formidable barriers to overcome.

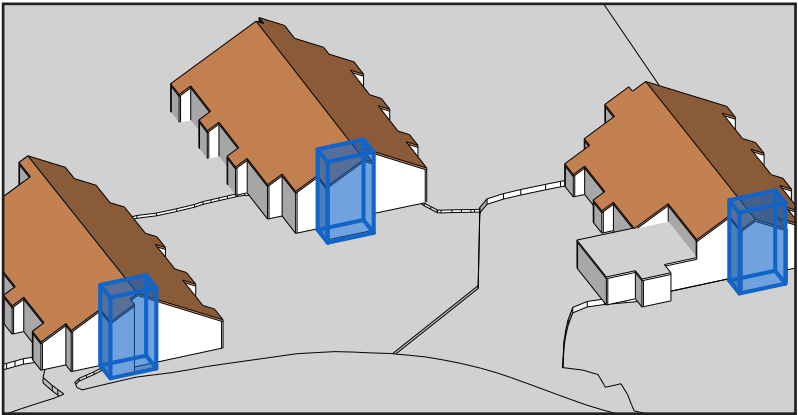
Although there appears to be space within the existing building envelope to add an elevator, the reality is that an elevator would likely require a section of the building to be demolished, and new concrete elevator pit installed, a concrete block or steel and wood hoistway constructed, the cab and track installed, and an elevator machine room with specialized equipment and a cooling system installed. Elevators are rarely installed unless they serve 20 or more units (Seabeds Way buildings have 6 apartments on the second floor); funding is unlikely to be obtainable for elevator installation in these buildings. Lifts are cheaper and easier to install, but do not meet ADA and Massachusetts Architectural Access Board requirements because their size and control systems generally don't meet the needs of those who need them. Although an elevator or lift could be considered, they are unlikely to be cost effective solutions to the challenge of providing accessibility and visitable second floors. (See images 9 and 10)

Sustainability upgrades:

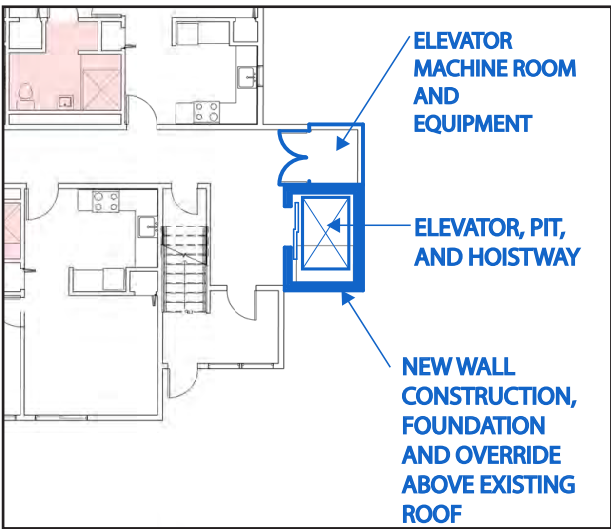
Reducing energy usage is advisable at all NHA developments, and Seabeds Way offers significant



8. Outdoor shelters can provide a center for community life and provide a focus for pedestrian oriented spaces.



9. Elevators could be added to all four Seabeds Way buildings to make second floors accessible, but costs are formidable.



10. Adding elevators would require significant demolition and new construction, although it could be contained within the existing building footprints.

opportunities to do so. Options to consider include:

- Solar PV on roofs – although all roofs face east and west, which is not the ideal south facing orientation.
- Replace current heating system with combined heat and power system for both Seabeds Way and Captain Robert Cook Drive.
- Replace all lighting with LED lighting
- Utilize storm water for site irrigation
- Although Insulation was added when the major envelope improvements were made in 2016, insulation was limited to R9 in walls and R19 in attics. Additional insulation will decrease energy usage if there is the opportunity to add in the future, particularly in the roof.
- Encourage recycling.

#### Heat/Hot water:

Four central boilers, one for each building, and water heaters need replacement. NHA has applied for a grant for boiler replacement through the DHCD sustainability program.

#### Common Space Improvements:

The lounge and lobby spaces are underutilized. The needs of the residents should be reconsidered along with new spaces that are utilized and defined.

### MAJOR MODERNIZATION OPTIONS: LINDEN STREET DEVELOPMENT

Both Linden Street and Chambers Street developments are nearly 50 years old; many or most materials or assemblies that have not been replaced are reaching the end of their useful lives - with the exception of building foundations, wood framing, and brick veneer.

#### Exterior Improvements:

Doors and windows throughout the development are original. When installed they did not meet today's standards, and glazing, weather-stripping, and frames have deteriorated over time. Replacement will reduce air infiltration and associated heating and cooling costs. Although an energy savings

payoff date is fairly far off into the future, there are resident comfort and convenience payoffs as well, and replacement will reduce staff time required for routine maintenance.

Roofs and copings were replaced in 2018. Brick and wood siding, alongside boilers and water heaters, are in relatively good condition. Wood trim is in relatively good condition although there are locations where patching and replacing is warranted.

All wood siding, columns and trim are painted white, which gives a homogeneous quality to all of the buildings and suggests that this is an institutional development. Variation in colors, if well done, would add variety to the buildings and give each one its own identity. Good color schemes require an eye for design. A consultant – an architect or interior designer - should be retained to propose and test color options before finalizing and implementing.

#### Kitchen Replacements:

Cabinets, counters and flooring are original. Although some are in reasonable shape, and a few have been replaced, they are reaching the end of their useful lives. Replacement could be done through yearly allocation of maintenance funds, but a major modernization kitchen replacement project for all apartments should be considered.

#### Bathroom Replacements:

Vanities, showers, and flooring are original. Although most are serviceable, and a few replaced, most are reaching the end of their useful lives. Replacement could be done through yearly allocation of maintenance funds, but a major modernization bathroom replacement project for all apartments should be considered.

#### Site improvements:

Although the site is relatively attractive and has been adequately maintained compared to other housing authority developments throughout the Commonwealth, there are a series of improvements that would be beneficial to the primarily older residents and to staff. All of these should be pursued with site planning professionals – a landscape



11. Carefully chosen colors can help provide variety and a sense of identity to buildings that might otherwise be identical.



12. Patios and pergolas can provide a transition from inside to outside for individual apartments or at common spaces like laundries.



architect and civil engineer – to insure that the result is an attractive and easy to maintain exterior environment suited to the older residents in this development. They can bring ideas to the challenge of using limited funding to make the greatest improvements possible. (See images 11 and 12)

### 1. Paving

Streets, curbs and sidewalks are in relatively poor condition. Repaving will allow all elements of the site circulation system to be in compliance with accessibility requirements, improve safety, and improve the appearance of the development. These issues should be reviewed as part of an overall reconsideration of the site layout and open space to improve the character and quality of the development. Parking space appears to be limited and the site does not offer opportunities for additional parking. Changing on-street parking by laws to allow resident parking in front of the development on Linden Street does not appear to be possible.

### 2. Linden Street Frontage

The Linden Street development has a strong presence directly opposite the school and playing fields, and is considered by many to be out of character with the neighborhood. The kind of variety that a well done painting scheme noted above will add to the frontage will begin to soften this presence. The addition of continuous hedges and/or fencing along Linden will also help integrate the development into its suburban context. Fencing should be carefully chosen – a traditional picket fence may clash with the mid-century modern character of the buildings, and a chain link fence is not advisable because it will reinforce the housing’s institutional character.

Simple spaced wood boards or metal verticals would complement both the building and neighborhood character. Continuous hedges open only at the walks to building entries are a viable alternative. In addition to screening the development from the street, they will offer residents a greater sense of privacy from automobile traffic and from those in the playing fields across the street. Fencing at the rear of each building should be considered as well - to differentiate front yards from back and to provide residents with semi-private outdoor spaces associated with

their own apartments. The height and location of fencing should be carefully considered to insure that open space is used effectively and back yards do not leave awkward underutilized spaces between them. The creation of back yards should be part of a broader reconsideration of site utilization and the effective definition of public and private spaces. (See image 13)

### 3. Porches, steps and walkways

The buildings set up odd entry conditions for apartments. The long front and back facades of every building have a four foot roof overhang on a row of columns suggesting traditional – if elongated – porches. But the front and back entry to every apartment is a small concrete stoop up one to three steps from the walk.

The stoops are too small to be real porches, but are elevated up enough that that space under the overhang on either side cannot be used as a porch space either. This design interferes with the potential of every apartment to have a usable exterior space right outside the door. This could be remedied by building a continuous deck the full length of the overhang, with low partitions extending out from the party walls to define the limits of each apartment’s porch. Stoops could also be enlarged so that they are usable without making them continuous – built with fiber composite decking on pressure treated framing on concrete piers. Alternatively, walks could be raised to floor level with paved terraces at grade to make apartments accessible. (Currently no apartments are accessible.) Grading and building construction would need to be studied – this may not be possible in all areas of the site.

### 4. Community Spaces

Green spaces are evenly distributed throughout the development. On the one hand – this allows everyone to have access to greenery right outside their door. And on the other, this makes it difficult to define a central open space that could provide a center for the Linden Community. The middle of each “pinwheel” of buildings is sufficiently large to locate a small terrace and benches with landscaping to make a small gathering space. Alternatively, benches and paved terraces adjacent to laundry rooms, clothes lines and trash



13. Fences and hedges can help provide privacy for residents while defining the adjacent public way.



14. Porches – whether associated with a single unit or built adjacent to common areas – facilitate resident socializing.



15. Community gardens may be a good use of Linden Street’s open spaces – which are now underutilized.



bin areas (if screened) could utilize these shared facilities to make social spaces for residents. At the south end of the development behind the Chambers Street Development community and maintenance building there is a larger space; a small plaza defined by paving and hedges, or a well-designed gazebo could help provide a neighborhood center. The development of community spaces should be part of an overall design strategy that is responsive to resident needs and the opportunities and limitations of the site, and that includes connections to the Chambers Street Development to the south. (See image 15)

### 5. Community Gardens

Gardens provide a number of advantages to elderly residents. They are a source of high quality and low cost food. They become a center for community life with efforts that bring people together. And they can be an incentive for older residents to leave their homes and meet neighbors and enjoy the outdoors. Although space is limited, there are many locations where 24" wide raised beds could be provided for resident use. Setting aside this space should be considered.

### Sustainability upgrades:

As previously noted, reducing energy usage in all of its developments should be a priority for the NHA. Options to consider at Linden Street include:

- Solar PV on roofs. Only 25% of roofs face south, but slopes may be low enough to consider panels on east and west facing roofs. There is not enough open land to consider panels elsewhere on site.
- Replace windows and doors with high performance units.
- Replace all lighting with LED lighting
- Utilize storm water for site irrigation

## MAJOR MODERNIZATION OPTIONS: CHAMBERS STREET DEVELOPMENT

### Exterior Improvements:

Doors and windows throughout the development are original. When installed they did not meet today's high standards, and

glazing, weather-stripping, and frames have deteriorated since installation. Replacement of these elements will reduce air infiltration and associated heating and cooling costs. Although an energy savings payoff date is fairly far off into the future, there are resident comfort and convenience payoffs as well, and replacement will reduce staff time required for routine maintenance.

Roofs and copings were replaced in 2018. Brick and wood porches and trim, alongside boilers and water heaters, are in relatively good condition although there are locations where patching and replacing is warranted. All wood siding, columns and trim are painted white, which gives a homogeneous quality to all of the buildings and suggests that this is an institutional development. Variation in colors, if well done, would add variety to the buildings and give each one its own identity. A consultant – an architect or interior designer – should be retained to propose and test color options before finalizing and implementing.

### Kitchen Replacements:

Cabinets, counters and flooring are original. Although some are in reasonable shape, and a few have been replaced, they are reaching the end of their useful lives. Replacement could be done through yearly allocation of maintenance funds, but a major modernization kitchen replacement project for all apartments should be considered.

### Bathroom Replacements:

Vanities, showers, and flooring are original. Although most are serviceable, and a few replaced, most are reaching the end of their useful lives. Replacement could be done through yearly allocation of maintenance funds, but a major modernization bathroom replacement project for all apartments should be considered.

### Site improvements:

Although the site is relatively attractive and has been adequately maintained compared to other housing authority developments throughout the Commonwealth, there are a series of improvements that would be beneficial to the primarily older residents and to staff. All of these should



16. Porches and colors can be used to add life to even the most basic buildings, and to differentiate them from each other.



17. Screening dumpsters and trash barrels makes sites more attractive and frees up other areas for resident uses.



be pursued with site planning professionals – a landscape architect and civil engineer – to insure that the result is an attractive and easy to maintain exterior environment suited to the older residents in this development. They can bring creative ideas to the challenge of using limited funding to make the greatest improvements in the lives of residents.

### 1. Paving

Streets, curbs and sidewalks are in relatively poor condition. Repaving will allow all elements of the site circulation system to be in compliance with accessibility requirements, improve safety, and improve the appearance of the development. The existing parking should be reconsidered by a site planning professional in concert with NHA residents and staff, with goal of insuring that paving is used effectively.

Because densely forested areas push so close to buildings on the east and west sides of the site, open space is relatively limited and the asphalt drive and parking tend to dominate the site. Differentiating sidewalks by using

concrete or pavers would give them a presence that would help the development feel more pedestrian oriented and clarify the pathway from housing to Linden Street and beyond. These issues should be reviewed as part of an overall reconsideration of the site layout and open space to improve the character and quality of the development.

### 2. Community Space

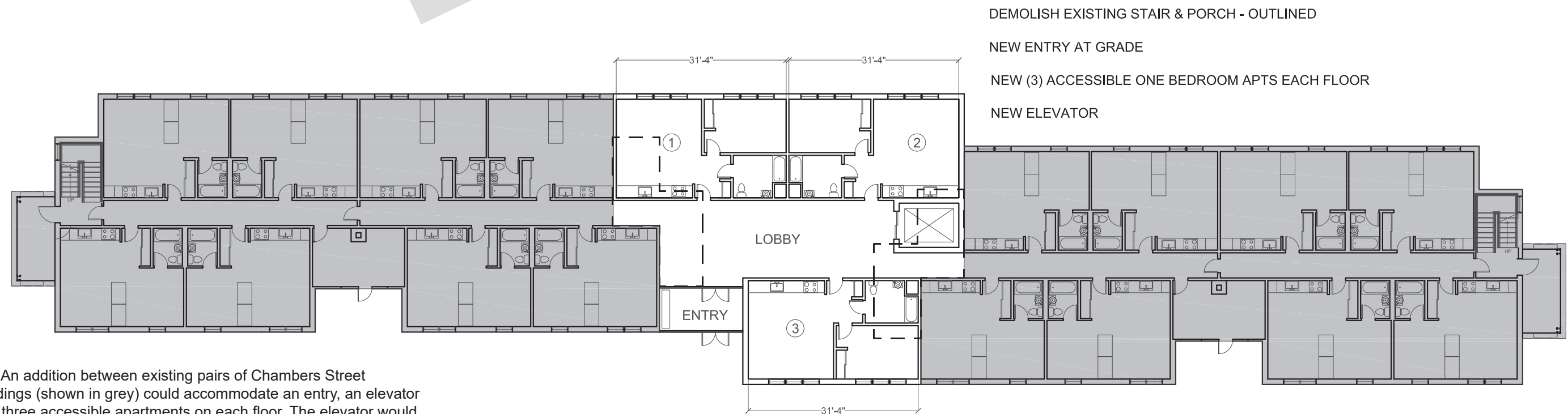
The development of improved pedestrian areas can provide gathering place for residents if properly defined with paving and landscape. There are currently benches and trash barrel areas that seem to be scattered around the site rather than positioned to facilitate social activities. At the end of Chambers Street, at the curve in Chambers Street and in front and to the side of the Community Center Building there are open areas that could be developed to be more useful for residents. The porches at each end of each building, terraces and balconies associated with the second floor laundries help to animate the buildings and provide useful shared outdoor space, but they have an ambiguous relationship to

the adjacent open space and don't feel like they are part of a continuous public realm.

