

# Riverbend Row

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2018 Affordable Housing Competition  
Federal Home Loan Bank of Boston



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# Meet the Team

## PROJECT ADVISORS

We would like to thank the following individuals, without whom we would have never had this opportunity to get to know Athol, its residents, and its housing needs:

*Alicia Tyler, Design Mentor*

*Chris Lippert, Finance Mentor*

*Edward Marchant, Professor at Harvard GSD & HKS*

*Marc Dohan, NewVue Communities*

*Peter W. Smith, Oxbow Partners LLC*

## ABOUT THE DEVELOPER



NewVue Communities is a non-profit organization based out of Fitchburg, MA, a small city about 25 miles east of Athol. Led by a diverse group of residents and business members, NewVue's mission is to provide affordable housing and economic opportunity to residents of North Central Massachusetts while promoting civic engagement<sup>1</sup>. NewVue Communities prides itself on quality design, reliable property management, and effective community engagement with local partners.

## PROJECT TEAM



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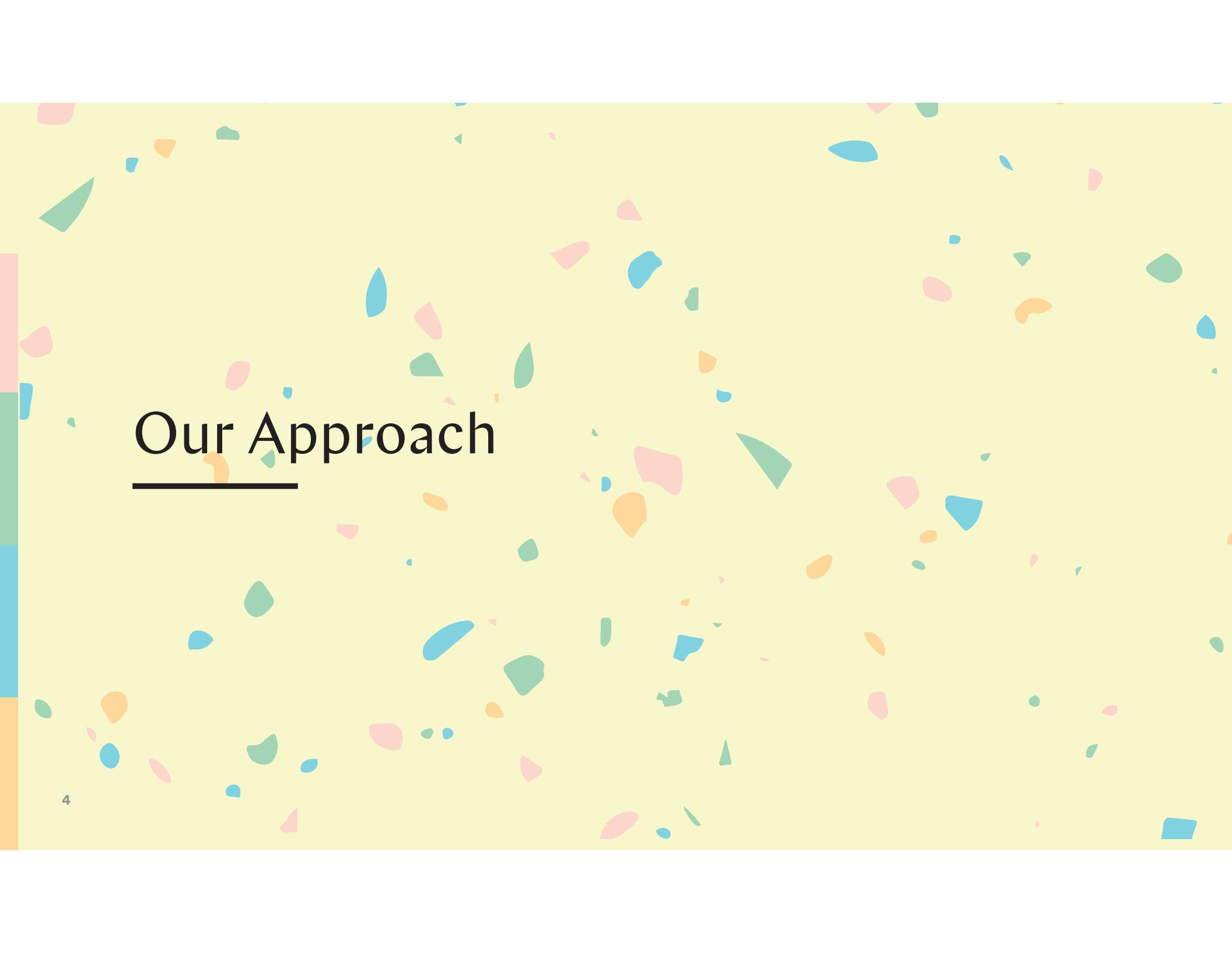
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# Our Approach



## Back to School

The Riverbend and Ellen Bigelow schools connect the people of Athol across generations. In selecting this site and addressing its challenges, we paid careful respect to its history and importance. In order to achieve this, we took ourselves back to school.

When we met with people in Athol, we were moved to find that the schools were a site of shared experience for middle schoolers and senior citizens who had attended as children. People of all ages spoke fondly of their time at Riverbend and Bigelow, an affinity for the schools we too came to share over time.

With this project, we hope to capture some of that feeling and sustain it for the future. As Riverbend Row, the historic schools will be preserved as a community asset. The development will answer Athol's immediate needs for affordable housing and provide new public programming that builds on the town's spirit of making. Though the buildings no longer function as schools, they will continue to be a place of learning and growth for future generations.

# Executive Summary

## BUILDING FOR ATHOL

When towns retire school buildings from use, as Athol did with its historic Bigelow and Riverbend schools four years ago, they have an opportunity to preserve the positive community impact of these buildings through adaptive reuse. Athol faces many of the issues that post-industrial communities throughout America contend with today: lower incomes and higher poverty rates than the state as a whole, automobile reliance, opiate addiction, and a limited selection of housing typologies. Despite these challenges, the town is predicted to have an 8% increase in population over the next 15 years, due to the draw of its beautiful hiking trails and lower cost of living relative to eastern Massachusetts. This increase in demand is creating a need for more family housing and a wider range of typologies.

Our sponsor, NewVue Communities, answered Athol's RFP<sup>2</sup> for the schools to create affordable housing that will contribute to Athol's economic revitalization and incorporate community spaces where people of all ages can socialize, imagine, and create.

## RIVERBEND ROW AT GLANCE

### UNIT TYPES

15 1BR  
35 2BR  
20 3BR

### AFFORDABILITY

8 units of Section 8 Housing  
3 units at 30% AMI  
50 units at 50% AMI  
9 units at 80% AMI

### AMENITIES AND FEATURES

Orange Innovation Center MakerSpace  
Bigelow Bend Test Kitchen  
Enterprise Green Communities Certified  
Supportive services provided by Montachusset Opportunity Council

### FINANCING

\$15.7M in LIHTC  
\$2.7M in Historic Credits  
\$231/GSF in Development Costs



## PROJECT GOALS

1

Tailor affordable family housing to the needs of a growing community.

2

Offer public programs that reactivate the schoolyard as high-quality open space.

3

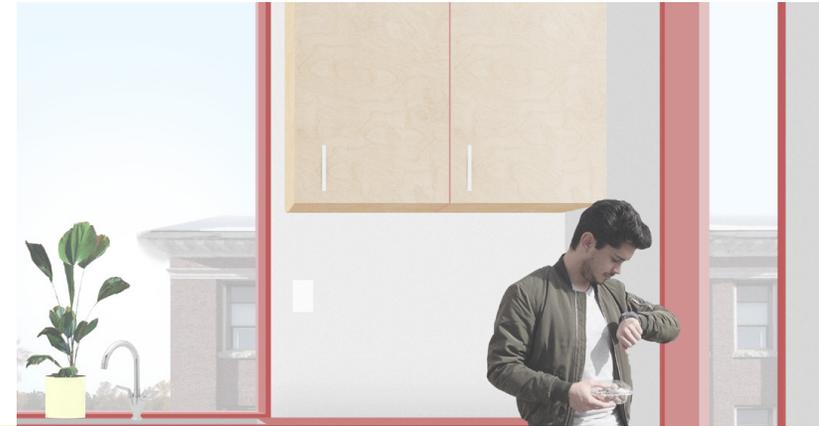
Integrate new housing types with Athol's existing neighborhood character.





## PHYSICAL DESIGN

- Pitched roofs and the massing of the semi-detached structures allow the new multifamily buildings to be integrated with the surrounding single-family neighborhood.
- The property is accessible for all, regardless of mobility needs, due to a central corridor that connects the outlying buildings to an elevator.



# Project Metrics

Given Athol's demographics and historic housing structure, our vision for Riverbend Row is to serve Athol's families and growing community by introducing new affordable housing typologies and multi-generational community spaces.



## COMMUNITY RESPONSIVENESS

- 12 interviews with community leaders and 2 focus groups (reaching 38 people total) directly shaped our proposal.
- Needs communicated throughout this community engagement period included the need for affordable family housing, economic revitalization, and safe recreational spaces for young adults.



## PROJECT FINANCING

- 87% of units are affordable to residents earning 30% to 50% AMI, while Athol market rate rents are at 60% AMI.
- Funding sources include Low Income House Tax Credits, Historic Preservation Tax credits, Section 8 vouchers, and Community-Based Housing rental subsidies.





## ENVIRONMENTAL SENSITIVITY

- Meets Enterprise Green Communities criteria for certification.
- Incorporates renewable energy, water conservation, and waste management practices to reduce carbon and energy footprints.



## INNOVATION

- Offers new housing typology to town.
- Creates Athol's first makerspace to promote workforce development and innovation.
- Develops spaces for seniors and children in the same residence, acknowledging that grandparents raising grandchildren is a prevalent condition in Athol.
- Blends multifamily residences into existing community through unique massing.



## PROJECT FEASIBILITY

- Agency leaders at YMCA and Orange Innovation Center expressed they would supply the staffing and program expertise to activate community spaces, saving funds on programming.
- We account for not reaching full leasing until six months after opening.





# Learning from Athol

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RESEARCH AND COMMUNITY OUTREACH

# The Maker's Spirit

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## A HISTORY OF MANUFACTURING AND INNOVATION

The town of Athol is an historically industrial working class community in North Central Massachusetts. During its early years, Athol established itself as a mill town, and nearly a dozen grist and saw mills operated within its borders. In the 19th century it became a manufacturing stronghold thanks to companies like L.S. Starrett, which remains a top area employer today. By the early 1900s when the major factory Union Twist Drill was founded, manufacturing was the mainstay of Athol's economy. The nickname "Tool Town," a reminder of the significance of manufacturing, can still be found on stores and restaurants throughout Athol.



## ECONOMIC CHALLENGES

*"It is a two-factory town trying to survive with one factory."*

-Focus Group Participant

Athol's economy began to decline in the 1930s when private automobile ownership led to the shuttering of its trolley lines. The town's economic problems continued to intensify in the 1950s with the redirection of traffic outside of Athol through the construction of Route 2, which moved retail and employment away from the downtown core. Three decades later, major employer Union Twist Drill closed, further destabilizing the town's economy<sup>3</sup>.

All of these factors had social as well as economic costs for Athol. Hit hard by the foreclosure crisis, the town was rated the number one most housing distressed rural or suburban community in the state in 2014<sup>4</sup>. Persistent unemployment and decades of disinvestment have produced many of the social and economic challenges highlighted by community members throughout our engagement process.



**1 in 7**  
Athol residents lives below the poverty line

## AN EVOLVING TOWN

*"In the last three years, there was a concerted effort by people to rally the voters and taxpayers. We knew we were not going to get any help from D.C. and we've continued to be a forgotten child of Boston. So, the taxpayers themselves put up the money for a new elementary school complex and other facilities."*

-Mark Wright, North Quabbin Chamber of Commerce

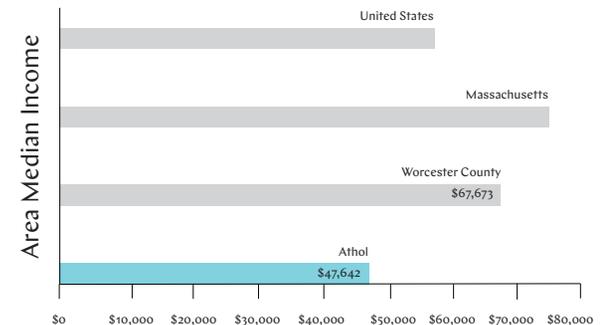
Since 2014, over \$100 million of public and private funds have been invested in Athol. In addition to the creation of a \$40 million elementary school which consolidates the Ellen M. Bigelow and Riverbend Schools, these funds have allowed for the expansion of the Athol Hospital and the development of a shopping plaza called North Quabbin Commons, creating new jobs in medical services and retail<sup>5</sup>.

According to Jim Meehan, Chairman of Athol's Economic Development Industrial Corporation, the development at North Quabbin Commons has led to an increase



**1 in 2**  
Athol renters are cost burdened

in housing demand. Over the past year, the number of vacant or abandoned homes in Athol went from 167 to 40 as people flipped and resold these homes. At the same time, the increasing cost of housing in Eastern Massachusetts has pushed workers to head west to seek more affordable housing costs. Subsequently, three out of four residents living in Athol are employed outside of the town. This growth in population is predicted to continue with approximately 1,000 people moving to the town over the next fifteen years, a population increase of 8%<sup>6</sup>. As Athol continues to grow and new employment opportunities arise, how can affordable housing be used as a tool to support current Athol residents and welcome new families?





## IDENTIFYING OUR RESIDENTS

The town of Athol is home to approximately 11,500 people who work primarily in the manufacturing, healthcare, and retail sectors. Athol's median household income is 30% lower than that of Worcester County, 40% lower than that of the state of Massachusetts, and 20% lower than that of the United States as a whole. Athol also faces high levels of poverty, with 14% of residents living below the poverty level as opposed to 10% for the state<sup>7</sup>.

Disparities between renters and homeowners in Athol are stark. While the town's median household income is \$47,642<sup>7</sup>, homeowners take home nearly three times the income of renters (\$60,642 compared to \$24,969 in annual income). Renters living in Athol also face high rates of housing cost burden with half paying more than 30% of their income for their rental unit. Given that over 30% of Athol residents are renters, more affordable housing options are needed to accommodate existing and future renters.

Additionally, half of housing structures in Athol were constructed in 1939 or earlier<sup>6</sup>. With these facts in mind, new, affordable rental housing is desperately needed in the community if Athol is to continue to prosper and grow.

A housing development can contribute much more than just shelter, so we looked into challenges in Athol beyond problems with housing stock and affordability. Athol's suicide rate is twice the state rate<sup>8</sup>. In addition, 27% of Athol's school-age children have disabilities and 62% have high needs, meaning that learning difficulties, physical

disabilities, and autism spectrum disorders are common in the community<sup>9</sup>. The Athol-Royalston school district has the 7th highest number of students with special needs and 52nd highest number of students with high needs in the state of Massachusetts, out of 404 school districts. With this in mind, offering programming which provides engaging and safe activities for youth is a priority for our site.



1 in 2

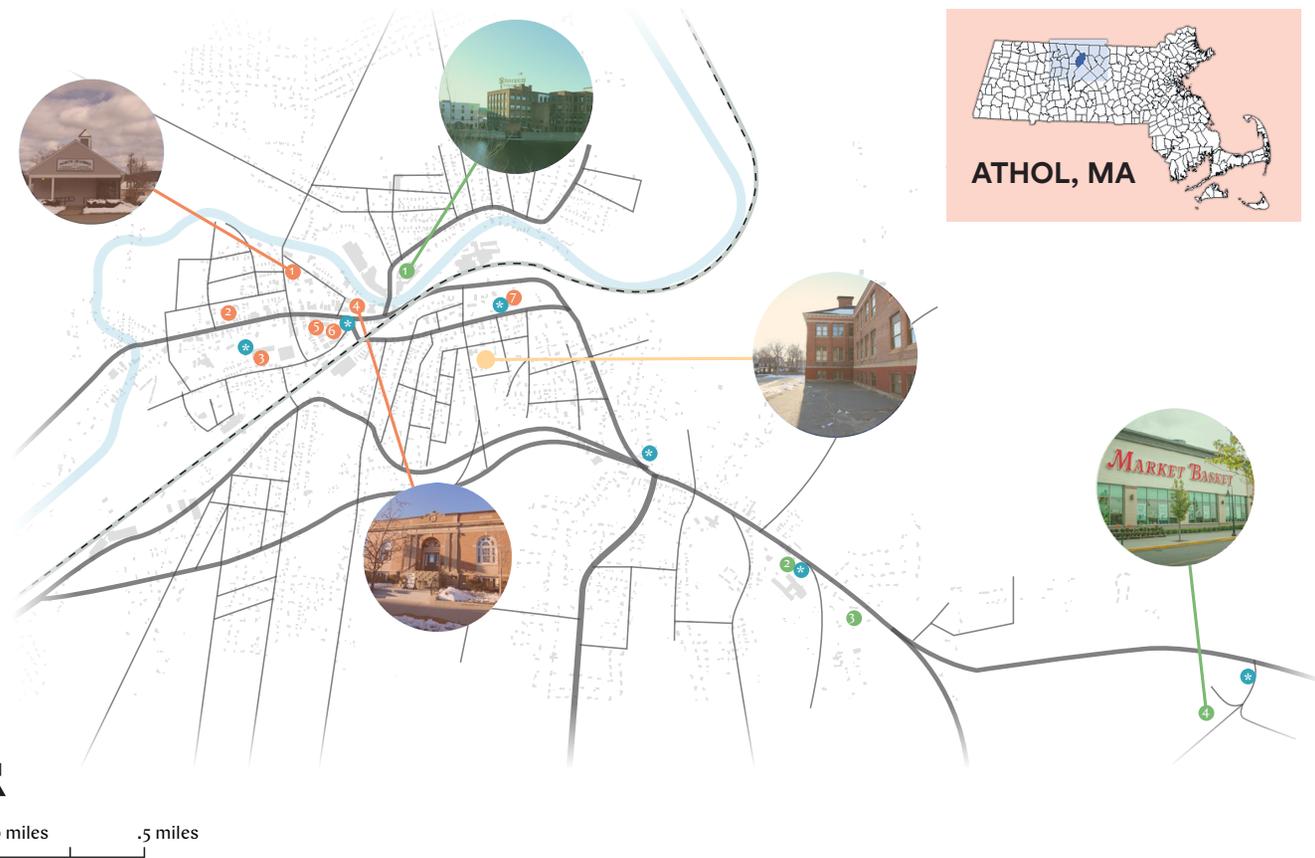
Athol housing structures built in 1939 or earlier

#7

Athol-Royalston school district's state rank for % of school students with disabilities and special needs\*

\*out of 404 total school districts

# Site Context



## AMENITIES

- 1 North Quabbin Community Coalition
- 2 Post Office
- 3 Senior Center
- 4 Public Library
- 5 Credit Union
- 6 YMCA
- 7 School Street Senior Residences
- 8 Athol Historical Society

## MAJOR EMPLOYERS

- 1 L. S. Starrett
- 2 Athol Hospital
- 3 Athol High School
- 4 North Quabbin Commons

## TRANSPORTATION

- Primary Road
- Secondary Road
- Montachusett Regional Transit Authority Route
- ⊛ Bus Route Stop
- Railroad
- Site