A small plaza defined by paving and hedges, or a well-designed gazebo are the kind of traditional elements used to provide neighborhood centers or community space – although they don't need to replicate traditional designs. The development of community spaces should be part of an overall site design strategy that is more responsive to resident needs and the opportunities and the limitations of the site, and that includes connections to the Linden Street Development to the north. (See Image 17)

### 3. Community Gardens

Gardens provide a number of advantages to elderly residents. They are a source of high quality and low cost food. They become a center for community life with efforts that bring people together. And they can be an incentive for older residents to leave their homes and meet neighbors and enjoy the outdoors. There is adequate space on site



18. An addition between existing pairs of Chambers Street buildings (shown in grey) could accommodate an entry, an elevator and three accessible apartments on each floor. The elevator would serve 19 second floor apartments. Each addition would include additional apartments. Construction would likely be very expensive on a per unit basis.

for community gardens; setting aside space should be considered.

### Accessible Second Floors:

Chambers Street is intended primarily for older residents, but the second floors are accessed only by stairs, making it difficult for anyone with mobility limitations to live there or visit. This is especially problematic because all laundries are on second floors. Elevator additions could be added between pairs of existing buildings to the east and west of the parking lot to provide wheelchair access to second floors and help those with difficulty climbing stairs.

The space between these buildings is large enough to also accommodate community spaces or up to 6 additional apartments. Because this construction would take place between existing buildings rather than inserted inside, it may be more cost effective than adding elevators at Seabeds Way, and have the additional benefit of serving more residents – 16 apartments per elevator, not including any added units.

This is, however, a major undertaking. Additions may trigger compliance with other code requirements such as sprinklers and structural upgrades, and connections to existing buildings must allow for differential expansion and settlement. Elevators are rarely installed unless they serve 24 or more units. Funding is unlikely to be provided for elevator additions to these buildings, although additional apartments or other facilities bring greater value to the endeavor. (See image 18)

### Sustainability upgrades:

Greening options to consider include:

- Add additional insulation at walls and roofs. At walls this would require removal of gypsum board, furring out walls and adding additional insulation, or adding insulation on the exterior along with a new finish system. Although housing authorities have implemented these improvements they are unlikely to be practical at Chambers St.
- Replace all lighting with LED lighting
- Utilize storm water for site irrigation

- Encourage recycling.
- Replace doors and windows.

### Accessible Laundries:

In each building there is a first floor mechanical room and a second floor laundry. When boilers and water heaters were replaced the new equipment took up less space, opening up the possibility of “carving out” space for laundry facilities that would be accessible.

## MAJOR MODERNIZATION OPTIONS: HIGH ROCK HOMES DEVELOPMENT

20 of the original 80 homes in this development were replaced by new duplex homes in 2009. This is considered a successful program - doubling the number of units while staying within Needham zoning and preserving the character of the neighborhood. The NHA has expressed a desire to continue this program. Also under consideration is replacement of some High Rock homes with denser development than duplexes. Given this, and that these homes were reportedly built in 1948 and are now 70 years old, major modernizations may not be warranted.

However, funding sources are not currently available for duplex or denser development and a continued replacement program or other redevelopment would compete with other NHA priorities - suggesting that major modernization is not out of the question. Options for consideration for the 60 single family homes are noted below.

Note that drawings are not available for the 60 remaining houses, and they vary in size, layout, and materials. Planning, design and construction would require them to be field measured.

### Exterior Improvements:

Doors and windows throughout the development appear to be original. Replacement with high performance doors and windows will reduce air infiltration and associated heating



19. The addition of porches, even if fairly small, would add an amenity for residents and improve the appearance of the neighborhood.



20. The addition of small bays would provide usable space and give these homes a more residential character similar to the new duplex replacements.



and cooling costs. Although an energy savings payoff date is fairly far off into the future, there are resident comfort and convenience payoffs as well, and replacement will reduce staff time required for routine maintenance. Roofs will continue to need replacement.

High Rock Homes were built as inexpensive “starter homes”, primarily for returning veterans after WWII. Expectations for the design of affordable housing has changed since then, and this is reflected in the design of the new duplex homes. The “basic box” of each unit has bays and porches that are both an amenity for residents and are a contribution to the street-scape. They increase the perceived value of the homes and neighborhood and remove what could be the perceived stigma of affordable housing in an affluent town like Needham. The NHA should consider adding bays, porches, patios, terraces, dormers, changes in siding material, color and pattern, and adding trim details on the exterior that will improve the “curb appeal” of this neighborhood housing. Bays and porches that add usable space in addition to improving appearance are especially useful. (See images 19 and 20)

### Site improvements:

Although the lots are relatively attractive and have been adequately maintained compared to other housing authority developments throughout the Commonwealth, there are a series of improvements that would be beneficial to the High Rock families and would improve the character of the neighborhood. All of these should be pursued with site planning professionals – a landscape architect and civil engineer – to insure that the result is an attractive and easy to maintain exterior environment suited to the a family development. They can bring creative ideas to the challenge of using limited funding to make the greatest improvements in the lives of residents. These are noted in 1 and 2 below:

#### 1. Paving

Streets are in poor condition. Repaving will allow all elements of the site circulation system to be in compliance with accessibility requirements, improve safety, and improve the appearance of the development.

Sidewalks encourage walking and outdoor activity. Unfortunately, High Rock is not equipped with many sidewalks, which directly contrast the paving and pedestrian zones of the adjacent, more affluent areas of Needham. This reinforces the perception of High Rock as an affordable housing development.

#### 2. Community Space

The entire High Rock Homes property has been subdivided into individual lots that are large enough to give each house a front and back yard. Missing from this neighborhood is any space for community use - with a playground being a major missing feature given that this is a family development.

Although there are recreational spaces at High Rock School and Needham Forest, a park or playground at High Rock Homes could provide a useful resource to residents and help reinforce the sense of community.

There appear to be three options for creating a park, playground or other kinds of outdoor community spaces accessible from the public way. One option is to demolish an existing house and replace it with open space. A relatively flat, large and prominently located site with play equipment, exercise equipment, benches, a small plaza, and perhaps a gazebo could provide a center for community life within easy walking distance even for small children. Community gardens could also be provided.

A second option is to utilize the southern end of the finger of Chambers Street Development land that extends between High Rock Homes and the railroad tracks. A public access would need to be provided off of Yurick Road or Murphy Road as a right-of-way taken from one or two of the lots. This option would be more expensive to develop given the clearing and regrading that would need to be done, but would not require the demolition of one of the houses.

A third option is to located a community space between Chambers Street buildings and High Rock Homes - bringing families together with elderly residents. Clearing, grading and wetlands issues would need to be carefully considered, but there appears to be sufficient space for the development of multi-generational outdoor space. (See image 21)



21. A small park or playground could be inserted into the High Rock or adjacent Chambers Street development land – possibly replacing one of the single family homes.



22. Today's housing tends to provide more open interiors that provide more furnishing options, and connect kitchens to dining and living areas. The duplex shown here is one story and fully accessible.



### Kitchen Replacements:

Cabinets, counters and flooring are original. Although some are in reasonable shape, and a few have been replaced, they are reaching the end of their useful lives. Replacement could be done through yearly allocation of maintenance funds, but a major modernization kitchen replacement project for all 60 homes should be considered. Reorganization of interior layouts should be considered before finalizing kitchen design to bring homes in line with contemporary family needs.

### Bathroom Replacements:

Vanities, showers, and flooring are original. Although most are serviceable, and a few replaced, most are reaching the end of their useful lives. Replacement could be done through yearly allocation of maintenance funds, but a major modernization bathroom replacement project for all 60 homes should be considered.

### Interior reorganization/Additions:

Contemporary affordable family housing design is generally different than the design of High Rock homes. Kitchens, dining rooms and living rooms are open to each other to provide more flexibility in how they are used, and to make the small spaces feel larger. Heating equipment is pushed to an outside wall for venting and to avoid impacting the interior layout.

Although layouts vary at this development, many have a large utility room at the center of the house, separating rooms from each other, and kitchens are cut off from other rooms. (The houses are all slab on grade with no basement.) A reorganization would relocate a small high-efficiency heating unit to a small closet with interior walls opened up to create a sense of openness. Alternatively, wall mounted fan coil units in each room would connect to an exterior condenser - an air source heat pump system - with no mechanical closet required at all. This would free up significant space and improve the usability of the interior rooms.

Combined with an added bay or small addition and other improvements noted above, a major modernization could bring High Rock Homes up to contemporary standards. Whether these kinds of changes are a cost-effective way to

support the NHA's mission, and use difficult-to-obtain funding wisely, is a question that should be considered. But the investment of significant money in new kitchens, bathrooms and mechanical equipment without improving the existing layouts may not result in significant advantages to tenants.

### Sustainability upgrades:

Reducing energy usage is advisable at all NHA developments. Options to consider include:

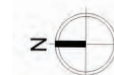
- Add 1" or 2" of exterior insulation as part of a residing project. Add insulation to attics.
- Air seal all homes. Utility company state or municipal rebates may be available.
- Replace boilers with more efficient units.
- Replace windows and doors with high performance windows and doors.
- Replace all lighting with LED lighting. Utilize rebates.
- Utilize storm water for site irrigation
- Encourage recycling.
- Solar PV on roofs – this is unlikely to be practical given the small roofs, varied orientations, and tall trees.

23. By aggregating High Rock lots, townhouses or other multi-family buildings can be constructed with 6 to 24 apartments. Given the opportunity to develop new housing on a parcel that spans the High Rock/Chambers Street line, and is flatter than most of High Rock, we do not recommend pursuing the options shown here at the present time.

### Lot aggregation:

The next section outlines proposals for new development at the Linden Street/Chambers Street/High Rock developments. As part of this study lot aggregation options were considered that provided density increases that were larger than those provided by replacing single family homes with duplexes, but were smaller in scale than the major redevelopment proposal that follows. Two lots can be aggregated for a 6 family development, or 4 lots for a 16 family development. This kind of construction would require relief from the as-of-right one and two family per lot zoning now allowed, but could be considered as an alternative way to use the High Rock property.

A challenge associated with larger scale development within the High Rock residential fabric is the ledge and slopes associated with most of the property. Small houses are easier to fit into the landscape and require less regrading. Exploration of moderately scaled multi-family redevelopment did not progress beyond conceptual sketches but may warrant consideration in the future. (See image 23)





# NEW DEVELOPMENT OPTIONS

## INTRODUCTION

The Consultant Team was asked to evaluate NHA properties for potential development. The team identified three promising opportunities, contingent on funding being secured:

- New Development at Seabeds Way / Captain Robert Cook Properties
- Redevelopment of Linden and Chambers Properties
- Redevelopment into duplexes of the 60 remaining High Rock single family homes

This Section 6 describes these three development/redevelopment opportunities in more detail. This section also closes with a brief discussion of Needham zoning considerations, and of other non-NHA owned sites that might be suitable for the development of low-income housing.

### NEW DEVELOPMENT AT SEABEDS AND CAPTAIN ROBERT COOK

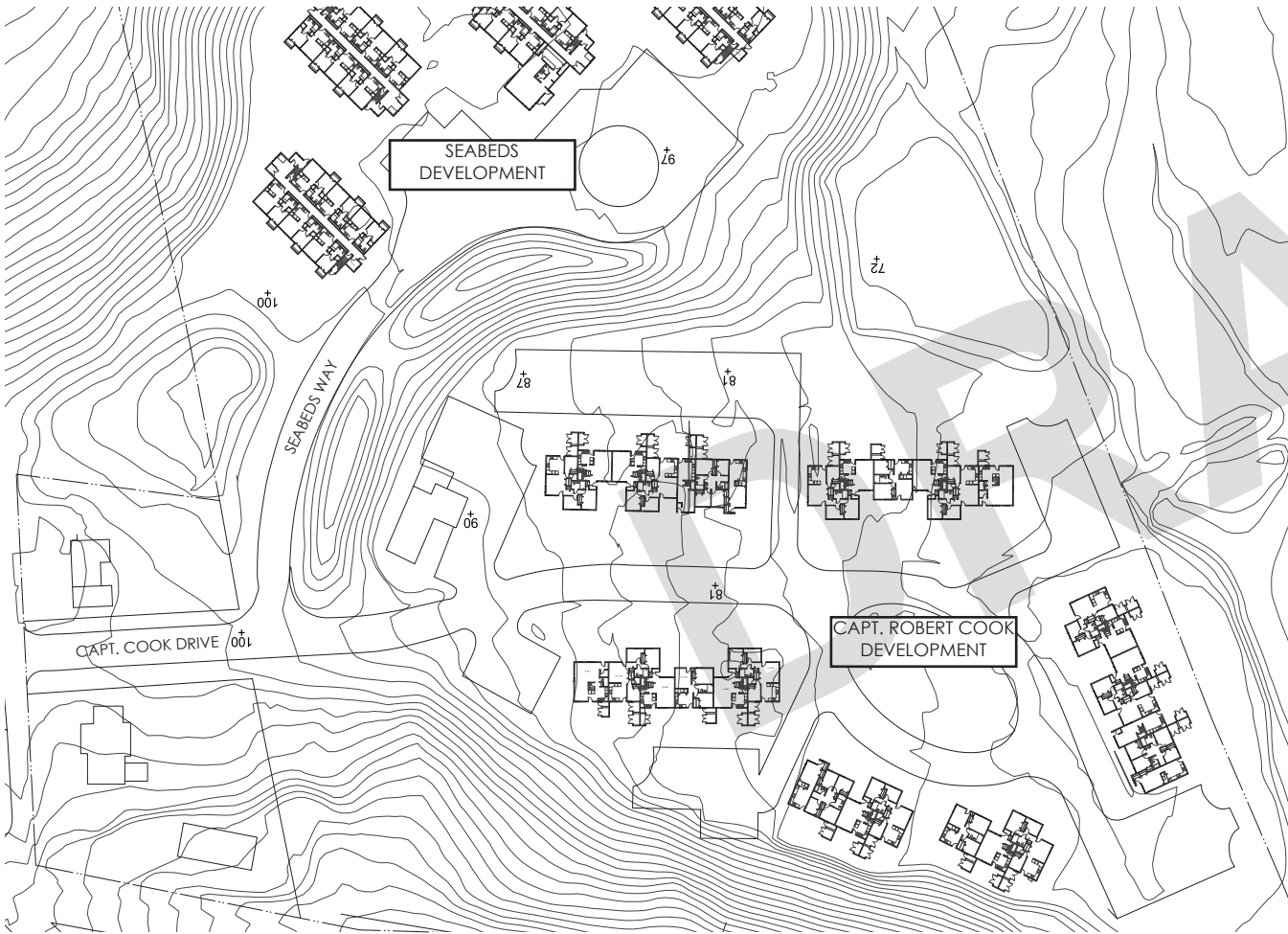
The Seabeds/Captain Robert Cook site is fairly isolated from the adjacent neighborhoods. It is surrounded by woods and steeply sloping hills, Route 9 to the north, Interstate 95 to the west, and Hurd Brook to the west and south. Although the remote location may not necessarily be beneficial for residents who want to engage with the Needham community, it is advantageous for the development of affordable housing at a density that can really make a difference without significantly impacting nearby neighbors. The areas surrounding both of these developments are too small or steeply sloping for significant construction, but the sloping area between them is ideal for a new building. The 10' drop from Seabeds on the south to Captain Robert Cook on the north will allow parking to be cut into the hillside and accessed from the north, with the first habitable floor accessed at grade from the south - allowing the development of a compact building with cars screened from view at a reasonable construction cost. Approximately 50 cars could be accommodated under the building with additional spaces on grade along Seabeds Way, or between the new building and Captain Robert Cook.

From a funding perspective, a design that provides at least 61 one bedroom apartments is ideal (see section 7 for further discussion of funding). This can be accomplished by stacking three floors of apartments over parking and configuring the building to fit the topography. Each floor would have approximately 20-22 apartments accessed by elevator from the parking below and the entry on Seabeds Way. Community and service spaces on the entry level and floors above would support healthful aging-in-place amenities residents - including those at Seabeds Way. The entire buildings would accessible and meet high sustainability and size standards. The configuration of the building – nestled into the hillside, arced in response to the topography, and broken down into separate building masses, would reduce the perceived bulk of the building. Although it is urban in scale compared to the suburban scale of the existing construction, both of the existing developments would still be surrounded by trees and open space, the pastoral character maintained.

Because the proposed new development would need land now occupied by the NHA offices, a new facility is incorporated into this proposal on a lower level close to the current office location.



# SEABEDS/CAPTAIN COOK DEVELOPMENTS



## 1. Existing Conditions Plan

The hillside between Seabeds Way and Captain Robert Cook Drive developments offers the opportunity for new development with minimal impact on existing residences. The ground rises up from Seabeds approximately 8 feet, and then drops down 18 feet to Captain Robert Cook. The 8 foot rise is an artificial berm that is both a landscape feature and a way to utilize soil from the excavation for the existing buildings and can be removed down to the base 10 foot drop.



## 2. Proposed Development Plan

A new three story building with 61 one bedroom apartments would arc along the hillside between the Seabeds Way and Captain Robert Cook Drive developments where there is now an 8 foot tall berm. Construction would have minimal impact on the existing buildings or surrounding sites.





### 3. Parking

Space for approximately 51 cars would be cut into the existing hillside and accessed at grade from the Captain Robert Cook direction – at substantially lower cost than parking completely underground and without paving over green space. A screen wall and landscaping would hide cars. Stairs and an elevator would allow access to the building above from the parking level.



### 4. Massing

A three story building above the parking would follow the curve of the contours. The housing block is broken down into smaller units which are then articulated with projecting bays, balconies and terraces. Although the building is substantially larger than those around it, its bulkiness can be minimized through thoughtful design. Connections to the surrounding landscape can be emphasized. The entire roof has southern exposure, which is ideal for solar panels.





#### 5. View from Captain Robert Cook

Projecting bays can give the building a village-like character. The arc of the building and a stepped back terrace above the parking level also help reduce the perceived size of the construction. Existing Seabeds parking and landscape would remain with very few changes.

Given that this new building faces the Captain Robert Cook Drive family development, it could include community facilities at the lower level for its residents along with facilities for Seabeds Way residents on the floor above - facing that development





### 7. Integration into the Hillside

From the Seabeds side of the new development the parking completely disappears from view – the advantage of cutting it into the hillside. Landscaping and terraces can connect residents to nature and to each other. A new development and the existing Seabeds buildings can coalesce into a senior community offering more services and supports. Additional and replacement parking along the entry drive instead of in lots can help both new and old developments feel more like traditional neighborhoods.



# LINDEN/CHAMBERS REDEVELOPMENT

## NEW DEVELOPMENT AT LINDEN/CHAMBERS

Although these two developments are separate entities, they occupy contiguous sites that directly border the High Rock Homes. From Linden Street, Chambers Street, or any of the roads that run through High Rock, the properties appear to be completely built out, requiring significant demolition in order to construct significant new housing. Wetlands and steep topography characterizes much of the remaining open space. In the southeast corner of the contiguous property there is a significant amount of unbuilt space that is relatively level and appears to be free of wetlands. By adding 9 of the High Rock properties to this portion of the Chambers Street parcel and demolishing 9 of the original single family bungalows, enough land can be aggregated for a significant new development.

This portion of the properties is bounded by railroad tracks to the southeast, the NHA's Chambers Street development to the northeast, High Rock Homes to the northwest, west and southwest. Due south there are three relatively new single family houses with a thick buffer of trees between them and NHA property. A new development could be built with minimal visibility from adjacent properties and virtually no impact beyond increased traffic on Yurick Road and Murphy Road as they lead out to Linden Street and High Rock Street. The configuration of the U-shaped building on a curving tree lined road presents only a small portion of its frontage at any one time; the building would not be perceived as an overwhelming presence on the site.

Although the Linden Street and Chambers Street developments could continue to serve Needham for another 20 to 30 years, the inadequacies of this housing, documented earlier in this report (such as small unit size and a lack of accessibility), suggests that replacement in the next five to ten years should be considered. The sale of the land that the existing housing occupies could help to pay for the cost of new construction. The new development proposed here includes 152 studio apartments – the same number of apartments in the existing Linden/Chambers buildings. New buildings could be constructed without impacting the current residents of these developments or abutters - except for the demolition of nine High Rock single family homes.

## IMPROVED SERVICES FOR THE ELDERLY

The proposal illustrated houses all residents in a single building served by an elevator for complete accessibility and compliance with Universal Design Principals. It can include community and service spaces that support aging-in-place for residents, and perhaps for others in Needham. A partnership with a local or regional service provider would allow the NHA to meet needs that go beyond what buildings, current staff or programs can provide for their aging population.

Apartments would meet contemporary standards for room sizes and accessibility and

compliance with Universal Design Principals. New buildings serving this population provide safety, security, communications and other systems that protect residents, and by creating a sense of community, residents are healthier, happier and tend to live longer.

All building systems and assemblies would meet high sustainable design standards to reduce energy use and to provide healthy interior environments - reducing operational costs in relation to existing buildings and creating a model for the kind of construction that Needham would like to see.

This kind of ambitious development will require extensive outreach and cooperation with the Town, the neighborhood and potential funders, and the kind of expertise that very few housing authorities have on staff. It is far from clear that funding will be available in the near future. The NHA can take incremental steps to understanding the costs and benefits of this kind of a proposal as it looks at its capabilities and mission.

## PREVIOUS DEVELOPMENT STUDIES FOR LINDEN/CHAMBERS

In the early stages of the investigations for this report several scenarios for adding new development to the Linden/Chambers/High Rock area were considered. They would provide less housing, have more impact on adjacent non-NHA neighborhoods, and be on pieces of land that are harder to develop because of topography and existing street layouts than the redevelopment options proposed below. Nevertheless, other options for utilizing this land could be explored, and the legal, environmental, and financial aspect of this kind of development investigated in more detail. The assumed sale of the existing Linden and Chambers Street development properties and their possible development by others is reviewed later in this section, and is another aspect of the project that needs further exploration.

In 2014 a study was done for the NHA that proposed the replacement of the Linden and Chambers Street buildings with new construction that increased the number and size of units. Plans are included in the appendix. The ongoing exploration of options for these properties are a response to the perception that the Needham community would like to see existing construction replaced, that it does not serve its residents effectively, and that there are unmet needs in the community that these properties could fulfill.



# LINDEN/CHAMBERS REDEVELOPMENT



## 1. Existing Conditions Plan

The NHA owned land proposed for new development “disappears” behind the Chambers Street and High Rock developments to the north and west with railroad tracks forming the boundary to the southeast. It will be virtually invisible from properties not owned by the NHA. It is higher and drier than the wetland areas, and is flatter and less rocky than other parts of the High Rock development and not currently being utilized.

\*Note: Shaded properties represent the homes that have NOT been replaced by Duplexes.



## 2. Proposed Development Plan

Nine existing single family homes along Yurick Road in the NHA's High Rock development would be demolished and their site incorporated into the new buildout. A 152 unit development meeting today's accessibility, sustainability and quality of life requirements could be integrated into the community with a 3 story U-shape building wrapped around a courtyard.





### 3. Parking

Underground parking is not feasible on this site for this project. Sufficient parking can be integrated into the site, with trees to buffer it from neighbors and the adjacent streets. The parking will further buffer nearby homes from the proposed construction.



### 4. Massing

The courtyard could be open to the public to provide a community asset. Placing a green space at the center of the new construction helps diminish its perceived size by pushing half of the build-out far back from the street and neighbors. Project bays, recessed areas, changes in material and stepping of the roof can break down the scale of the new construction.





#### 5. View from Yurick Road

Because of the arc of Yurick Road, plentiful trees and homes across the street the development can only be seen at a glancing angle, with over half of the apartments on the back side of the courtyard. This minimizes the apparent mass of the building and its perceived impact on adjacent properties.



#### 6. View into Courtyard Landscape

Terraces and the incorporation of community facilities into the courtyard will have a positive impact on the neighborhood and provide an amenity for residents. Trees will screen the building from the street and help it fit into its wooded context.





### 7. View of Entry

By consolidating the Linden and Chambers senior apartments into one building they can be served by a central entry and management facilities which will allow a higher level of security and aging-in-place services. The entry can be welcoming for residents and for the broader community.



### 8. Phasing

A project of this scale might need to be phased. Phase I to pull back from the street would have virtually no presence – even on Yurick and Murphy Roads. A full build out of the massing could be four stories in back and two stories in front to minimize community impact even more. Building 72 units would allow all Linden Street residents to move into new, larger, handicap accessible units and would free up 3.5 acres for market rate development to fund the overall project.



# HIGH ROCK SINGLE-FAMILY REDEVELOPMENT TO DUPLEXES

In 2009 the NHA replaced 20 of the original 80 single story single family High Rock Homes with new two story, two-unit homes. These are shown on the High Rock site plan in Section 3. Twenty of the new units are rental units and 20 are income restricted ownership condominium units - one of each in each building.

The redevelopment is considered very successful. Aging buildings were replaced with new ones that are more attractive, and whose planning, design, construction and resident and neighborhood amenities are more in line with contemporary standards for affordable housing, and closer in appearance to the market rate housing in surrounding neighborhoods. The redevelopment added 20 new buildings totaling 40 units to the NHA portfolio without requiring the development of previously undeveloped properties or major changes to site infrastructure. This redevelopment was “as-of-right” per current zoning, making municipal approval relatively easy to achieve.

Continuing with the replacement of the original homes is recommended. Current designs can be reutilized for the new development, interspersing different house models, changing colors, and perhaps porch and deck designs for variety. A survey of residents of the new buildings and staff would be advisable to determine if they have recommendations for design changes. The previous replacement project scattered new buildings throughout the overall High Rock property. If a complete replacement of the remaining 60 units is not fundable as one project, a phased approach could be considered and replacement sites would need to be chosen for the next phase. Some considerations that go into the selection are:

1. The master plan for Linden and Chambers proposes a 152 unit new development that utilizes nine High Rock Homes sites. Although this construction may be many years in the future we recommend that significant investments not be made in these nine properties with the expectation that ultimately this larger redevelopment can be funded and built.
2. Many of the single family homes are elevated on ledge with steep slopes and steps. It may be difficult or expensive to redevelop these sites, and lots without these challenges should be developed first.
3. Replacing an existing home with a park and playground would provide an excellent community asset. A visible corner site might be the most appropriate location. If the NHA is considering a site for a park it should not be redeveloped with housing.
4. Some lots are more visible than others; the redevelopment of more visible sites would have a bigger impact on the character and quality of the neighborhood.

Obtaining financing is the primary challenge for continuing this redevelopment effort. The NHA should look comprehensively at redevelopment options, funding sources and required investments of time and effort and evaluate new High Rock construction in relation to other options. If the NHA is interested in pursuing this option it will require a developer and development team not unlike the team responsible for the first phase – with a significant amount of planning and design work already in place.

The one aspect of the 20 unit replacement project that the NHA does not want to repeat is the creation of additional income restricted ownership units. In the present economic and regulatory climate it has proven extremely difficult to locate potential owners which can meet both low-income requirements and qualify for a personal mortgage to buy the unit.



1. The lots shaded in dark green have not had single family homes replaced with duplexes; those shaded in light green have. Lots shaded in brown have not been replaced but are proposed for ultimate incorporation into a 152 unit Linden and Chambers new construction replacement project.
2. In the foreground is one of a number of different designs for High Rock replacement duplex homes.



## ALLOWABLE DEVELOPMENT AT NHA PROPERTIES

The redevelopment of the Linden/Chambers/High Rock site with new replacement housing offers the opportunity to provide state-of-the-art accessible and sustainable aging-in-place facilities that meet contemporary standards. While there is no clear funding mechanism in place to achieve redevelopment at this time, there are opportunities for demonstration projects that could conceivably achieve this goal. The availability of underutilized and developable land on NHA properties means that land acquisition costs do not need to be added to the proformas. And the fact that this land will allow the existing Linden and Chambers developments to remain occupied during construction reduces relocation costs.

Also implicit in the redevelopment proposal is the assumption that the Linden and Chambers developments will be sold – most likely to a private developer for market rate housing. Included in the zoning analyses below are site layouts and zoning requirements associated with these parcels of land. If the current housing is demolished the site will revert to the underlying zoning. The value of the land is based on this development potential. Variances for denser development may be possible, but cannot be assumed – especially if 152 units of affordable housing have just been developed by the NHA a block away.

### Linden (SRB District):

The likely as-of-right redevelopment scenario for the Linden parcel would be a nine lot single family subdivision with all lots having the minimum 80' frontage directly on Linden Street. See sketch (top right). Lot sizes would range from a minimum of 13,600 SF to a maximum of 24,800 SF. While the minimum required lot size is 10,000 SF, because of the configuration of the site and the location of the stream running along and within the length of the back of the site, it is unlikely that a more advantageous subdivision plan could be achieved.