## SITE ASSETS

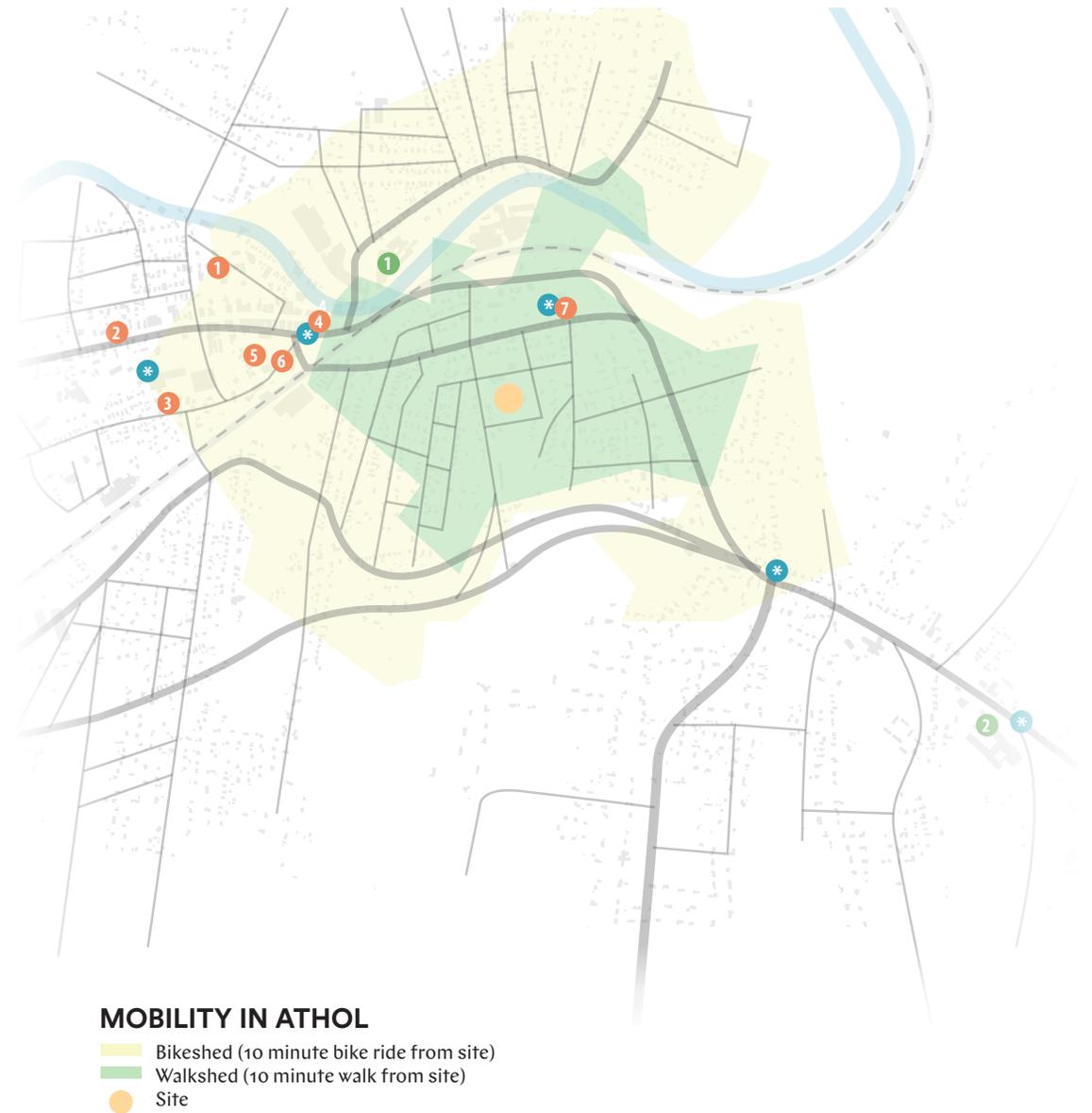
The site currently features two school buildings that closed four years ago, a playground, and a parking lot. As both schoolhouses are in good structural condition and have functioning plumbing and electrical lines, they are well suited for apartment conversion.

Community members have a strong affinity for this site, viewing the schools as an asset. Athol residents from across age ranges remember attending these schools, playing on the playground, and building lifelong relationships, leading many to want these spaces used again. Furthermore, the schools have historically brought both vehicle and pedestrian activity to the area, making neighbors accustomed to children and car traffic.

## SITE CHALLENGES

The terrain is sloped, reaching a high point in the southeast corner, which poses design constraints.

Blending new development into the existing community is also a challenge, as the immediate area does not feature any multifamily housing. Added density must be accommodated through sensitive design so as to integrate with the surrounding single family residences.



## NEIGHBORHOOD ASSETS

The site is at the center of a residential block within a half-mile of the YMCA and the recently remodeled Athol Public Library. The YMCA offers discounted afterschool programs, and the library is a location where residents can access free internet services.

The site is also within a half-mile of two bus stops. These two bus routes run roughly every 1.5 hours during the week, providing Athol's residents with public transportation options<sup>10</sup>.

## NEIGHBORHOOD CHALLENGES

While regional transportation exists, the site isn't located within walking distance of convenient, affordable, and high-frequency public transportation routes as these modes have been defunded in recent years. Typical of rural communities in this region, the neighborhood struggles from isolation due to automobile dominance.

Although Athol itself has bountiful greenspace, there are no parks or green spaces currently walking distance from the site.





## Local Knowledge

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When we began considering our proposal for the site, we placed high priority on engaging with the people who live, work, and play in Athol. The social sustainability of a project such as this depends on a design program driven by the experiences, needs, and desires of the existing community. To ensure that our project was addressing the actual needs of Athol's residents, we gathered stories and feedback from 38 people including neighbors adjacent to the site, long-time residents, public officials, and youth. Their feedback allowed us to propose housing and programming that would receive community support.

## INTERVIEWS

We interviewed twelve community leaders who provided us with varying perspectives on life in Athol. They included:

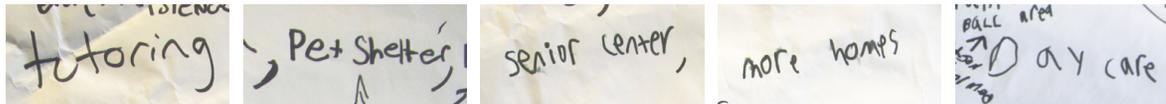
- Bette Jenks, Director of Grandparents Raising Grandchildren Support Group
- Christi Martin, Director of Athol-Orange Housing Authority
- James Meehan, Chairman of Athol Industrial Development Industrial Corporation
- Pat Moore, Housing Referral Agent for Grandparents Raising Grandchildren Support Group
- Sean O'Donnell, Orange Innovation Center
- Steve Raymond, Director of Salvation Army
- Jeannette Robichaud, Director of Athol YMCA
- Cathy Savoy, Director of Council on Aging
- Eric Smith, Athol Town Planner
- Laurie Smith, Neighbor and Preschool Owner
- Shaun Suhoski, Athol Town Manager
- Mark Wright, Executive Director of North Quabbin Chamber of Commerce



## FOCUS GROUPS

Our first focus group included fourteen people and took place at Athol's Senior Center. This focus group included senior residents as well as Athol's fire chief, its building commissioner, and the YMCA's Director of Youth Programs. We conducted three activities, starting with a group brainstorm in which members wrote on large Post-It notes about Athol's past, present, and future, as well as the future potential of the Bigelow/Riverbend site. We also worked with residents to draw asset maps of Athol, and concluded with a survey that included questions about design preferences.

Our second focus group involved twelve middle-school students at the YMCA. We asked them two questions: "What do you do for fun?" and "What places would you like to see in Athol?" to learn what recreational spaces preteens and teens desire. The students engaged in conversations as well as writing and drawing on two large Post-it notes.



## FOCUS GROUP RESULTS

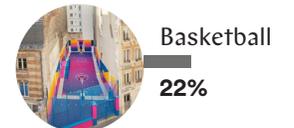
### Typology



### Materiality



### Public Spaces



# Community Highlights

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## NEED FOR AFFORDABLE HOUSING FOR VARYING AGES

*“There is a need in the area for low to moderate income housing.”*

*-Steve Raymond, Former Director of Athol's Salvation Army*

There are many people in need of affordable housing in Athol, and many are not easily categorized. Seniors at our focus group expressed a desire to make Athol a place where young people would be able to live. Furthermore, the Housing Authority waiting list is highest for two and three bedroom units. Our proposal took these comments and housing needs into account to ensure that families can live at Riverbend Row.

## UNIQUE FAMILY STRUCTURES

*“You may have housing that's age 55 and over, but you can't have kids there. Where do the kids go?”*

*-Laurie Smith, Director of Preschool and Neighbor of Site*

Athol has a substantial population of grandparents raising their grandchildren. Multiple community residents cited

this unique family structure, which is often a result of substance abuse and economic distress. These residents also expressed concern that grandparents can't access safe, affordable senior housing as children aren't allowed to be permanent residents in those housing structures. This is an indication that affordable and safe family housing is a need in Athol even if families don't fit a conventional family structure.

## TRANSPORTATION CHALLENGES

*“As time progresses, the lack of robust public transportation could become an issue.”*

*-Mark Wright, North Quabbin Chamber of Commerce*

Athol's public transportation system is not as extensive as that of more urban communities. Throughout our community outreach, residents of Athol voiced concerns about the town's existing transportation infrastructure and a lack of trust in ride share services such as Uber. However, residents expressed hope that through future investment and economic development, existing transportation systems would become more substantial. While Riverbend Row is a six minute walk from a bus stop, the elevation of the site may make this journey challenging for elderly individuals and people with disabilities.