### Chambers (GR District):

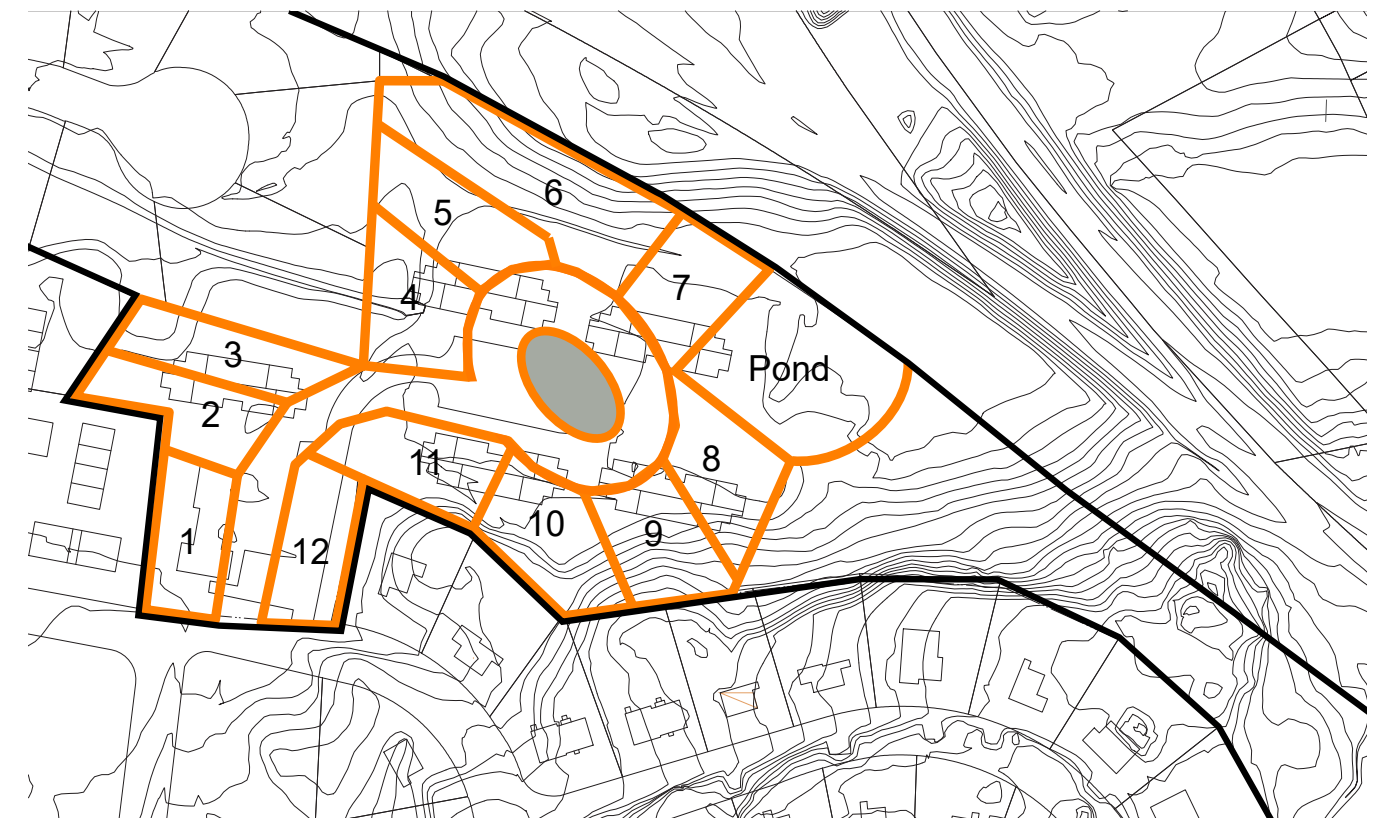
The Chambers parcels is hourglass shaped with a larger and more immediately accessible north lobe and a remote south lobe that is separated by wetland and slopes. The likely as-of-right redevelopment scenario for the north lobe would be a 12 lot two-family subdivision on a cul-de-sac road/right-of-way. See sketch (bottom right).

### High Rock (GR District):

The likely as-of-right development scenario for the remaining single family lots at High Rock is to redevelop them individually as two-family dwellings, similar to what was already achieved a decade ago with the first development.

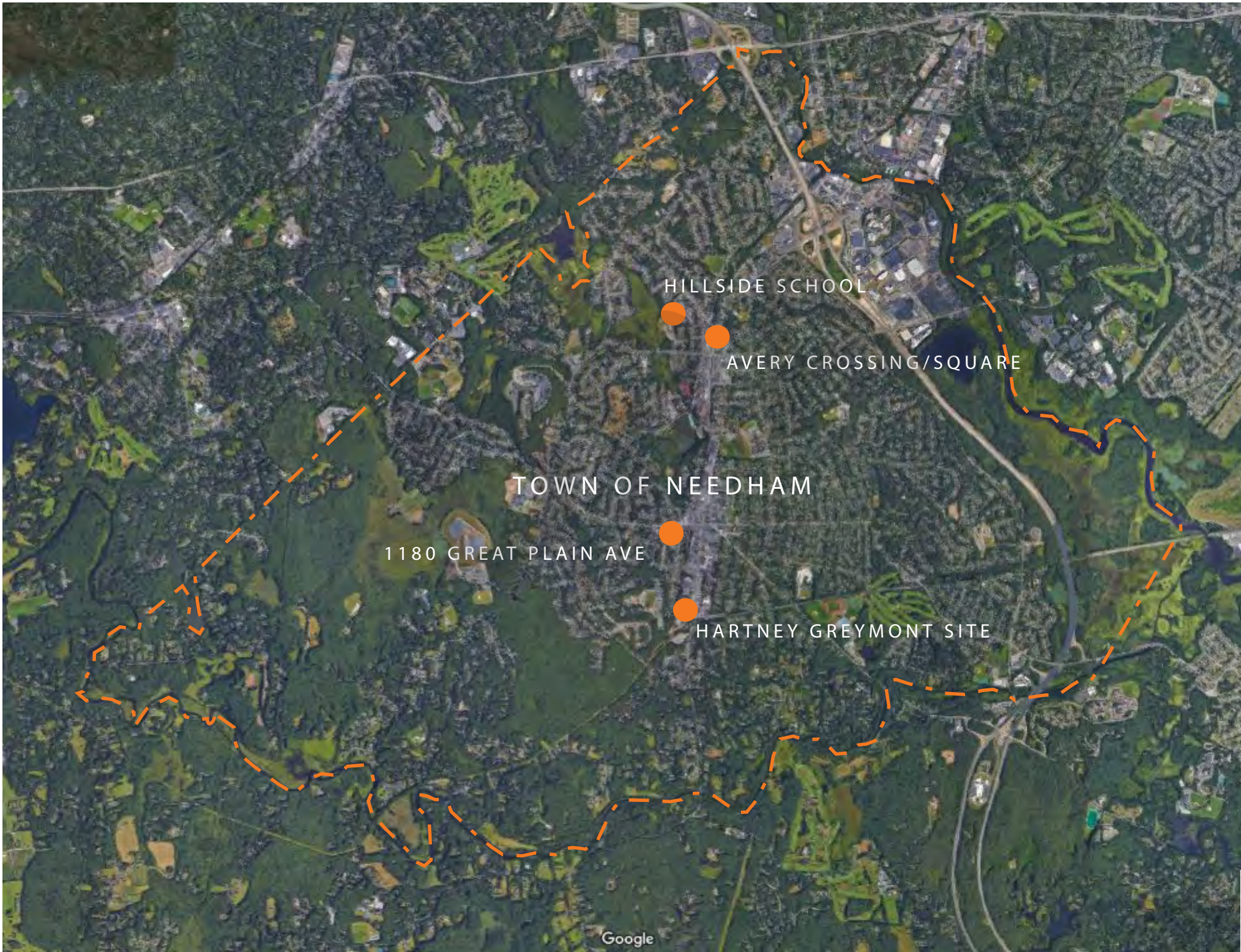
### Seabeds and Captain Robert Cook (SRB District):

There does not appear to be an as-of-right opportunity to increase unit density at Seabeds and Captain Robert Cook. Adding buildings at this site would appear to require a Comprehensive Permit (or amendment of an existing Comprehensive Permit) as a Local Initiative Project (LIP) or “friendly 40B.”





# DEVELOPMENT ON NON-NHA OWNED SITES



Given the NHA’s mission to not only improve the affordable housing it already has, but to support the growth of low income affordable housing in Needham, the team considered properties that the NHA does not own for affordable housing development.

Given the other opportunities available to the NHA on properties they own, we do not recommend actively pursuing any of these, or other non-NHA owned properties for development at the present time. Nevertheless, ongoing communications with the Planning Department, Needham Public Schools, non-profit organizations and local real estate brokers could be beneficial if the situation changes with these or other properties. These sites are noted here for the record.

## HARTNEY GREYMONT SITE

Located at 433 Chestnut St, Needham, Hartney Greymont has been providing landscaping, lawn care and tree services since 1938. When they opened, they occupied a marginal piece of land in a triangle of leftover property between three railroad tracks. As land values have increased and the desire for pedestrian oriented communities has become a priority, Hartney-Greymont can now be seen to occupy a pivotal piece of land whose redevelopment could serve a broad range of needs. In parallel with these changes, the rail lines to Dover have been decommissioned, suggesting a rethinking of how the property could be used.

This property has become interesting to the NHA because it is adjacent to – but could connect – the Linden Street, Chambers Street and High Rock developments to many nearby amenities, such as Chestnut Street





retail (Roche Brothers, several restaurants) and community resources (Needham Junction Commuter Rail Line, Beth Israel Deaconess Healthcare, the Charles River YMCA and the Salem Five bank). Currently NHA residents need to go to Oak Street to the north or High Rock to the south to access these neighborhood assets.

A new connection would have to tunnel under or climb over the decommissioned tracks, but to the extent that the Linden and Chambers Street connection to Chestnut Street would be advantageous to the entire Town of Needham, new or replacement development at Hartney-Greymont warranted consideration. Ultimately this option was not pursued because:

- 1. Sale of the land did not appear imminent.
- 2. Sale price would likely be high given the site's location.
- 3. NHA currently owns land that could be redeveloped – which would ultimately be more cost effective way to get additional units or replacement apartments.
- 4. There is no assurance that a connection across the tracks could be made in a cost effective manner.

**HILLSIDE SCHOOL SITE**

Located at 28 Glen Gary Road this K-5 school, built in 1959 and expanded in 1968, is being replaced by a new school building on Central Avenue (The Sunita L. Williams School) which is slated to open in 2019. The building's design and layout does not appear to be advantageous for cost effective adaptive reuse for housing, but the site appears to be a possibly ideal site for low income housing.

It is a short walk to the east to access the Needham Heights Commuter Rail Station, a Trader Joe's grocery store, and a variety of banks and restaurants along Highland Avenue and adjacent streets. It is adjacent to Glover Meadows on the west. Although Hasenfus Circle housing is to the south east, most of the eastern and northeastern frontage is non-residential suggesting less community concern than there might be on other sites. Housing development would likely have less impact on neighbors than the current school, designed for 261 students but now enrolling 470.

Although the site could be appropriate for new or replacement affordable housing this option was not pursued further because:

- 1. Availability of the land did not appear imminent and the Needham Public Schools intends to retain it for swing space in the near future.
- 2. If put on the market the price would likely be high given the site's location. It's sale and taxes would add significant resources to Needham that the Town may not want to devote to the NHA.
- 3. NHA currently owns land that could be redeveloped – which would ultimately be more cost effective way to get additional or replacement units.

**AVERY CROSSINGS/AVERY MANOR**

Kindred Living has closed Avery Manor & Avery Crossing, two large facilities providing independent and assisted living services, short-term and long term rehabilitation care, and respite care. They are planning to sell the buildings.

The Needham Heights location on Highland Street is ideally situated for senior affordable housing. The commuter rail station and Rt 58 bus line are steps away. The brand new Needham senior center is one block away. A CVS drug store, restaurants, Trader Joe's food store, banks, urgent care facility, liquor store and other community resources are all within a two block radius.

The Kindred facilities were built out in an old mill building. One building is currently configured with one bedroom and a few two bedroom apartments – although they would likely require very significant rehabilitation and upgrades to meet current code. The other building is configured as a nursing home and would require renovation. The long three story masonry buildings might be challenging to get approved for redevelopment today, however the current density they offer would be advantageous in developing new or replacement housing.

Despite the advantages of this property it was not pursued because:

- 1. Sales price would likely be high given the site's location, and a private developer would likely offer significantly more money than the NHA could provide.
- 2. NHA currently owns land that could be redeveloped – which would ultimately be more cost effective way to get additional or replacement units.

**1180 GREAT PLAIN AVENUE**

The Needham Congregational Church owns property which was occupied by a 11,750 square foot Christian Science nursing home that has been closed for several years. The location near an unlicensed center and associated town services, and the mission oriented owner suggests that there might be redevelopment opportunities.

Despite the superficial advantages of the site, the property was not pursued for these reasons:

- 1. The current configured room sizes and building layout do not meet contemporary needs for affordable housing, and the small size and restricted zoning could make this building and site uneconomical to develop.
- 2. Funding would be difficult or impossible to obtain.
- 3. The NHA currently owns land which could be redeveloped without accepting a financial burden in order to do so.



# FUNDING SOURCES

## INTRODUCTION

Prior sections of this report identify three scopes of work that the Needham Housing Authority is considering for maintaining and improving its portfolio of housing: Repairs and Improvement (Section 4); Major Modernization (Section 5); and New Development (Section 6). In this Section 7 we describe the currently available sources of funding for this work and how the NHA can pursue and secure these dollars.

As previously noted, affordable housing needs in Needham, the Commonwealth and across the country outstrip the resources (i.e. dollars) that are available to meet them. Unmet needs continue to grow and competition for funding can be fierce. Because both the Federal government and the Commonwealth understand that Needham Housing Authority properties should not be allowed to degrade, a modest amount of money for repairs and basic maintenance is allocated by HUD and DHCD every year.

Funding for major modernizations or new development is much harder to obtain. Although there is some overlap between the available funding for repairs and improvements, major modernization and new development/construction will likely be enabled by programs specifically designed to fund this particular type of project. It should be noted that NHA's state and federal developments require different funding sources: most state sources cannot be used for federal developments, and vice-versa. Another major consideration with respect to the fundability of new development is the income level of its potential residents, and thus the amount of rental income they collectively pay.

- New development at Seabeds/Captain Robert Cook becomes possible if nearly all tenants make 60% of the Area Median Income (AMI). A mix that includes a large proportion of 30% AMI tenants does not generate enough rental income to make the project pro forma numbers work.
- For a Linden/Chambers redevelopment project targeted to produce 152 replacement units for the existing tenants, a viable funding model becomes near impossible. Why? Most Linden/Chambers tenants pay rents at or below the 30% AMI level, not enough to make redevelopment fundable using the currently available sources of funds.
- The bottom line at this time: funding of the Seabeds/Cook construction project is significantly more likely than the Linden/Chambers. The level of need and the likelihood of funding should both be taken into account when making decisions on what opportunities to pursue.

The following pages lay out in more detail the possible funding options available to the Needham Housing Authority. This Section 7 concludes with additional considerations, risks and rewards that must be understood before embarking on major modernization or new development and construction.

## FUNDING SOURCES FOR ROUTINE REPAIRS AND IMPROVEMENTS

There are two primary annual funding sources for relatively low cost capital improvements intended to prevent properties from degrading, one for federal properties, the other for state. The Needham Housing Authority, like most housing authorities in Massachusetts, applies for and receives allocations every year.

### 1. Federal properties

**Seabeds Way, Captain Robert Cook, High Rock Homes - HUD Capital Fund Grants.** The NHA applies for these funds on an annual basis and has typically received \$160-\$180,000 per year for the three properties consisting of 176 units. This amount provides ~\$909 - \$1,023/unit/year. Applying for these grants is part of the work that NHA staff know they need to do on an annual basis. The money can be spent in its entirety each year, or some can be reserved for more significant improvements. Recent repaving of the entry drive at Seabeds is the kind of work that this money supports.

### 2. State Properties

**Linden Street, Chambers Street, and Matthews House Developments - DHCD Formula Funding.** This state program allocates approximately \$140,000 annually to the housing authority for the three state properties consisting of 160 units. This amount provides \$875/unit/year, somewhat less than the Federal properties. Like the HUD funding, the money can be spent in its entirety each year, or some can be aggregated over several years for more significant improvements. The replacement of roofs and boilers at Linden and Chambers was paid for with the formula funding.

The NHA has managed the use of these funds effectively over the years – buildings and sites are in relatively good condition. As structures and infrastructure age, however, this funding will be increasingly insufficient to keep up with the routine maintenance that is needed, let alone pay for most of the upgrades that would be required to meet current building codes and contemporary affordable housing standards for accessibility, sustainability and quality of life. As current residents age, the size of apartments and the organization of buildings becomes increasingly problematic for achieving a goal of “aging in place”. Work beyond what the annual funding can support has been termed major modernizations, and funding must of necessity come from other sources.

## FUNDING SOURCES FOR MAJOR MODERNIZATION

For more ambitious improvements the NHA must tap into funding sources beyond those noted above (i.e., HUD Capital Fund Grants and DHCD Formula Funding). As with the funding for these routine repairs and improvements, most of the funding for larger scale projects comes from different sources for the federal vs. state developments. For the funding sources that can be applied to either federal or state properties, the NHA must weigh priorities and trade-offs before choosing where to allocate these dollars.

## Federal Properties: Rental Assistance Demonstration Program (RAD)

The NHA's three major federal developments (Captain Robert Cook, Seabeds, and High Rock Homes) potentially qualify for HUD's primary program designed to provide a more stable operating source than traditional public housing operating subsidies and larger amounts of money for major renovation projects.

The Rental Assistance Demonstration Program (RAD) converts public housing operating funds, and funds that pay for capital items (HUD Capital Fund Grants) into Housing Assistance Payments through the Section 8 program. This enables housing authorities to support mortgage debt (funded primarily by tax-exempt bonds) and acquire investor equity primarily by banks and insurance companies (utilizing the federal Low Income Housing Tax Credits). While the rents of NHA's tenants are below Boston's high Fair Market Rents, since they are primarily based on an authority's tenant income and operating expenses, the rental income generated from a RAD conversion can support some mortgage debt because: (1) a capital component can be included; and (2) Public Housing Authorities have typically project-based a portion of the existing mobile vouchers they administer to enhance the amount of supportable debt.

One recent HUD notice (PIH 2018-04) may result in a significant increase in the amount of supportable debt and rehabilitation that can be performed in RAD-funded modernization projects. A development which meets certain criteria under the notice (e.g., unit obsolescence) and qualifies under Section 18 (1) can receive up to 25% Tenant Protection Vouchers at rents equal to the area Fair Market Rents. The effect of this is to allow an authority to substitute regular high area Fair Market Rents for 25% of the units that would have been assigned low RAD rents. The difference between the two is striking: the current proposed one bedroom RAD rent for Captain Robert Cook Drive and Seabeds Way is \$646 per month; the FY 2019 Fair Market Rent for the Boston Cambridge Quincy Metro Area under which Needham falls is \$1,561. In addition to accessing debt, the RAD program enables a housing authority to bring investor equity into a development program through the use of tax-exempt bonds and 4% Low Income Housing Tax Credits (LIHTC's).

These are annual credits used by an investor (typically a bank or insurance company) over a 10 year period. In turn, the investor provides an upfront infusion of their investment dollars which is often the largest capital source in an affordable housing transaction. 4% LIHTCs differ from the federal 9% Low Income Housing Tax Credit, discussed in several sections below, in that they are not awarded through a competition. Rather the 4% LIHTCs are

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<sup>1</sup>-Under Section 18, a housing authority has the ability to demolish or dispose of public housing if it is in the best interest of the authority and residents. HUD would issue Tenant Protection Vouchers that would assist displaced tenants to find new housing. HUD is creatively interpreting this section for the RAD program to allow authorities to “dispose” of 25% of RAD units that are meeting a minimum rehabilitation threshold, thus enabling an authority undergoing a RAD conversion to utilize higher Section 8 Fair Market Rents (FMR's) for 25% of the units. In effect, there is no actual disposition (or demolition)—there is simply a disposition of lower rent Section 8 RAD rents for higher Section 8 FMR's.



awarded by either MassHousing or MassDevelopment when they issue tax-exempt bonds as part of a loan commitment. While RAD is a program primarily used for the rehabilitation of federal public housing, HUD has encouraged housing authorities to explore utilizing it for creating new units as well. In those instances, additional funding sources such as 9% LIHTCs will probably be required to cover the higher development costs associated with new construction. In the next section, the funding model for High Rock Estates utilizes such an approach.

NOTE: Pursuing RAD funding for the major modernization of a development will require the NHA to change its business model as described in the next sections. The risks and rewards of these changes are also described.

### **RAD Projects Require a Different Ownership Structure**

The ownership structure of a syndicated development project will be very different from previous authority projects. Each project developed by the NHA that involves tax credits will have a different, single purpose ownership entity. This is typically a requirement of the lender who wants to ensure that their loan is not impacted by the performance of any other property in the authority's portfolio.

1. The ownership entity will be a for-profit limited partnership to enable the tax benefits to flow through to the investor.
2. The NHA, while having a small ownership interest (less than 1%), will nevertheless be the controlling entity.
3. There are typically provisions for the NHA to purchase back the balance of the ownership in the project after the tax credit compliance period (15 years).

### **Tenant Protection Under RAD**

In addition to the program addressing important physical issues, RAD also provides for strong tenant protections. Housing authorities must notify and consult with tenants throughout the conversion process. If relocation is required, residents must be provided an option to return to the completed RAD project with rescreening. Long-term affordability is required of owners of converted properties—they must renew their subsidy contract and cannot opt out when expired.

### **Elapsed Timeframe for a RAD Conversion**

The process for RAD conversion is likely to take at least 12 to 18 months. A housing authority first submits a Letter of Interest to HUD and is placed on a waiting list. HUD will notify a public housing authority when funds are available and it will have 60 days to submit a complete RAD application. During that period, an authority will need to consult with residents before obtaining board approval. Once HUD approves an application, it will issue a Commitment to enter into a Housing Assistance Payment or CHAP. In parallel with the HUD process, the Public Housing Authority will need to work with a tax-exempt-issuing agency to seek approval of tax-exempt bonds and 4% Low Income Housing Tax Credits, as well as identify an investor to purchase the tax credits.

### **Resources That Would be Required by the NHA**

While a few large authorities may have personnel in place to set up the groundwork and apply for this program, most will use outside development consultants to assist the authority in assembling a team of professionals. This will likely be the case with the NHA's future work of this type, as it was when the NHA replaced single family homes with duplexes at High Rock.

### **Risks and Rewards of the RAD Program**

#### **Financial Risks:**

- The NHA will need to expend funds for a development/financial consultant to assist it in navigating the RAD process.
- Once designated by HUD, the authority will need to borrow pre-development funds for architectural/engineering services, environmental, surveys, financing consulting, etc.
- There is still the risk that the NHA will fail to obtain debt and/or equity financing.

Most of these risks are manageable. A key to minimizing risk will be to work with the authority's development/financial consultant early in the process to: (1) develop a realistic budget; and (2) have him/her meet with lenders and tax credit syndicators to obtain feedback on the NHA's preliminary development program. The pre-development costs are reimbursable at construction closing. The authority should be able to obtain feedback early in the process from tax exempt lenders (MassHousing or MassDevelopment) as well as syndicators as to the feasibility of what is being proposed.

#### **Rewards:**

- First, RAD provides an important initial infusion of capital into a project. In the case of Captain Robert Cook and Seabeds, the potential rehabilitation dollars could vary between nearly \$77,000 per unit and over \$128,000 per unit if the new HUD notice is found to be applicable to the project.
- Second, the RAD program provides a more stable source of operating funding than public housing operating subsidy from the Operating Fund. It builds into ongoing operations annual revenue increases through Operation Cost Adjustment Factors (OC-AF's) which should help project bottom lines.

Please click the links below for additional information about the RAD program and links to relevant websites.

<https://www.hud.gov/RAD>

<https://www.hud.gov/sites/dfiles/PIH/documents/pih2018-04.pdf>

### State Properties: High Leverage Asset Preservation Program (HILAPP)

For work beyond what can be supported by the annual formula funding program noted above, DHCD has created a program called HILAPP (High Leverage Asset Preservation Program). It is intended to leverage a housing authority's ability to bring additional capital to a modernization effort by theoretically providing \$1.00 of DHCD funding for every \$0.30 of non-tax credit funding that a Public Housing Authority can muster (e.g., Needham CPA funds). 75% of HILAPP funding is geared towards projects requesting no more than \$65,000 per unit. 25% of HILAPP funding is available for developments facing high levels of distress and/or functional obsolescence. The limit for these funds is \$165,000 per unit.

The goal of the HILAPP program is to preserve as many existing low income housing units as possible. It prioritizes developments with significant capital needs that cannot be met with formula funding, in communities with the highest needs for extremely low income housing units. There are five major evaluation criteria to qualify for HILAPP funding:

1. Scope of work (ability to address 20 years of capital needs);
2. Leveraging of other Funding Sources (excluding Low Income Housing Tax Credits but counting monies such as CPA and local HOME);
3. Project Management Capacity;
4. Property Management Capacity;
5. Community Need. In addition, an authority's ability to provide supportive services is also helpful.

A threshold requirement is that a development must have a Facility Condition Index (FCI) of 15% or higher as recorded in DHCD's Capital Planning System as of April 11, 2016. (The FCI is a measure of building condition which compares the value of failed building components to replacement costs.) While previously only Matthews House (the authority's 8-unit special needs development) qualified for HILAPP funding, a DHCD representative recently confirmed that both Linden and Chambers Streets now meet the minimum threshold for applying. DHCD is accepting HILAPP applications on a rolling basis. The NHA is allowed to submit only one application per year. The program is accepted applications on a rolling basis.

### State Properties: Partnership to Expand Housing Opportunities (PEHO)

This program was created for housing authorities interested in developing mixed income housing. DHCD provides extra modernization funding to cover a portion of the construction costs of the project. No additional operating subsidies are provided. DHCD issued a Notice of Funding Availability (NOFA) in late 2015. The Somerville and Chelsea Housing Authorities were selected as the initial recipients of PEHO funding. As of the completion of this report, neither project has broken ground.

DHCD is determining over the next six months which capital programs it will be targeting for funding.

### State Properties: Modernizing Public Housing and Supporting Elders (ModPHASE)

In 2016, DHCD initiated a program with the Executive Office of Elder Affairs (EOEA) designed (1) to preserve senior Chapter 667 developments with extensive capital needs, and (2) to encourage housing authorities to work with senior service providers to assist the elderly with "aging in place". Developments must have a minimum of 20 units, and similar to the HILAPP program, must have a Facility Condition Index of 15% or higher as recorded in DHCD's Capital Planning System at the time the NOFA was issued. DHCD is determining over the next six months which capital programs it will be targeting for funding.

### State Properties: Public Housing Innovation Demonstration Program

The recent bond bill passed by the Commonwealth authorized \$50 million in general obligation bonds for this for a Public Housing Innovation Program (PHIP) to be allocated over a 5 year period. It is designed to support initiatives that demonstrate cost effective revitalization methods for state-aided family and elderly/handicapped public housing. While the stated goals of the program are innovative models for improvement management (coordination among housing authorities and encouraging new affordable housing units on municipal-owned or housing authority owned land) the program's primary focus in actual practice appears to be to supplement funding for projects financed through other DHCD programs that may require statutory relief from such requirements as the designer selection process or provisions of Chapter 121B. It does not appear to be a stand-alone program.

### Funding Sources That Can be Used for EITHER Federal or State Projects: Major Modernizations and New Development

**Community Preservation Act.** The NHA can also apply for funding from CPA monies, a flexible source of funds within the control of the Town of Needham. While the CPA bars the use of CPA dollars for repairs and maintenance, it is a particularly useful funding source since it can be spent on either federal or state projects involving significant improvements, major modernization or new developments. It can also be used for feasibility studies or as a general capital subsidy source. It also can provide the authority with the required local matching source of funds should it decide to participate in a DHCD funding competition.

A minimum of 10% of the town's CPA monies awarded to the Town must be reserved for affordable housing under the CPA statute. Another 20% is reserved for open space, recreation and historic preservation. The NHA is not precluded from applying for additional funding from the remaining 70% of unreserved Town CPA funds. Applications must meet the requirements of the Town's Community Preservation Plan, which is updated periodically by the Needham CPC.

Applications for CPA funding are submitted annually to the Needham Community Preservation Committee (CPC) not later than December 1 of each year. The CPC in turn make recommendations to Town Meeting, which must approve the appropriation.



**Home Funds.** Another potential source of capital funding is the Home Investment Partnership Program (HOME). Needham is a member of the West Metro Home Consortium making the town eligible for federal HOME monies. In Fiscal Year 2018 the Town's share of the consortium's funding was approximately \$20,000. HOME funds are useful but clearly will not be a major source of funding for any but the smallest projects.

## FUNDING SOURCES FOR NEW DEVELOPMENT AND CONSTRUCTION

Beyond the previously described funding programs available to the NHA through HUD, DHCD and the Town of Needham, there is one additional source that is potentially available for new development and construction – DHCD funding competitions. These are annual or semi-annual competitions that provide sponsors and developers with the opportunity to apply for a mixture of 9% federal Low Income Housing Tax Credits, state Low Income Housing Tax Credits and a variety of subordinate loan programs which are further explained below.

To participate in these funding competitions also requires the NHA to apply for and receive private financing. This brings opportunities for significant new funding as well as new challenges for the NHA, which has a small number of units under management and a small administrative staff. NHA should not be deterred from submitting a funding competition application—there are examples of LHA's with less than 350 units (e.g., Chelmsford, Falmouth) that have found success despite their size. However, if the NHA is interested in pursuing new development construction, it must engage the appropriate professional consultants to guide the application process.

### Role of Department of Housing and Community Development (DHCD)

If any development option considered by the NHA involves new construction, then a funding competition administered by the Department of Housing and Community Development will likely be part of the process. While most projects entering DHCD competitions are requesting 9% LIHTC's for new development and construction, a preservation project that needs additional capital sources, such as one of the DHCD subordinate debt programs or state LIHTC's, can also apply. In addition to the Federal 4% and 9% Low Income Housing Tax Credits, the Commonwealth created the its own Low Income Housing Tax Credit Program. The Federal and State LIHTC Programs differ as follows:

- While the Federal programs provide an annual credit against federal taxes for 10 years, the state credit is more limited, with a term of only 5 years.
- While both federal and state programs have project caps, the state LIHTC program has caps based on the number of units. For example, projects with 41 to 60 units are limited to \$700,000 per year of annual credit while projects sized between 61 and 100 units are capped at \$1 million annually. For this reason, in section 6 of this report, a proposed 61 unit development at the Seabeds Way /Captain Robert Cook Drive has been identified to maximize the state LIHTC award.

There are also a variety of subordinate loan programs available to low income affordable housing projects.

- With the exception of HOME, which is a federal pass-through, programs such as the Affordable Housing Trust, Housing Stabilization Fund, and others are typically funded through bond authorizations of the state legislature. These are programs which are also referred to as “soft debt”—unlike a first mortgage on a property, they do not require ongoing loan payments. They typically have very low interest rates (less than 1%) and the interest accrues over the 30 to 50 year term of the loans.
- The HOME Investment Partnerships Program provides \$750,000 to \$1,000,000 per project, with a per-affordable-unit maximum of \$50,000-\$75,000 in HOME entitlement/consortium communities like Needham. In communities receiving HOME funds directly from HUD, matching funds must be included as part of the DHCD application.
- The Commonwealth's Housing Stabilization Fund has requirements similar to HOME.
- The Affordable Housing Trust Fund has a \$1,000,000 project limit and a \$50,000 per affordable unit limit.