## PRIDE IN NATURAL RESOURCES

*“This region offers many outdoor places for hiking, fishing, and camping. There are so many beautiful places to visit in this region that people who aren’t from here have no idea exist.”*

*-Laurie Smith, Neighbor and Director of  
the Riverbend Preschool and Childcare*

Residents in Athol continually emphasized the natural beauty in the North Quabbin Region. The area has waterfalls, hiking trails, farmers markets, festivals, and concerts. In adjacent towns, residents have access to rail-to-trail networks, which link with other parts of the state. There are also multiple lakes that offer recreational opportunities, including playgrounds and beaches. City officials also expressed interest in attracting visitors to the area through eco-tourism. In this rural region, residents highlight the importance of their natural resources as an asset they would like to preserve and enhance. While these natural assets are essential to Athol, few open spaces are found in the downtown area.

## COMMUNITY COMMITMENT

*“The community has incredible fabric and connection with each other, in terms of working with young people, elders and families to keep them safe.”*

*-Bette Jenks, Coordinator for North Quabbin Patch Program of Valuing Our Children*

During our community outreach, we met many people who had lived in Athol their entire lives. Many residents were students at the schools during their childhoods and desired to see these spaces reinvigorated. We heard stories of Athol’s bustling downtown, which has recently experienced significant disinvestment. Despite this change in Athol’s downtown district, there was a sense of commitment and hope. Over generations, Athol’s residents have shaped the character of the town and they continue to work to see it thrive in the years ahead. These residents desired to see an affordable housing development that created a space for families, seniors, and individuals with disabilities, as well as young individuals seeking work in the town. For many years until their closing, the schools were a space of community. Riverbend Row will sustain this sense of community and bring generations together in a vibrant space.

# Designing Riverbend Row

PHYSICAL DESIGN,  
PROGRAMMING, & SUSTAINABILITY



# The Buildings

## HISTORIC PRESERVATION & NEW CONSTRUCTION

Our proposed site is occupied by two former elementary schools named Riverbend and Ellen Bigelow. Each is rich with their own character and history, even in their current state. Multiple generations of Athol residents have passed through their doors, making them an integral part of the community. In thinking about how to transform them, we hope to strike a respectful balance between preserving their original identities and introducing fresh life into their halls.

New construction will attempt to compliment these schools with a new living typology specifically geared towards families. Informed by their context and the input of future residents, they attempt to create a bridge between past and present.

Welcome to Riverbend Row.

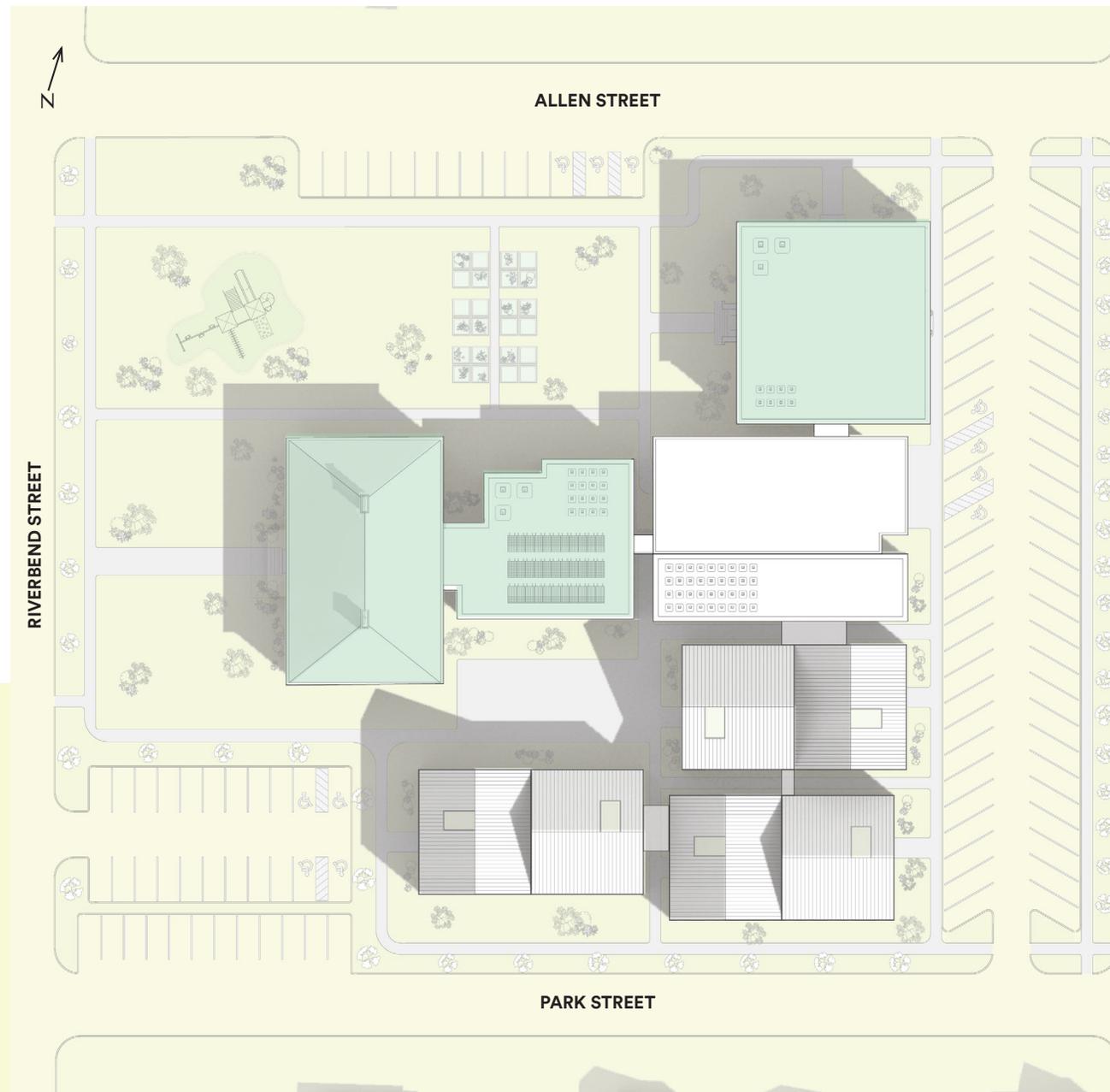
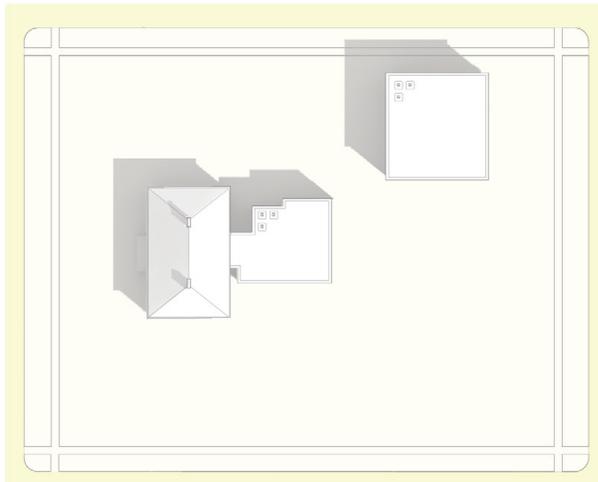


## PLANNING THE SITE

The existing schools sit far back within the former schoolyard. They are currently disconnected from one another and their context.

Our proposal features a total of 4 new buildings that connect Riverbend and Ellen Bigelow back to their neighborhood fabric. Three new housing modules to the southeast of the site make up the majority of the site's unit stock. Borrowing from Athol's architectural context, their masses are broken into smaller chunks.

The fourth new structure, at the center of the site, serves as a central connection space for all buildings. Creating a central connection point allows all of the floors to be accessible by a central public staircase and two elevators.





The 3 new residences are designed to complement their neighbors across the street. Despite housing 70 units, Riverbend Row maintains a compact scale with room to grow and a vibrant material palette

The largest area for parking is situated at the back of the site, in order to preserve the primary facade of the schoolyard

Access to the lobby and elevators from ADA accessible parking

Riverbend Row Additions  
 -Form and color match Athol neighbors  
 -Scale remains modest  
 -Placed at the "back" of the site to preserve historic school image