### Participating in a Funding Competition

In order to participate in a competition, a project must first pass through a pre-application process. The bar for this most often involves a “readiness” test—for example, if a project does not have zoning relief in place, DHCD will not extend an invitation since it is unlikely to be in a position to close on its financing in a reasonable period of time. In addition, a project must have site control and have closed all projects for which DHCD has previously awarded funding. The rules for entering DHCD competitions are laid out each year in a document called the Qualified Allocation Plan. It establishes the set-aside categories (e.g. 70% production, 30% preservation), per unit cost limits (e.g. a suburban small unit new construction total development cost per unit limit for Needham in 2018 is \$319,000), and project subsidy limits (e.g. State LIHTC caps are \$400,000 annually for 40 or fewer units, \$700,000 for 41-60 units, \$1 million for 61-100 units and \$1.5 million for greater than 100 units).

### Funding Rounds: Try, Try and Try Again

There are many more applications for funding through these competitions than there are available funds, and there is no guarantee that an application will ever be funded. However, after an initial rejection, DHCD staff will sit down with unsuccessful applicants and provide feedback as to how an application can be strengthened. This may involve design changes or advancing design documents to the construction phase. DHCD will also require local funding contributions as part of an application when a community is a member of a HOME consortium. This can be either CPA, HOME or another source. While an applicant may occasionally be funded after two rounds, it often takes three rounds for a successful proposal to receive an award given the ratio of proposals to available funding.

## DEVELOPMENT CONSIDERATIONS

### Steps to Consider in Pursuing Private Financing Options

Engaging with the world of private finance will have several significant implications for how the NHA conducts business. Both the RAD program and DHCD funding competition involve mortgaging authority property and seeking out investors to purchase Low Income Housing Tax Credits. As was discussed earlier, this will require different ownership structures for the NHA than what is now in place. Obtaining sound technical expertise and pre-development resources to cover early costs is essential.

Other issues that will need to be addressed include:

- **Assembling a Development Team.** Putting together a successful RAD package, tax-exempt loan application, or DHCD funding application, and either 4% or 9% LIHTC equity syndication, will require an experienced team: a development/financial consultant, a design team and a law firm will be essential for the authority to navigate the process.
- **Identifying Predevelopment Loan/Grant Funding.** While approaches to funding vary, the NHA will need to spend funds on architectural and engineering plans, environmental studies, surveys, financial feasibility analyses, preliminary legal work, etc. Either CPA monies or pre-development loans from organizations such as the quasi-public agency CEDAC (Community Economic Development Assistance Corporation) will need to be considered to cover these costs. Once a development/financial consultant is retained, they can assist the NHA with identifying the most appropriate sources of funding.
- **Creating New Ownership Structures.** Each project will require a single purpose entity owner. In addition, a transaction involving the sale of Low Income Housing Tax Credits will involve the creation of a limited partnership in which the NHA will be part of a for-profit general partnership, with the tax credit investor being the limited partner. The NHA's attorney and development/financial consultant will assist the authority to create the most appropriate structures that protect the long-term interests of the agency and residents.
- **Exploring Alternative Management Options.** In evaluating potential deals, a tax credit investor/syndicator will focus on the experience of the developer and in particular, the property manager. A manager's experience in leasing to tax credit-eligible households is critical in the evaluation process since failure to perform will have significant financial impacts on the returns promised investors. A question for the NHA will be whether it can rely on its staff to be trained to perform all of the tasks required to provide comfort to an investor, or whether it will need to explore bringing in third party management to operate properties that are syndicated.
- **Project-Basing of Section 8 Vouchers.** The authority's ability to project-base some of its Section 8 mobile vouchers for its federal properties undergoing RAD conversions

can have a significant impact on its ability to support debt. Given that it does not directly administer its own voucher program, the NHA needs to understand what steps to undertake to maximize the availability of Section 8 for Captain Robert Cook/Seabeds and High Rock Estates.

### Other Issues to Consider in Moving Towards Private Financing Options

If the NHA is successful in either converting its federal developments to RAD tax credit projects, or developing new tax credit projects, there are several important issues which should be considered:

- The authority will have a greater number of organizations monitoring its operations. In addition to HUD who will still be involved because of the long-term Section 8 contracts associated with RAD, there will be reporting requirements associated with the permanent lender, tax credit investor and tax credit compliance reviewer. These requirements will either be handled by a third party property manager or authority staff.
- If the authority initially relies on a private property manager to assist it with tax credit marketing and compliance issues, the agency will need to think through how to integrate the company with its overall operations.
- Rather than having either one waiting list or the centralized state waiting list which DHCD will be implementing in the fall, tax credit developments require separate project-based waiting lists. This will necessitate a significant administrative change in how the authority approaches leasing.
- The NHA will be potentially generating significant developer fees from RAD projects (e.g. an estimated \$970,000+ from the Captain Robert Cook Drive/Seabeds Way rehabilitation). While some of the fees will be held to build up authority reserves for future development projects, the fees can provide the NHA with flexibility to enhance its capacity in response to some of the increased administrative demands that accompany utilizing these programs.
- As the NHA does more development involving project-basing of Section 8, it should evaluate whether exercising greater control over its Section 8 portfolio merits consideration. Self-management of its Section 8 vouchers might make the development process easier as well as providing administrative fees for the organization.

## RISKS AND REWARDS OF ENTERING DHCD FUNDING COMPETITIONS

### Risks:

Similar to the considerations which were mentioned in the risks paragraph of the RAD section of this report, the NHA would be required to incur pre-development dollars for development/finance consulting and design services. However unlike RAD, the NHA would need to expend



significant dollars without any guaranty of a funding/subsidy commitment—DHCD requires that projects exhibit a high degree of readiness to proceed to construction. In other words, they should be permitted and be far along in the construction document process. While DHCD staff provide feedback to development teams to improve proposals that are not initially funded, there is no guarantee of funding.

#### **Rewards:**

The DHCD competition is the only vehicle available to provide significant subsidy dollars for stand-alone affordable new construction projects. In addition, it is also available to supplement bond-financed 4% LIHTC preservation projects (although developers would need to be prepared to wait through the same 2-3 funding cycles as if they were applying for a 9% LIHTC project). Thousands of units of affordable housing have been constructed using tax credits, and various subordinate debt programs. Numerous housing authorities have successfully utilized these programs with the assistance of the numerous consultants that exist in the Commonwealth with the expertise to assist the NHA if it decides to pursue these funding sources.

#### **REFERENCES FOR FURTHER INFORMATION**

##### **Qualified Allocation Plan**

<https://www.mass.gov/files/documents/2018/04/26/20182019QAP.pdf>

##### **Low Income Housing Tax Credits**

<https://www.mass.gov/service-details/low-income-housing-tax-credit-lihtc>

##### **DHCD Subordinate Debt Programs**

<https://www.mass.gov/service-details/home-investment-partnerships-program-home>

##### **Housing Stabilization Fund**

<https://www.mass.gov/service-details/housing-stabilization-fund-hsf>

##### **Affordable Housing Trust Fund Guidelines**

<https://www.mass.gov/files/documents/2016/07/wm/ahtfguide.pdf>

# COST ESTIMATES, PRO FORMAS AND FUNDING STRATEGIES

## INTRODUCTION

The previous Section 7 outlines the federal and state programs that may be available to fund major modernization and new development/construction of the Needham Housing Authority properties. In this Section 8 we apply these programs to create funding pro formas for the four projects that could be realistically envisioned for the NHA, showing the costs and funding source which could be assembled for each project:

- Construction of 61 new Senior Apartments on the Seabeds/Capt. Robert Cook site
- Major Modernization of the Existing Buildings at Seabeds/Capt. Robert Cook
- Redevelopment/Replacement of Linden/Chambers Buildings
- Replacement of High Rock Old Single-Family Bungalows with Two-Family Duplexes

The pro formas that are associated with the Modernization recommendations for Captain Robert Cook and Seabeds require HUD approvals through the major federal program known as the Rental Assistance Demonstration (RAD). Remaining funding (4% Low Income Housing Tax Credits, CPA) can be obtained without seeking monies through DHCD funding competitions. The pro forma for the replacement duplexes at High Rock would require both HUD approval and entering DHCD funding competitions since the final product would be new construction. The proposed new construction at Seabeds Way/ Captain Robert Cook Drive would also require competing for state funding through the DHCD funding competition. The proposed model for Linden and Chambers Streets contemplates redevelopment/replacement as the only viable option. The current physical design of the site and buildings are not suited for seniors to age in place in New England, and could not be feasibly modernized to achieve this goal. While recent changes in the threshold scoring for the state HILAPP program theoretically enables the authority to apply for modernization funding, it is unlikely that either development will be able to meet the funding criteria of the program.

Because of the extremely low income nature of senior households living in Chapter 667 housing, significant subsidy commitments will be needed to produce housing that truly meets the long term needs of older residents. Ultimately, we believe that some form of pilot program will need to be created that can address the needs of Linden and Chambers Street. This will require the board to develop a political strategy that builds on the support of town and state representatives. The state has shown a willingness in the past to fund models that could be used to successfully redevelop Linden and Chambers Street (e.g. Capen Court in Somerville). Using the information in Sections 7 & 8 of this report, the Needham Housing Authority will be in the best possible position to avail itself of opportunities if it is clear on its aspirations, has defined desired scopes of work, and understands the changes in governance and staffing that may be required to move forward with more ambitious rehabilitation and new construction work. Establishing and maintaining relationships with a Community Housing Specialist, affordable housing advocates, state and federal agencies and local political representatives will help the NHA to find and pursue opportunities when they arise.



Captain Robert Cook/Seabeds-New Construction Senior Apartments

The proposed 61 unit new construction senior apartment achieves feasibility through entering a DHCD funding competition and obtaining 9% Low Income Housing Tax Credits, State Low Income Housing Tax Credits and subordinate debt through three of DHCD’s programs (HOME, Affordable Housing Trust Fund, and Housing Stabilization Fund). A mandatory municipal match is met through a \$950,000 CPA award.

53 of the 61 units are targeted for low income seniors at 60% of area median income. Eight of the units will be designated for seniors who are extremely low income by using project-based Section 8 which will be requested from DHCD as part of the funding competition.

Construction costs assume prevailing wages.

Captain Robert Cook/Seabeds-RAD Modernization

The rehabilitation of Captain Robert Cook and Seabeds developments is done through HUD’s Rental Assistance Demonstration Program (RAD), tax exempt bonds and 4% Low Income Housing Tax Credits that are syndicated to an investor. The pro forma does not assume any contribution by the town in determining the maximum rehabilitation per unit (nearly \$77,000 per unit assuming a 10% construction contingency).

The projections do assume that the authority will project-base eight of its mobile vouchers as part of the RAD conversion. This is a technique used by housing authorities to boost supportable debt since the Section 8 RAD rents are significantly lower than the local Fair Market Rents.

Construction costs assume prevailing wages.

Capt Robt Cook/Seabeds Sr New Construction			
Unit Mix	Total	100%	
Total Units	61		
Total LIHTC Units	61	100%	
Total Affordable	0	0%	
Total Market Units	0	0%	
Total Moderate Units	0	0%	
Total Development Cost	Total	Total/Unit	Total/GSF
TDC	\$21,242,911	\$348,244	\$464.33
Acquisition	\$0	\$0	\$0.00
Construction	\$16,102,451	\$263,975	\$351.97
Soft Costs	\$2,780,572	\$45,583	\$60.78
Developer Fee/Overhead	\$1,984,000	\$32,525	\$43.37
Reserves	\$375,888	\$6,162	\$8.22
Total Sources	Total	Total/Unit	Total/GSF
Total Sources	\$21,242,911	\$348,244	\$464.33
Permanent Loan	\$4,245,491	\$69,598	\$92.80
Federal Tax Credit Equity	\$9,799,020	\$160,640	\$214.19
State Tax Credit	\$3,750,000	\$61,475	\$81.97
Housing Trust/CPA	\$950,000	\$15,574	\$20.77
State Soft Debt	\$2,300,000	\$37,705	\$50.27
Developer Fee Loaned	\$198,400	\$3,252	\$4.34
Surplus or (Gap)	\$0		

Capt Robt Cook/Seabeds Rehabilitation			
Unit Mix	Total	100%	
Total Units	76		
Total LIHTC Units	76	100%	
Total Affordable	0	0%	
Total Market Units	0	0%	
Total Moderate Units	0	0%	
Total Development Cost	Total	Total/Unit	Total/GSF
TDC	\$16,483,881	\$216,893	\$251.04
Acquisition	\$7,600,000	\$100,000	\$115.74
Construction	\$5,838,029	\$76,816	\$88.91
Soft Costs	\$1,371,819	\$18,050	\$20.89
Developer Fee/Overhead	\$1,300,000	\$17,105	\$19.80
Reserves	\$374,034	\$4,921	\$5.70
Total Sources	Total	Total/Unit	Total/GSF
Total Sources	\$16,483,881	\$216,893	\$251.04
Permanent Loan	\$2,764,669	\$36,377	\$42.10
Federal Tax Credit Equity	\$5,794,212	\$76,240	\$88.24
Housing Trust/CPA	\$0	\$0	\$0.00
Developer Fee Loaned	\$325,000	\$4,276	\$4.95
Acquisition Loan	\$7,600,000	\$100,000	\$115.74
Surplus or (Gap)	\$0		

Linden Chambers Replacement

The replacement of the Linden and Chambers developments on an adjacent parcel (created by using nine of the High Rock bungalow properties) can be made possible by an allocation of 152 units of project-based Section 8 subsidy. This pilot is based on a model that DHCD utilized when it funded the Capen Court redevelopment in Somerville in which 64 state-aided walk-up senior apartments were converted into a 95-unit elevator Section 8 building.

Feasibility is achieved through entering a DHCD funding competition and obtaining 9% Low Income Housing Tax Credits, State Low Income Housing Tax Credits and subordinate debt through three of DHCD’s programs (HOME, Affordable Housing Trust Fund, and Housing Stabilization Fund). In addition, the financing assumes a two part subsidy award from the Federal Home Loan Bank Affordable Housing Program: (1) a \$1 million capital subsidy; and (2) an interest reduction subsidy. DHCD requires matching contributions from local communities as an important component of its funding round. \$2 million of CPA monies are shown as a source as part of the capital structure.

Finally, since the land that Linden and Chambers Street developments previously occupied will now be available for development, the pro forma assumes that the NHA will be able to net \$1 million in land profit that will be reinvested in the redevelopment of Linden/Chambers.

Construction costs assume prevailing wages.