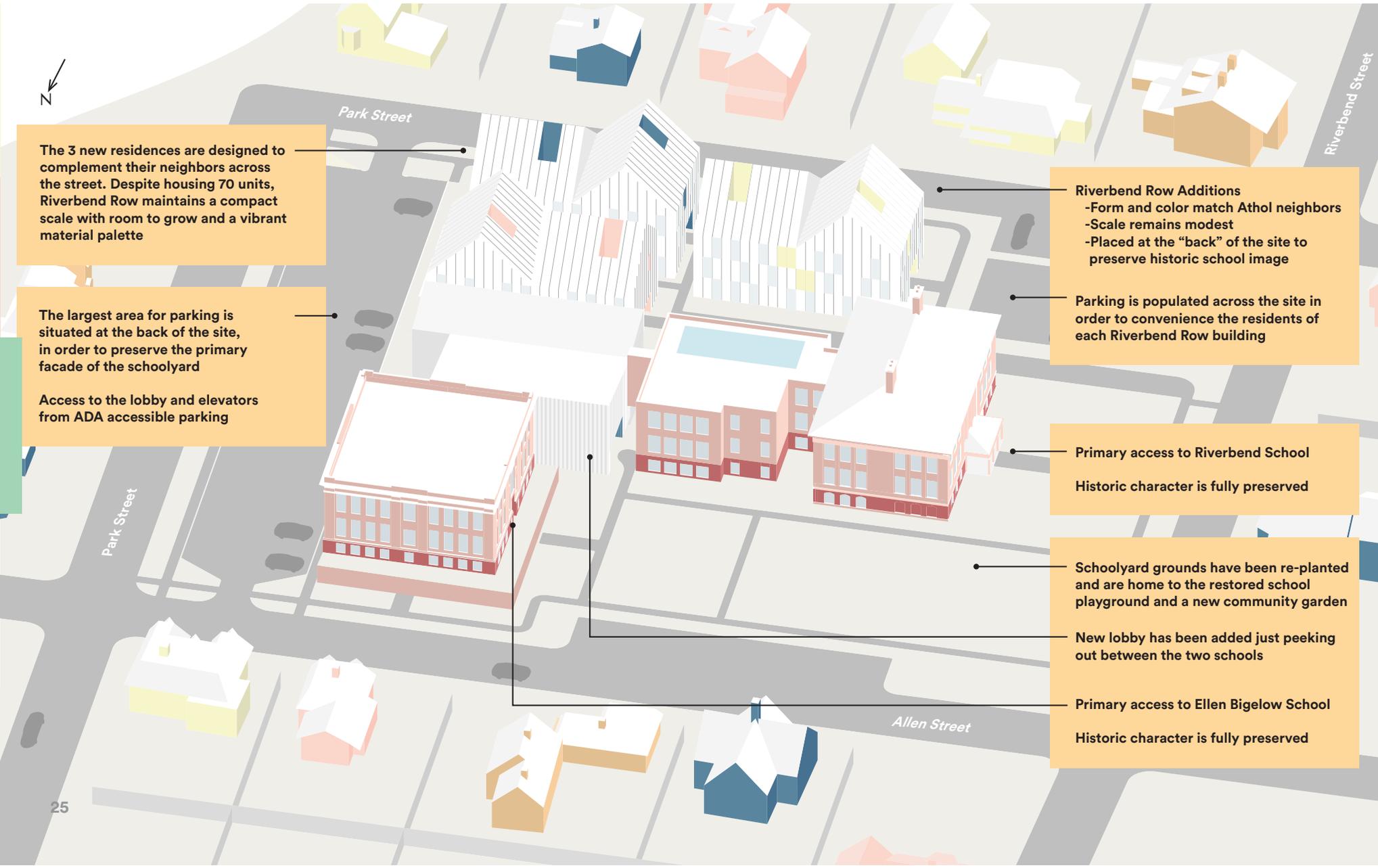
Parking is populated across the site in order to convenience the residents of each Riverbend Row building

Primary access to Riverbend School  
 Historic character is fully preserved

Schoolyard grounds have been re-planted and are home to the restored school playground and a new community garden

New lobby has been added just peeking out between the two schools

Primary access to Ellen Bigelow School  
 Historic character is fully preserved



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## GROUND FLOOR

Parking and outdoor programs are reconfigured on the site in order to privilege green spaces and common areas.

The majority of parking sits at the back of the site to the east, with two smaller lots at the north and southwest.

Open green space is concentrated to the northwest, including a refurbished Riverbend Playground and a new community garden. This concentrated green space takes advantage of its proximity to downtown Athol, which desperately needs more open spaces. New housing modules surround a communal courtyard near the center of the site, ideal for gatherings and play.

A central lobby peeks out onto the front of the site, making a minimal impact on the visual appearance of the site from the northwest. It also sits at a respectful distance from the school buildings in order to preserve maximum existing facade area.



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## SECOND & THIRD FLOORS

Corridors on the upper floors branch out from the central lobby building and into each of the schools and new housing modules, which each get their own names to keep pace with the legacy of Riverbend and Ellen Bigelow. Millers House, Tully House, and Ellis House are the new kids on the block. Misaligned floor plates are negotiated by two elevator cores and a common staircase above the lobby.

While each of the new buildings are equipped with two spiral staircases for quick access from the neighborhood and parking lots, the 2nd and 3rd floor corridors are amenable to visitors, those who want to avoid the stairs, and of course, Riverbend Row residents going to visit their new neighbors. All units connect back to central elevators.





# Historic Preservation

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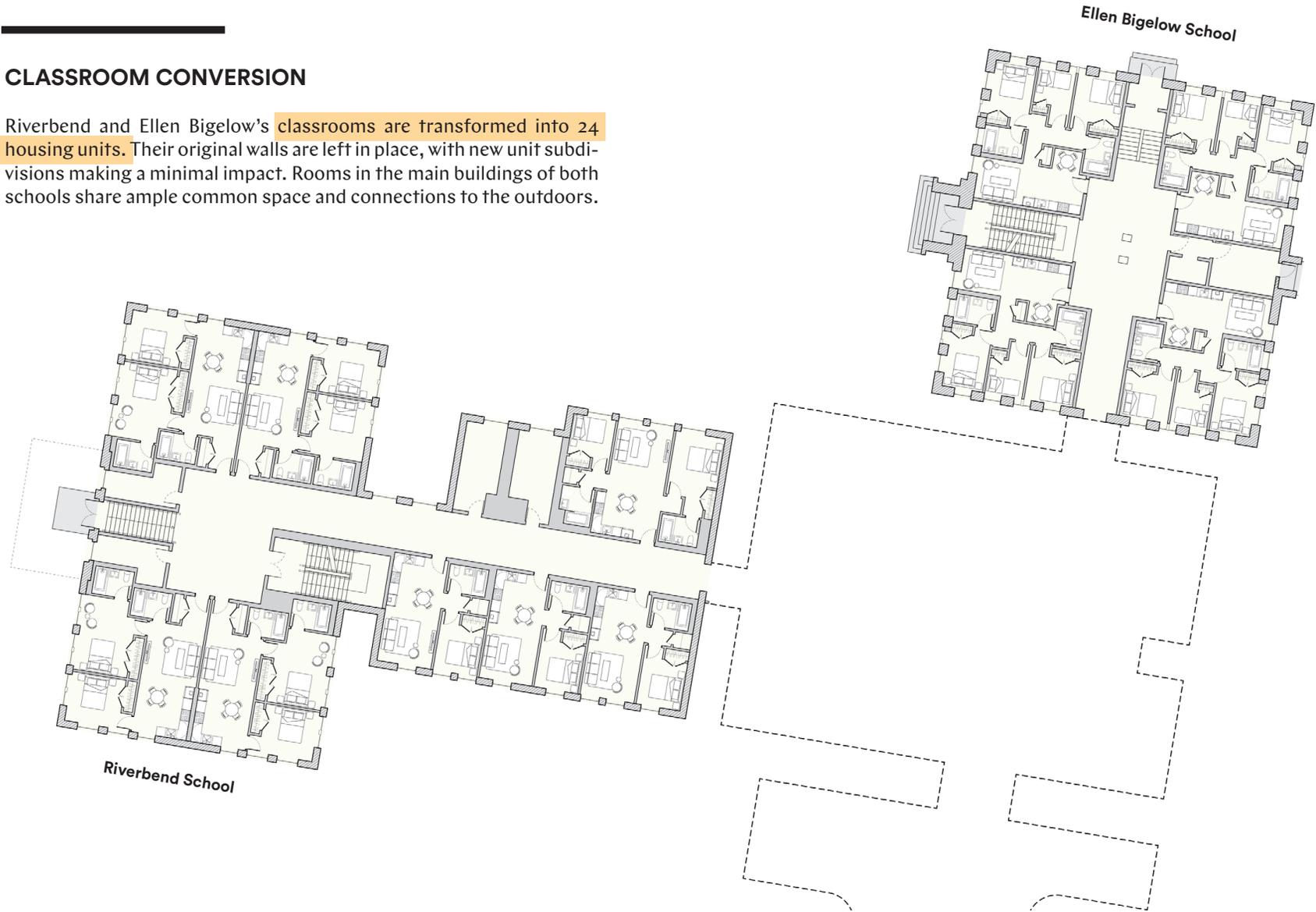
## OPPORTUNITIES & CONSTRAINTS

The Ellen Bigelow and Riverbend Schools have not yet been historically designated, but with more than a century of contributions to Athol, they are likely candidates for the Massachusetts and National Registers of Historic Places. To qualify for the Historic Tax Credit, our proposal will preserve all key elements of their original character even while converting their classrooms into residences. Existing structures will be refurbished and new housing structures will sit behind the schools so as to not block the historic brick exteriors. Inspired by the vibrant paint and well-preserved chalkboards we found inside the existing classrooms, we added pops of color and other school-inspired finishes into the new interiors. Closed only four years ago, the schools' structures and essential utilities are still fully functioning. With relatively minor modifications including, repainting, restoring woodwork, and removing asbestos, the historic value of these buildings can be preserved while shifting to the contemporary needs of Athol's residents.

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## CLASSROOM CONVERSION

Riverbend and Ellen Bigelow's classrooms are transformed into 24 housing units. Their original walls are left in place, with new unit subdivisions making a minimal impact. Rooms in the main buildings of both schools share ample common space and connections to the outdoors.



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## A NEW LIVING TYPOLOGY

The trio of new buildings works in conversation with the site's immediate context, borrowing the smaller massing, pitched roofs, and vibrant colors of Athol's beautiful houses. Careful attention is paid to their placement on the site and relationship to existing views, both from the school buildings and the development's neighbors.



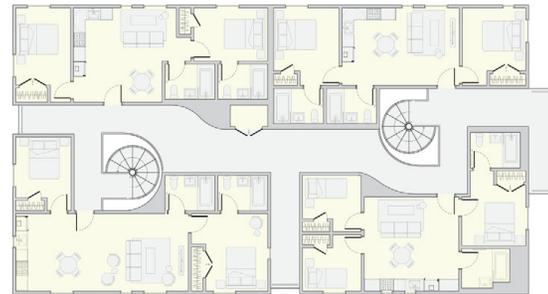
## A TYPOLOGY FOR FAMILIES

The modular massing of the new buildings allows each unit to enjoy between 2 and 4 full walls of windows. The typology is designed specifically with families in mind, creating quick circulation and visual connections to the outdoors wherever possible.