Linden Chambers Redevelopment			
Unit Mix	Total	100%	
Total Units	152		
Total LIHTC Units	152	100%	
Total Affordable	0	0%	
Total Market Units	0	0%	
Total Moderate Units	0	0%	
Total Development Cost	Total	Total/Unit	Total/GSF
TDC	\$41,958,024	\$276,040	\$464.91
Acquisition	\$0	\$0	\$0.00
Construction	\$31,580,965	\$207,770	\$349.93
Soft Costs	\$5,353,373	\$35,220	\$59.32
Developer Fee/Overhead	\$3,933,000	\$25,875	\$43.58
Reserves	\$1,090,685	\$7,176	\$12.09
Total Sources	Total	Total/Unit	Total/GSF
Total Sources	\$41,958,024	\$276,040	\$464.91
Permanent Loan	\$20,799,315	\$136,838	\$230.46
Federal Tax Credit Equity	\$9,799,020	\$64,467	\$108.58
State Tax Credit	\$3,750,000	\$24,671	\$41.55
Federal Home Loan Bank	\$1,000,000	\$6,579	\$11.08
CPA	\$2,000,000	\$13,158	\$22.16
State Soft Debt	\$2,300,000	\$15,132	\$25.48
Developer Fee Loaned	\$1,309,689	\$8,616	\$14.51
Cash Equity from Land Sale	\$1,000,000	\$6,579	\$11.08
Surplus or (Gap)	\$0		



High Rock Estates-Two Phase Redevelopment

The current High Rock Estates consists of 60 single family homes and 20 duplex homes that replaced 20 single family homes in 2009. The proposed two-phase redevelopment assumes a HUD-RAD conversion involving the demolition of the 60 single family homes (51 homes if nine are incorporated into the Linden/Chambers 152 unit new development as proposed in the previous section) and construction of 60 (or 51) new duplexes containing 120 units.

The project is divided into two phases to ease relocation issues as well as to divide the subsidy request between two competitions. Feasibility is achieved through entering a DHCD funding competition and obtaining 9% Low Income Housing Tax Credits, State Low Income Housing Tax Credits and subordinate debt through three of DHCD's programs (HOME, Affordable Housing Trust Fund, and Housing Stabilization Fund). Each funding round assumes that the municipal matching contribution will be made through a \$750,000 from CPA monies.

60 of the 120 units will have project-based Section 8 subsidies ensuring that those units meet the income needs of current public housing residents. (Eight of the units in each phase would ideally be project-based from the total vouchers assigned to the NHA to maximize the loan proceeds). The balance of the units will be established for households earning 60% of area median income.

Construction costs assume prevailing wage.

High Rock Estates Phase I			
Unit Mix	Total	100%	
Total Units	60		
Total LIHTC Units	60	100%	
Total Affordable	0	0%	
Total Market Units	0	0%	
Total Moderate Units	0	0%	
Total Development Cost	Total	Total/Unit	Total/GSF
TDC	\$22,700,023	\$378,334	\$325.45
Acquisition	\$0	\$0	\$0.00
Construction	\$16,994,337	\$283,239	\$243.65
Soft Costs	\$3,215,536	\$53,592	\$46.10
Developer Fee/Overhead	\$2,086,000	\$34,767	\$29.91
Reserves	\$404,151	\$6,736	\$5.79
Total Sources	Total	Total/Unit	Total/GSF
Total Sources	\$22,700,023	\$378,334	\$325.45
Permanent Loan	\$6,537,623	\$108,960	\$93.73
Federal Tax Credit Equity	\$9,799,020	\$163,317	\$140.49
State Tax Credit	\$2,625,000	\$43,750	\$37.63
Federal Home Loan Bank	\$0	\$0	\$0.00
CPA	\$750,000	\$12,500	\$10.75
State Soft Debt	\$2,300,000	\$38,333	\$32.97
Developer Fee Loaned	\$688,380	\$11,473	\$9.87
Cash Equity from Land Sale	\$0	\$0	\$0.00
Surplus or (Gap)	\$0		

High Rock Estates Phase II			
Unit Mix	Total	100%	
Total Units	60		
Total LIHTC Units	60	100%	
Total Affordable	0	0%	
Total Market Units	0	0%	
Total Moderate Units	0	0%	
Total Development Cost	Total	Total/Unit	Total/GSF
TDC	\$22,947,046	\$382,451	\$328.99
Acquisition	\$0	\$0	\$0.00
Construction	\$17,183,718	\$286,395	\$246.36
Soft Costs	\$3,248,680	\$54,145	\$46.58
Developer Fee/Overhead	\$2,103,000	\$35,050	\$30.15
Reserves	\$411,648	\$6,861	\$5.90
Total Sources	Total	Total/Unit	Total/GSF
Total Sources	\$22,947,046	\$382,451	\$328.99
Permanent Loan	\$6,779,036	\$112,984	\$97.19
Federal Tax Credit Equity	\$9,799,020	\$163,317	\$140.49
State Tax Credit	\$2,625,000	\$43,750	\$37.63
Federal Home Loan Bank	\$0	\$0	\$0.00
CPA	\$750,000	\$12,500	\$10.75
State Soft Debt	\$2,300,000	\$38,333	\$32.97
Developer Fee Loaned	\$693,990	\$11,567	\$9.95
Cash Equity from Land Sale	\$0	\$0	\$0.00
Surplus or (Gap)	\$0		

# CONSULTANT FINDINGS AND RECOMMENDATIONS

## INTRODUCTION

This report can be considered an “owner’s manual” for the NHA’s properties, giving management, staff, the board, tenants and the town a common understanding of the authority’s mission, resources and properties, and a master plan for their evolution. It is intended to lay out needs, options and opportunities for the next decade or more, although priorities may change along with the economic and political climate.

Although the NHA is well managed and properties are in relatively good condition, it is in the same position as most other housing authorities – over the next few decades affordable housing needs will continue to rise, along with standards and expectations, while the condition of the existing properties, now many decades old, will continue to decline.

This report provides descriptions of existing developments, histories of recent renovations and lists of work to be done, options for more ambitious modernization projects, and new development opportunities at the Seabeds Way/Captain Robert Cook Drive, and Linden Street/Chamber Street/High Rock clusters. It also provides pro formas and funding options that may be available to the Needham Housing Authority. This Section 9 distills out of this information recommendations for opportunities to be pursued. It also suggests a change in mindset, where even small changes are seen in the context of the longer term master plan.

On May 31, 2018, Governor Charlie Baker signed the \$1.8 billion Housing Bond Bill (H.4536) into law. This is the largest housing bond bill in the state’s history and is expected to “increase the production of affordable housing and modernize public housing” according to CHAPA, (Citizens Housing and Planning Association) the state’s most influential affordable housing advocacy organization. Although there will continue to be a great deal of competition for very limited resources, the NHA can be in a better position to take advantage of funding opportunities if it has a master plan in place for its properties.

The modernization and new development work being proposed is exactly the kind of work being pursued by other housing authorities in the Commonwealth, and by community development corporations and for-profit developers designing and building affordable and mixed income projects. The Needham Housing Authority is in a less advantageous position to compete for this funding than some other organizations.

Unlike many Community Development Corporations and developers, the NHA has an aging portfolio of buildings and a large number of vulnerable tenants with limited staff to explore opportunities beyond making modest improvements in existing conditions. Unlike the Boston Housing Authority and the Cambridge Housing Authority, the NHA is not large enough to have a development staff dedicated to pursuing funding and approvals for major projects.



The NHA’s routine maintenance needs are funded on an annual basis by HUD at Seabeds Way, Captain Robert Cook and High Rock, and by DHCD at Linden and Chambers. Financing for modernization is more difficult to obtain, and for new development more difficult still. To accomplish more than ongoing repairs will take a concerted effort by the Needham Housing Authority staff and board, and will require outreach to town officials, state agencies and funders, and the expertise of affordable housing consultants. It may also take a restructuring of the ownership of the NHA properties, or the establishment of a new development entity and staff.

We recommend a series of incremental steps that will help the NHA staff and board envision opportunities for improvements and the impact they will have on properties, staffing and management. These can be pursued in parallel, with further development and implementation decisions based on funding, the need for approvals, and NHA priorities for accomplishing their mission.

## STAFFING AND GOVERNANCE

Like most housing authorities of its size, the Needham Housing Authority has experienced staff that manage its properties, and a Board of Commissioners that oversees policies and their execution. This expertise is supplemented by a part time Community Housing Specialist funded by the Town of Needham (Karen Sunnarborg) who collects and analyzes housing and related data, coordinates potential affordable housing initiatives, monitors affordability, insures compliance with funding sources and addresses inquiries related to housing issues.

Major modernizations or new development will require additional expertise to navigate the planning, funding and execution of initiatives, and changes in governance. This is especially true if Low Income Tax Credits are being utilized as part of the financing strategy. In the early stages the NHA will have to manage a design team and an affordable housing financing specialist. As the planning progresses investor expectations must be anticipated and met. After completion there will be oversight of management and operations that will be more extensive than that now in place.

It is important that the NHA understand the changes that they will need to make in their staffing and governance to pursue the more ambitious redevelopment opportunities proposed in this study, or that may emerge in the future. These changes are put into context in the Funding Sources section of this study and are summarized below.

**1. Investigate Assembling a Development Team** Obtaining funding for new development will require time and expertise beyond what the Needham Housing Authority has on staff. Modernization requires a different pathway than new development, and HUD and DHCD have very separate application protocols. It would be beneficial for the NHA to hire an affordable housing funding consultant that can provide a more detailed outline of the steps forward than what can be provided in this report.

A typical team for a significant new development would include:

- An experienced developer who can both manage the development process and engage possible funders – similar to the role Peter Smith and Oxbow Partners played for the 2009 redevelopment at High Rock.
- An architect and engineering team to prepare initial designs and provide drawings for review, approval, bidding and construction. Cost estimates are generally provided by the architects or their estimating consultants.
- A marketing agent for the affordable units to insure compliance with regulations.
- An attorney to respond to the myriad legal requirements.
- A tenant relocation specialist if tenants will be relocated during construction or after completion.

**2. Investigate Converting to Project Based Section 8** This change in how the federal developments (Seabeds Way, Captain Robert Cook and High Rock) are funded is necessary to implement the larger scale redevelopment described earlier in this report. The NHA should investigate the impact that this change will have on its operating procedures and staffing given the reporting and other requirements associated with this change. Many housing authorities have made the decision to make this conversion, and along with consultants and other authorities can be a resource for the NHA.

**3. Investigate New Ownership Structures** Accessing the Low Income Housing Tax Credits (LIHTC) necessary for major redevelopment will change the ownership structure of NHA properties as investors take an ownership stake in return for providing funding. The NHA should investigate the impact this will have on its governance and operations so that it can make a decision on whether to pursue LIHTCs. This is a very common way of funding housing authority and non-profit developer initiatives and expertise is available to lay out risks and rewards.

**4. Investigate Alternative Management Options** NHA properties appear to be well managed, conforming with HUD and DHCD requirements. Buildings and apartments are kept in good repair and residents seem to appreciate staff’s responsiveness. Once investors become part of the ownership structure requirements change, and there is a higher level of scrutiny over how developments are managed. The NHA’s review of whether LIHTC should be used to fund major modernizations or new development should include an analysis of whether a third party manager should be utilized to supplement NHA management. Other housing authorities that have made this choice can provide valuable information on the impact it has had on operations and management costs.

# PUBLIC AND REGULATORY ENGAGEMENT

## 1. Build the Case for Affordable Housing

Although many residents of Boston area cities and towns understand the necessity for building more affordable housing, they often resist construction in their neighborhood. Given that many people do not have a vocabulary or clear concepts to use in discussing the planning and design of housing, they may be concerned about the number of apartments being proposed, and whether they will actually impact their neighborhood in a significant way or not. If the NHA is interested in pursuing new development it is advantageous to have clear descriptions of why housing is being proposed and what its impact is likely to be. “Talking points” for the planning proposals illustrated in this study include:

- There is a lack of affordable housing in Needham. The sons and daughters of current residents may not be able to afford a house or apartment in the town that they grew up in.
- Teachers and many people in the service industries, construction and industry cannot afford to live in Needham.
- Housing for those with very low incomes – families and the elderly – are in particularly short supply. They could be our friends or relatives or provide services to us, our children or our parents.
- Increasing the amount of housing helps solve these problems – although the character and quality of life in Needham has to be protected when development takes place.
- All of the sites on which development is being proposed are essentially invisible to everyone except those who already live in NHA housing.
- All sites are screened by trees on all sides, so that even at three floors, these buildings will barely be visible from adjacent properties.
- Although traffic will be increased it should have minimal impact. A traffic study will evaluate mitigation options if needed.
- All parking will be on site.
- A majority of the development proposals are for the elderly; there will be no significant increased demand on schools.

## 2. Community Outreach

Housing Authorities like those in Boston and Cambridge, and Community Development Corporations that make substantial improvements in existing affordable housing, or develop new affordable housing, do not do it alone. Transformations that seem to suddenly emerge on a street corner are the result of years of work building broad based support from a series community stakeholders. Some provide financial support, others regulatory relief, and still others, moral support, or at least the decision not to engage in active opposition.

There are three reasons for active outreach early in the process. One is to determine if anticipated plans may not be possible because of regulatory or other requirements. Another is to facilitate the kind of dialog that minimizes the chances that active opposition to proposals will occur. The third is to actively build community support so that the majority of Needham’s citizens, elected officials, departments and committees support the NHA proposals with their time and with funding. The NHA does not necessarily have to be 100% committed to pursuing an ambitious modernization or new development effort to begin the dialog with selected members of the Needham community.

Outreach to funders at the state and federal level is described in Sections 7 + 8 in this report. Local engagement that will be needed for the approval of modernization and redevelopment efforts would include:

- **NHA Staff and Commissioners.** There continues to be very significant demands on staff and commissioner time, and on the Authority’s resources. It is critical that there be broad agreement on new endeavors that will increase those demands, and that the resources are there to support them. This report is a starting point for building consensus on the best directions forward.
- **NHA residents.** Inclusion of NHA residents in planning efforts will help ensure that proposals are responsive to their needs and that concerns are addressed. Public housing resident opposition to proposed changes can be a significant setback to what are intended to be beneficial improvements. Resident Associations should be actively involved in the effort and their input solicited.
- **Abutters and Neighbors** Those who live in close proximity to housing authority developments may be concerned that changes will have a negative impact on their lives or property. Although every proposal in this study is intended to benefit not only the NHA, but Needham neighborhoods as well, it will take outreach to get the input and support that is needed. Generally outreach is best organized with the support of the Planning Department and planning board along with any neighborhood organizations in the area that are active in these kinds of issues.



- **Planning Department and Planning Board.** Lee Newman, Director of Planning and Community Development, is very familiar with development issues in Needham. Along with her staff, she can provide valuable input on community engagement and approvals issues, and how NHA proposals can support the Department's broader vision for the Town. The department can facilitate the kind of dialogue that is critical to integrating the Authority's properties into a larger community context and to seeking relief through the Zoning Board of Appeals. They may recommend public meetings as part of the review and approvals process.
- **Community Preservation Committee** Any significant modernization or new development effort is likely to utilize Community Preservation Act funding allocated by the committee with money from a surcharge on real estate taxes. Funding is limited. The NHA will have to decide on its priorities, and investigate what other funding sources may require CPA allocations as a sign of local support. They should review with CPC staff, apply based on the CPA schedule, and testify on behalf of the application with others from the community.
- **Conservation Commission** Given the proximity of NHA sites to wetlands, any proposed new development should be reviewed with the Conservation Commission early in the process. Definitive delineation of wetland boundaries may not be available and may need to be established in the field if it might impact the location or type of construction that could occur. Replication of wetlands impacted by development may be necessary for new construction and requires Conservation review and approval.
- **Department of Public Works** To the extent that proposed NHA work impacts sidewalks, streets or utilities beyond the limits of their property, review with DPW is advisable early in the process. They may require the NHA to have a recent site survey showing utilities and topography in impacted areas.
- **Building Department** Like the DPW, the Building Department should be consulted early in the process to understand their review and approval process.
- **Fire Department** The fire department will want to review any proposal that impacts access to a site and their ability to fight fires. Consultation with the fire department early in the planning process is advisable.
- **Town Meeting** The NHA should attend and understand town meeting votes that may be required and build support for approval.
- **Elected Officials** Support from Needham Selectmen is essential in building consensus around major improvements and new construction, and their input on the local "lay-of-the-land" can provide information that is useful in responding to

community concerns. They can also facilitate funding from the Town. Needham's State Representative and State Senator officials can also advocate on the allocation of funding as they advocate for the well being of their constituents. The form that the engagement with elected officials takes should be carefully considered by the NHA.