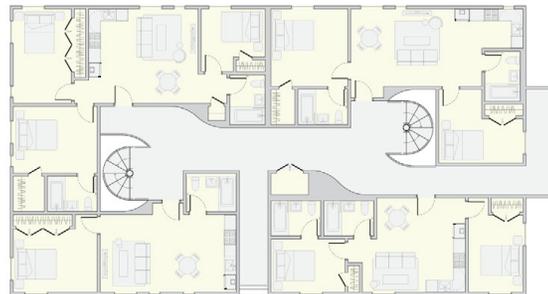
On the ground floor, two and three-bedroom units are arranged in a townhouse style, with direct access to outdoor common spaces and parking.

Up a semi-private staircase, second and third floor units are arranged around semi-outdoor common spaces and connected to the central entrance building by covered corridors.

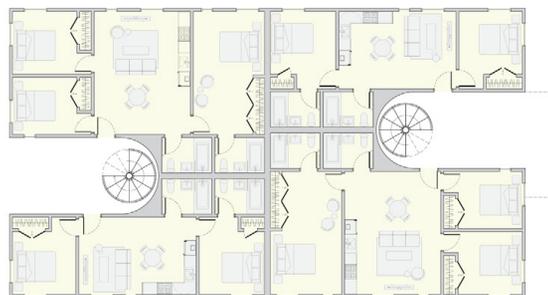
On the third floor, the pitched roof creates spacious cathedral ceilings in common spaces. Punched openings in the roof bring light down into the shared spaces, allowing extra light and fresh air even inside the building footprint.



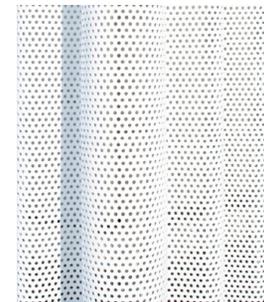
3rd Floor



2nd Floor



1st Floor



## MATERIALITY

The material palette of the new housing takes inspiration from the site's neighbors and the colors of the existing schools with a sustainable twist. Contemporary recycled aluminum cladding, perforated aluminum mesh, and pops of color create a vibrant environment.

# Shared Amenities

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## OUTDOOR SPACES

The local residents we spoke to expressed a need for **large open green spaces**. A grassy lawn on the northwest of the site, a playground, and a community garden provide space for kids (and adults) to run and play.

## RESIDENT AMENITIES

The lobby building provides a centralized place for **everyday resident needs**, including a mail room, security desk, storage space, and a leasing office.

## SUPPORTIVE SERVICES

We're partnering with Montachusett Opportunity Council, who will provide case management for residents in need. This collaboration will connect clients to **resources for education, employment, and childcare**.



# Living Spaces

## UNIT MIX & DISTRIBUTION

Totalling 70 units, Riverbend Row's living spaces are oriented towards families and single adults, with the largest share given to 2-bedroom units. These are distributed across 6 buildings and split between classroom conversions and new construction.

Floor Level	Historic Renovation		New Construction	Total
	Riverbend	Ellen Bigelow		
Basement	9,890	5,620	18,420	<b>33,930</b>
1st	9,890	5,620	18,600	<b>34,110</b>
2nd	9,890	5,620	13,700	<b>29,210</b>
3rd	0	0	13,700	<b>13,700</b>
<b>Total</b>	<b>29,670</b>	<b>16,860</b>	<b>64,420</b>	<b>110,950</b>

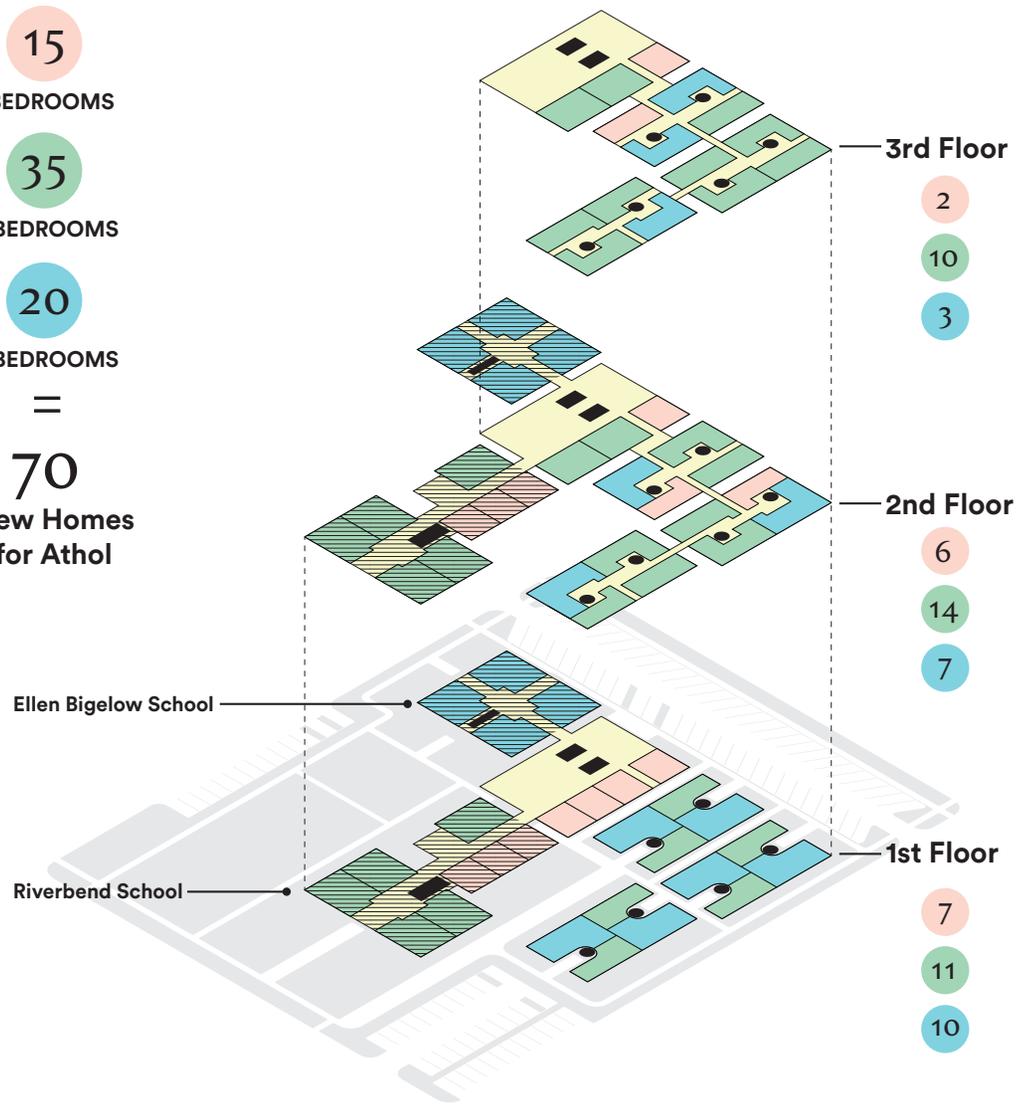
15  
1 BEDROOMS

35  
2 BEDROOMS

20  
3 BEDROOMS

=

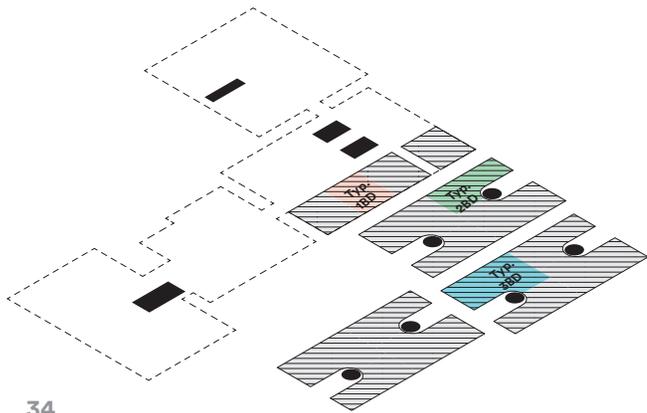
**70**  
New Homes  
for Athol

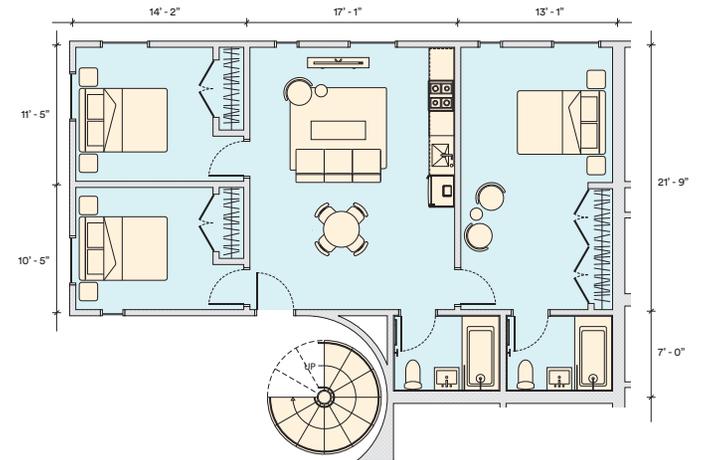
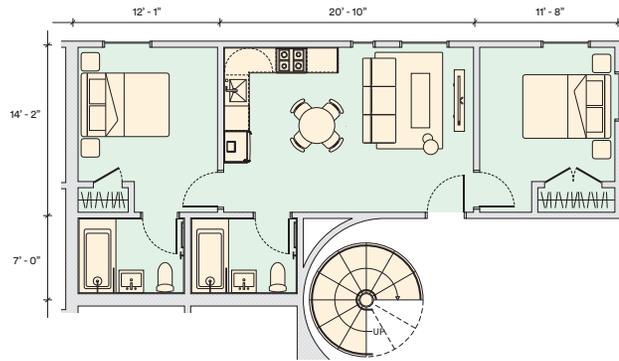
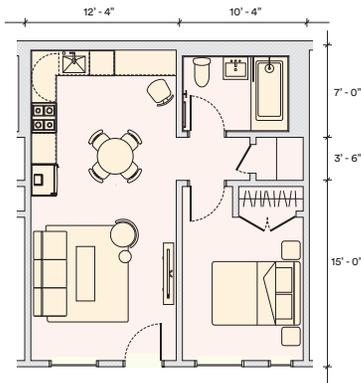


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## NEW CONSTRUCTION UNITS

Newly constructed units in Ellis, Tully, and Millers take advantage of ample exposure to light and air. Their finishes are kept minimal with pops of color that give each building a unique identity and connection to the schools.





By subdividing units along clean interior lines, maximum flexibility for new resident families is achieved. Furniture can be freely arranged to accommodate varying family dynamics. Large kitchens and living spaces mean maximum time spent with loved ones!

### TYPICAL 1 BEDROOM UNIT

Avg. Square Footage:	
600 SF	
# Units By Income Group	
30% AMI	50% AMI
-	10
Section 8	CBH
-	5

### TYPICAL 2 BEDROOM UNIT

Avg. Square Footage:	
775 SF	
# Units By Income Group	
30% AMI	50% AMI
1	20
Section 8	CBH
2	2

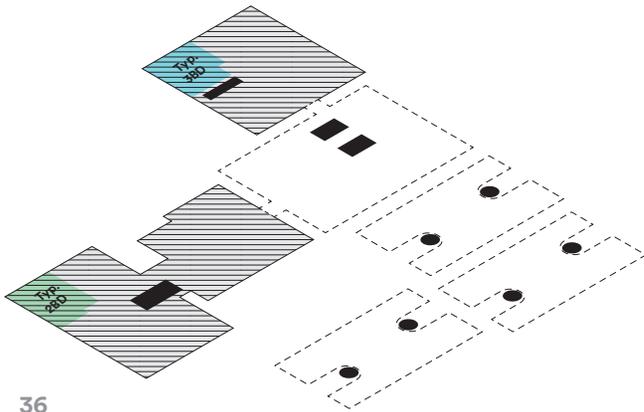
### TYPICAL 3 BEDROOM UNIT

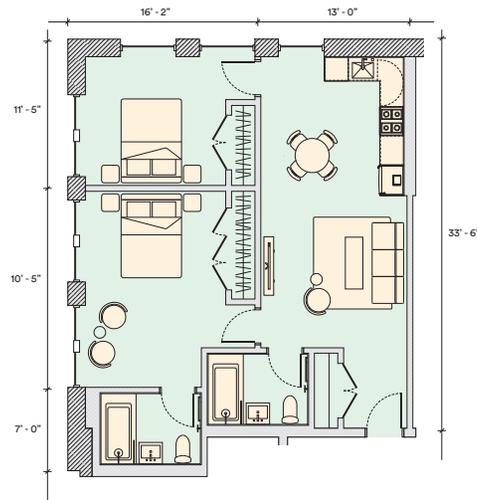
Avg. Square Footage:	
1,100 SF	
# Units By Income Group	
30% AMI	50% AMI
1	9
Section 8	CBH
2	-

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## CLASSROOM CONVERSION

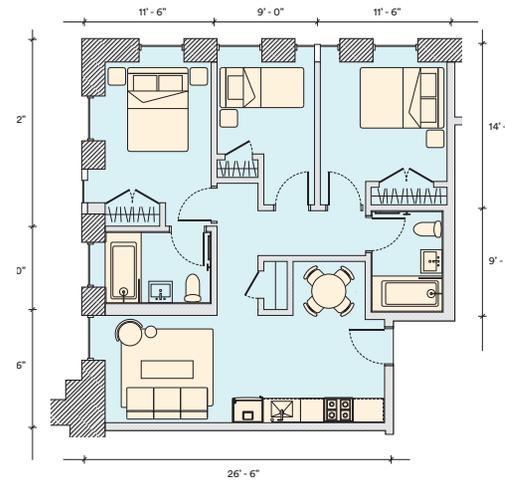
While offering maximum efficiency in unit design in the new Riverbend Row residences, the character of the existing school adds diversity to the overall development. Each spacious classroom is converted into a 2 or 3 bedroom unit. Tin ceilings, wood floors, historic windows, and original pops of color found in the classrooms are fully restored to their original vibrancy for a unique living environment.





**TYPICAL 2 BEDROOM UNIT  
CONVERTED CLASSROOM**

Avg. Square Footage:	
<b>1,000 SF</b>	
# Units By Income Group	
30% AMI	50% AMI
<b>1</b>	<b>5</b>
Section 8	CBH
<b>2</b>	<b>2</b>



**TYPICAL 3 BEDROOM UNIT  
CONVERTED CLASSROOM**

Avg. Square Footage:	
<b>1,100 SF</b>	
# Units By Income Group	
30% AMI	50% AMI
<b>-</b>	<b>6</b>
Section 8	CBH
<b>2</b>	<b>-</b>

The two original schools have elegant and spacious classroom layouts with almost every classroom occupying a corner! Converted units are not only spacious but filled with light and well ventilated given the generous 20th century windows. The building layouts feature no blind corners, ideal for populations who have experienced trauma.

# MakerSpace

## THE MAKERSPACE @ RIVERBEND ROW & BIGELOW TEST KITCHEN

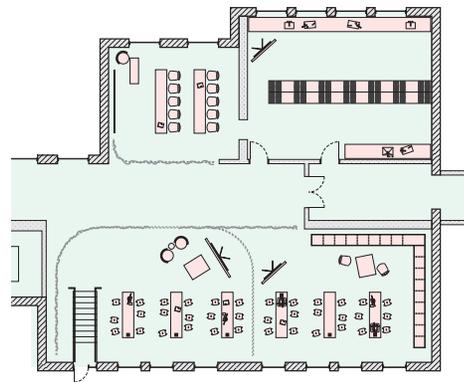
Conversations with staff at Athol's YMCA revealed that they lack the capacity to offer diverse arts programming. At our senior focus group, Pete Stahlbrand, the Camp and Youth Services Director at the YMCA, mentioned teenagers having to choose between taking art classes or enrolling in Advanced Placement courses. The programming of Riverbend Row seeks to create a space where teenagers can focus on art, cooking, and job development while still pursuing other interests in school.

To ensure the success of programming a makerspace, we reached out to various local organizations. One potential partner, Orange Innovation Center (OIC), provides the coordination needed to run a successful makerspace and test kitchen. Based in the adjacent town of Orange, OIC offers innovative art spaces and has partnered with NewVue Communities on previous projects. OIC provides equipment, education, and support to residents, who may not have the space and resources to create on their own.



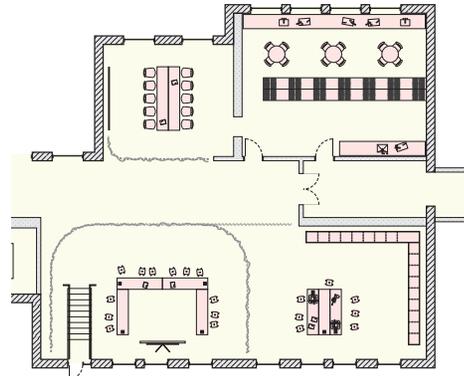
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## ONE SPACE, MANY USES



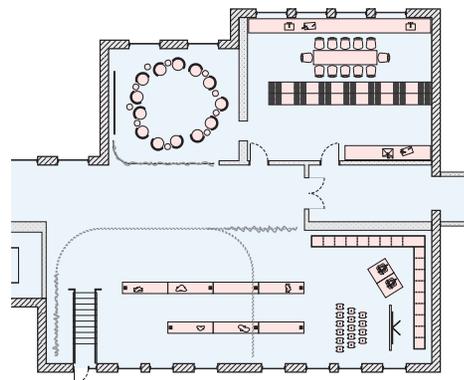
### SATURDAY, 11 AM

- Riverbend Row is buzzing with activity! The Orange Innovation Center has sponsored a hack-a-thon for Athol teenagers.
- Across the hall at the Bigelow Test Kitchen, a local chef is leading a workshop on French cuisine for local seniors.
- Athol Driving School flooded last week during a big storm so they've relocated all weekend courses to the Riverbend Row flexspace.