- **Department of Housing and Community Development (DHCD)** This state agency funds repairs and improvements through their annual grants. Although they do not currently have programs in places that the NHA can easily access for larger scale improvements or new construction, they have taken an interest in this report and have asked that the NHA stay in contact. Periodic review with DHCD is recommended so that the NHA and DHCD can work together on planning and potentially funding future redevelopment.
- **Housing and Urban Development (HUD).** This state agency funds repairs and improvements through their annual grants.

## PRESERVE/BROADEN NHA KNOWLEDGE BASE

### 1. Utilize Building and Site Plans

Maintain printed and digital copies of the existing site and building drawings that were prepared for this study and use them to plan and document maintenance work and large scale improvements. This has a number of advantages:

- In the planning stages it allows the developments to be seen in their totality with relationships between different parts of buildings and sites easy to understand. For example, replacing boilers can free up space that might allow an adjacent space to be expanded, or replacing curbs and repaving might allow a more efficient layout to be envisioned. This tends to be easier to do on plans than in the field.
- Work can be documented on plans as "as-built" information with the scope and dates noted. This is helpful as time goes by and institutional memory fades.
- The plans can be a wish list that documents priorities for the years to come as funding becomes available.
- Plans indicating work to be done can be helpful in obtaining competitive pricing from contractors.

Note that the plans included in the report, and provided to the NHA in CAD and PDF form, are based on the original drawings for each development provided by the

NHA. Their accuracy should be confirmed before work is implemented. In addition, the authors of this report have provided the NHA with digital PDF scans of original drawings for Seabeds Way, Captain Robert Cook, Linden Street and Chambers Street developments. These drawings provide valuable additional information on building construction and systems (accuracy to be verified) that NHA should keep available for reference as needed.

## 2. Site Surveys

Many of the ideas noted below and referenced elsewhere in this study will require up-to-date site surveys showing topography, utility and site features in order to be implemented successfully. This is especially important for accessibility features like ramps and regrading where small changes in elevation have an outsized impact on planning and design. Site surveys provide all of the benefits noted above for building plan drawings.

## 3. Seek Professional Planning and Design Expertise

Utilize professional planning, design and engineering consultants. They can provide up-to-date ideas on the most cost effective materials, systems and design that supplement the expertise of maintenance staff and contractors. At Chambers Street, for example, a team of architects and landscape architects could propose how to utilize excess mechanical room space for a first floor laundry, remove unneeded second entry doors in each apartment to improve kitchen layouts, regrade the site so that ramps were not required to access porches, use paint color more effectively inside and outside, create a system of trash barrel enclosures to improve the appearance of the site and use outdoor open space more effectively as a community asset. DHCD's "house doctor" program is intended to make this expertise easier to access for state developments, facilitating rather than interfering with effective decision making and allocation of money.

Professional planning and design can also help the NHA put smaller scale improvements into the context of larger scale planning so that incremental measures contribute to a larger vision that may not yet be funded.

## 4. Seek Professional Affordable Housing Expertise

The NHA has an excellent staff that appears to manage the Authority in a thorough and effective way. Applications for HUD and DHCD formula funding provide money every year for maintenance and repairs that keep facilities in good condition. However, the funding required for major modernizations or new development requires more time than current staff have available, and specialized expertise that only the largest housing authorities have in-house. The Boston area has a very substantial number of highly qualified consultants that provide exactly the kind of services that the NHA needs, and is provided to other housing authorities,

community development corporations, and for-profit developers who build affordable housing.

CHAPA (Citizens Housing and Planning Association) provides a clearinghouse for affordable housing questions and concerns, and for connecting affordable housing owners and developers with appropriate consultants.

Once the NHA has decided that these may be projects worth pursuing, the NHA should hire consultants who can chart the path forward in greater detail than it is laid out in this report. Funding for new development, as outlined in previous sections, will be hard to finance and will strain NHA resources. Nevertheless, it can also bring significant benefits to the Town of Needham and be the 21st century manifestation of the NHA's mission. This report outlines the planning, engagement, funding, staffing and governance issues that the NHA has to address to accomplish new development. This outline is necessarily abbreviated given the much broader range of issues this study is meant to address.

We recommend that the NHA engage an affordable housing development consultant to help them take the next incremental steps in understanding the impact this kind of endeavor will have on the NHA staff, commissioners and mission, and the benefits it will bring. A consultant can provide a more detailed description of the step by step process that will be required for the two development options noted so that the very best decision can be made on whether to proceed further or not.

# ADDITIONAL PLANNING INITIATIVES

## 1. Continue Developing Comprehensive Plans

Although funding for major modernizations may not be immediately available, planning for more ambitious improvements can be helpful in organizing the routine repair and maintenance efforts in an effective way. For example, replacement of curbs and paving and repair of ramps at Seabeds Way is an ongoing effort. It is conceivable that the site could be regraded to eliminate or reduce the need for ramps, and that the paved areas could be organized more effectively to allow more parking in less space, creating a more pedestrian friendly environment. A landscape architect could explore options for reorganizing the site to insure that even small scale improvements help pave the way for a better outdoor environment, and not just fix the worst of the concrete or asphalt problems.

The major modernization recommendations outlined earlier in the report suggest additional planning efforts that are worth exploring. If pursued at a conceptual/ schematic design level with a commitment to long term follow-through they may warrant the modest expenditures for professional design and engineering services that will ensure that construction funding is well spent.



## 2. Pursue parallel paths

Although all five major NHA developments have many years, and perhaps decades of useful life remaining, none meet contemporary affordable housing standards, and slip further behind every year. Although assemblies and systems are being replaced as needed, the money is being invested in buildings that will eventually need to be replaced. As the need for housing in Needham and the region grows, the relatively low density of the NHA's developments become more of a lost opportunity. For these reasons we recommend that the NHA consider modernization and new development options until insurmountable obstacles present themselves.

There may be a diversity of opinion at the NHA about whether it is the mission of the housing authority to explore and implement improvements to its properties beyond maintaining its current housing stock in good condition. Major modernization and new development opportunities as outlined in this report require time, money and energy that many housing authorities do not choose to allocate. They require time, effort and political capital that may not be available, and run the risk that the investment may not be rewarded with the required funding for construction.

We recommend that the NHA continue taking preliminary steps so that they understand the costs and benefits, risks and rewards, of modernization and new development. Although these are outlined in this report, more information may be necessary to understand the process required to move towards implementation. By taking these incremental steps the NHA will be in a better position to make decisions on what efforts it wants to expend.

## 3. Plan Envelope Improvements at Captain Robert Cook Drive Development

The devastating weather conditions that led to ice damming and water infiltration at Seabeds Way, and over \$1,000,000 in required repairs, was unusual, and led to similar problems in tens of thousands of properties throughout the region. The work that was done not only repaired the damage, but upgraded exterior walls and roofs so that these problems would not reoccur. A study by envelope consultants Russo Barr Inc. indicates that Captain Robert Cook has similar construction deficiencies and is vulnerable to similar water infiltration problems. We recommend that this work be pursued as soon as possible to prevent similar devastating damage, to replace deteriorated roof and wall assemblies that are at the end of their useful lives, and to conserve energy and improve resident comfort by adding insulation, and air and vapor barriers.

In parallel, other design and engineering issues should be considered. The choice of materials, colors, trim details, and window and door design affect the character

of this community, the quality of life for residents, and the long term effectiveness and durability of systems. We recommend that the NHA utilize the services of a qualified architect to insure that the most cost effective materials and assemblies are being utilized, and look at the opportunity to use color and material changes to give individual apartments or buildings their own identity.

## 4. Plan for Quality of Life improvements

Although repairs and modest upgrades to apartments, buildings and sites absorb most of the funding and staff time available, modest quality-of-life improvements can have a big impact on resident and neighborhood perceptions of NHA properties. Pedestrian areas at Seabeds Way, outdoor community spaces at Captain Robert Cook Drive, fencing along Linden Street, screening of trash bins at Chambers Street and a playground at High Rock would all be community assets that instill pride and suggest a "good neighbor" attitude in relation to tenants and the surrounding town. Some of this work could be financed through the yearly HUD or DHCD formula funding allocations after critical repairs have been taken care of. This work could also be part of a broader modernization effort that would require additional funding. The NHA may not know where the funding is coming from when it considers this kind of work and puts it on its "wish list". The critical issue is that NHA should make strategic decisions about improvements it wants to prioritize and then pursue funding from whatever sources may be available. This report is the starting point for this kind of planning, decision making, funding applications and making choices on implementation.

## 5. Plan for Accessibility and Aging in Place

The Needham Housing Authority, like many or most housing authorities, lacks sufficient accessible housing as defined by the Americans with Disabilities Act (ADA) and the Massachusetts Architectural Access Board (MAAB), which issues state requirements enforced by local building departments. (There is no enforcement mechanism for ADA other than through lawsuits). Accessibility becomes increasingly important as residents age or face short or long term mobility challenges. MAAB also sets requirements for those with hearing and visual impairments. The NHA should do a comprehensive accessibility survey of their developments noting MAAB compliance requirements in relation to existing conditions, and then prepare a plan for meeting these requirements. At Captain Robert Cook, where there are larger bathrooms and kitchens, and roll-in first floor apartments, compliance may be relatively easier with larger doors, kitchens with wheelchair knee space, and relocated fixtures in bathrooms bringing them up to standards. At the Linden Street and Chambers Street development, compliance will be very difficult given the small size of the apartments, and kitchens and bathrooms surrounded by other construction on all sides. Although housing authorities should have 5% of apartments accessible in each of their developments, it may be more

practical to work towards this percentage portfolio wide. An accessibility professional should be retained to do this work. Site accessibility should be reconsidered as well. In addition to ensuring that walks and curb cuts meet MAAB requirements, the NHA should consider regrading sites to eliminate the need for ramps (Seabeds Way, Chambers Street) or eliminate the need for steps that prevent access (Linden Street). This will require creative thinking concerning grading, drainage and landscape, and should be pursued by landscapes architects with experience in housing planning and design. This effort can be part of the quality-of-life investigations noted above.

## **6. Plan for Sustainability and Energy Conservation Improvements**

The entire portfolio of NHA buildings were designed and built in an era of cheap energy. Linden Street and Chambers Street boilers and water heaters were replaced in 2018. Heating systems at the other three developments are original with replacement anticipated - subject to whether funding is available - in the next few years. All developments have air conditioning via individual units provided by tenants in windows or through-wall sleeves. Building envelopes have been improved at Seabeds Way but not at other developments. Bathroom ventilation is provided by fans.

Building code and best practices require that all of these systems be engineered as a comprehensive heating/ventilation/air conditioning system that protects resident health and building durability. We recommend that the NHA pursue a comprehensive energy audit by mechanical engineers working with New Ecology Inc. (NEI) or another sustainability consultant. NEI is a non-profit based in Boston whose mission is to provide sustainability and energy conservation consulting to affordable housing owners. They provide a variety of metrics for measuring efficiency and recommendations on system design and performance - to be engineered for implementation by an engineering and architectural firm.

## **7. Plan for Alternative Energy**

Geothermal, wind, combined heat and power and solar photovoltaics are coming down in price as performance goes up, and many housing authorities are considering adding or have already added these systems. Solar PV is probably the most practical for the NHA. Given the number of buildings and the amount of land the NHA owns, the installation of panels could significantly reduce energy costs. Some housing authorities own their panels and reap 100% of the benefits; others contract with a third party and share in the benefits with the panel installer/owner. Which alternative might be appropriate for the NHA depends on costs, subsidies and grants available, and the terms offered by a third party. NEI could review opportunities and make recommendations on how to proceed if the NHA chooses to pursue renewable energy. A consultant such as New Ecology Inc. can provide related consulting services.

## **8. Plan for Landscape and Site Design Improvements**

All five of the major NHA developments benefit from their sylvan settings and relatively sheltered locations which, along with a good maintenance staff, keep sites relatively attractive. Most recent affordable housing developments are designed to provide richer environments that both create a sense of community and provide resident privacy that is more like what is in surrounding neighborhoods, and looks less like public housing. All five major developments could become better places to live for residents, and more attractive places in the neighborhood with improved site design.

The design of clearly articulated pedestrian walks and gathering areas, the creation of outdoor plazas and gathering spaces, screening of trash bins and dumpsters, fencing and hedges to define public, semi-public, semi-private and private outdoor areas, and the use of materials and colors to create a sense of identity for different areas in each development should be investigated by architects, civil engineers, and landscape architects. Community gardens are another asset that more and more affordable housing developments are including in their plans for housing that support wellness, education and inter-generational activities.

## **9. Designing Playgrounds as Community Assets**

Redesign or relocation of the playground at Captain Robert Cook Drive and the design of a new playground at High Rock Homes can create important community assets. Not only do they provide attractive areas for children within walking distance of their homes, but when they include benches and pleasant paved areas can provide a supportive environment for parents. This work can be part of the quality of life, accessibility and landscape improvements noted above.

## **10. Reconsider Interior Common Spaces**

The NHA has a series of interior common spaces. There are community rooms at Seabeds Way and Chambers Street, offices at Chambers Street and at the entry to the Seabeds Way/Captain Robert Cook development, and small lobby areas at the Seabeds Way and Chambers Street buildings. Even the laundries at Linden Street and Chambers Street can be considered common spaces. These can be merely utilitarian areas, but can also become gathering places where elderly residents reach out to each other.

Laundry rooms at Linden Street marked with canopies or colors can become little landmarks with places to sit around which communities can form. Small entry areas can be outfitted with window gardens or book swap shelving that encourage engagement with other people and the surrounding world. We recommend that the NHA consider these kinds of improvements, and retain appropriate professionals for design and development.



## TABLE OF ACRONYMS

AIA	- American Institute of Architects
ADA	- Americans with Disabilities Act
AC	- Air Conditioning
CEDAC	- Community Economic Development Assistance Association
CHAPA	- Citizens Housing and Planning Association
CPA	- Community Preservation Act
DHCD	- Department of Housing and Community Development
DPW	- Department of Public Works
EOEA	- Executive of Elder Affairs
FC	- Facility Condition Index
GPF	- General Protection Fault
HILAPP	- High Leverage Asset Preservation Program
HUD	- Housing and Urban Development
HVAC	- Heating, Ventilation and Air Conditioning
LED	- Light Emitting Diode
LHA	- Local Housing Authority
LIHTC	- Low Income Housing Tax Credit
MAAB	- Massachusetts Architectural Access Board
NHA	- Needham Housing Authority
NOFA	- Notice of Funding Availability
OCAF	- Operating Cost Adjustment Factors
PEHO	- Partnership to Expand Housing Opportunities
PHA	- Public Housing Agency
PV	- Photovoltaic
RAD	- Rental Assistance Demonstration Program
RFP	- Request for Proposal
RFQ	- Request for Qualifications
VCT	- Vinyl Composition Tile

# 11

## NHA FACILITY MASTER PLAN

EXTERNAL REVIEW DRAFT

## TABLE OF REFERENCE DOCUMENTS

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