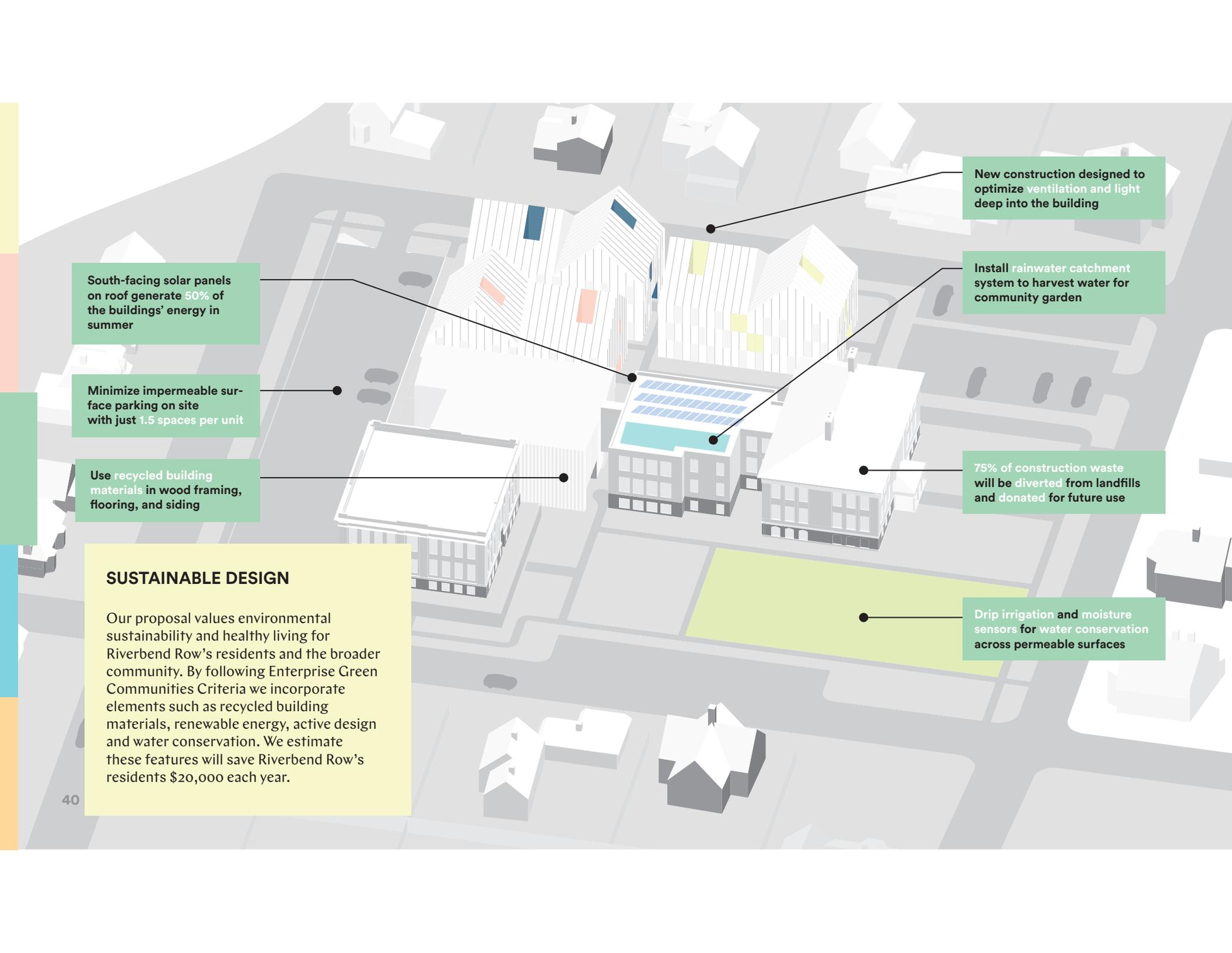
### TUESDAY, 4 PM

- After-school at Riverbend Row is when the hard work gets done. A calculus tutoring session closes the curtain for better focus while a small group of high school students works on a group project.
- The Grandparents Raising Grandchildren group is hosting its monthly dinner potluck in the Bigelow Kitchen.
- Athol High School student government is hosting their semester kick-off meeting in the conference room next door.



### THURSDAY, 7 PM

- All that work paid off! Residents of Riverbend Row and their friends gather in the MakerSpace for an exhibition of their 3D-printed design work.
- One family has relatives visiting from out of town so they've reserved the large kitchen out for the night to host a family dinner.
- The YMCA ran out of space for the night so the Athol school board hosts its bi-monthly meeting in the conference room.



South-facing solar panels on roof generate 50% of the buildings' energy in summer

Minimize impermeable surface parking on site with just 1.5 spaces per unit

Use recycled building materials in wood framing, flooring, and siding

New construction designed to optimize ventilation and light deep into the building

Install rainwater catchment system to harvest water for community garden

75% of construction waste will be diverted from landfills and donated for future use

Drip irrigation and moisture sensors for water conservation across permeable surfaces

## SUSTAINABLE DESIGN

Our proposal values environmental sustainability and healthy living for Riverbend Row's residents and the broader community. By following Enterprise Green Communities Criteria we incorporate elements such as recycled building materials, renewable energy, active design and water conservation. We estimate these features will save Riverbend Row's residents \$20,000 each year.

### 1. Integrative Design

M	1.1a	Goal Setting
M	1.1b	Criteria Documentation
9 of 9	1.1c	Designing for Project Performance
M	1.2a	Resident Health and Well-Being: Design for Health
M	1.2b	Resident Health and Well-Being: Health Action Plan
12 of 12	1.3a	Resilient Communities: Design for Resilience
15	1.3b	Resilient Communities: Multi-Hazard Risk

### 2. Location + Neighborhood Fabric

M	2.1	Sensitive Site Protection
M	2.2	Connections to Existing Development and Infrastructure
M	2.3	Compact Development
7 of 7	2.4	Compact Development
M	2.5	Proximity to Services
M	2.6	Preservation of and Access to Open Space for Rural/Tribal/Small Towns
6 of 6	2.7	Preservation of and Access to Open Space
8 of 10	2.8	Access to Public Transportation
3 of 10	2.9	Improving Connectivity to the Community
5 of 5	2.10	Passive Solar Heating/Cooling
4 of 4	2.11	Brownfield Site or Adaptive Reuse Building
6 of 6	2.12	Access to Fresh, Local Foods
4 of 4	2.13	LEED for Neighborhood Development Certification
6 of 6	2.14	Local Economic Development and Community Wealth Creation

### 3. Site Improvements

M	3.1	Environmental Remediation
M	3.2	Erosion and Sediment Control
M	3.3	Low-Impact Development
M	3.4	Landscaping
M	3.5a	Efficient Irrigation and Water Reuse
4 of 8	3.5b	Efficient Irrigation and Water Reuse
4 of 8	3.6	Surface Stormwater Management
1	3.7	Reducing Heat-Island Effect: Paving

### 4. Water Conservation

M	4.1	Water-Conserving Fixtures
6 of 6	4.2	Advanced Water Conservation
4 of 4	4.3	Leaks and Water Metering
4 of 4	4.4	Efficient Plumbing Layout and Design
4 of 6	4.5	Water Reuse

### 5. Energy Efficiency

M	5.1a	Building Performance Standard
M	5.1b	Building Performance Standard
M	5.1c	Building Performance Standard
12 of 12	5.2a	Additional Reductions in Energy Use
0 of 12	5.2b	Advanced Certification: Nearing Net Zero
M	5.3	Sizing of Heating and Cooling Equipment
M	5.4	Energy STAR Appliances
M	5.5	Lighting
M	5.6	Electricity Meter
4 of 4	5.7a	Photovoltaic/Solar Hot Water Ready
8 of 10	5.7b	Renewable Energy
0 of 8	5.8a	Resilient Energy Systems: Floodproofing
0 of 8	5.8b	Resilient Energy

### 6. Materials

M	6.1	Low/No VOC Paints, Coatings and Primers
M	6.2	Low/No VOC Adhesives and Sealants
3 of 3	6.3	Recycled Content Material
4 of 4	6.4	Regional Materials
1 of 1	6.5	Certified, Salvaged and Engineered Wood Products
M	6.6	Composite Wood Products that Emit Low/No Formaldehyde
M	6.7a	Environmentally Preferable Flooring
6 of 6	6.7b	Environmentally Preferable Flooring: Throughout Building
M	6.8	Mold Prevention: Surfaces
M	6.9	Mold Prevention: Tub and Shower Enclosures
12 of 12	6.10	Asthmagen-Free Materials
5 of 5	6.11	Reduced Heat-Island Effect: Roofing
6 of 6	6.12	Construction Waste Management
3 of 3	6.13	Recycling Storage

### 7. Healthy Living Environment

M	7.1	Ventilation
M	7.2	Clothes Dryer Exhaust
M	7.3	Combustion Equipment
11 of 11	7.4	Elimination of Combustion Within the Conditioned Space
M	7.5	Vapor Retarder Strategies
M	7.6	Water Drainage
M	7.7	Mold Prevention: Water Heaters
M	7.8	Radon Mitigation
M	7.9	Garage Isolation
M	7.10	Integrated Pest Management
9 of 9	7.11a	Beyond ADA: Universal Design (New Construction)
0 of 9	7.11b	Beyond ADA: Universal Design (Substantial Rehab)
M	7.12	Active Design: Promoting Physical Activity Within the Building
10 of 10	7.13	Active Design: Staircases and Building Circulation
9 of 9	7.14	Interior and Outdoor Activity Spaces for Children and Adults
M	7.15	Reduce Lead Hazards in Pre-1978 Buildings
10 of 10	7.16	Smoke-Free Building

### 8. Operations, Maintenance + Resident Engagement

M	8.1	Building Operations & Maintenance (O&M) Manual and Plan
M	8.2	Emergency Management Manual
M	8.3	Resident Manual
M	8.4	Resident and Property Staff Orientation
M	8.5	Project Data Collection and Monitoring System

Total Points: 225 out of 300

Riverbend Row earns  
225 of 300 points

## ENTERPRISE GREEN COMMUNITIES

Our criteria for sustainability and environmental responsiveness was thoughtfully considered based on Athol's existing infrastructure and neighborhood fabric. We began by analyzing criteria for LEED certification, but found that Athol did not meet required LEED benchmarks based on its rural location. For this reason, we used the Enterprise Green Communities Criteria, which includes measures amenable to a rural community such as Athol<sup>11</sup>.

In order to meet Enterprise Green Communities Criteria a site is required to achieve 35 optional points. Riverbend Row earns 225 points. Enterprise designates this point value as equivalent to the LEED Silver standard. Riverbend Row's critical features include:

- Incorporation of smart growth strategies through compact building design
- Installation of ENERGY STAR appliances and WaterSense features in all units
- Production of 20 to 30 percent of energy from renewable sources in fall and winter
- Use of native plants in open space to effectively capture stormwater runoff
- Active design through staircases conveniently located near units

The background is a solid teal color with scattered, irregular, colorful shapes in shades of pink, orange, yellow, and green. On the left side, there are vertical bars of yellow, orange, and green.

# The Numbers

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FINANCING RIVERBEND ROW

# Affordable & Sustainable

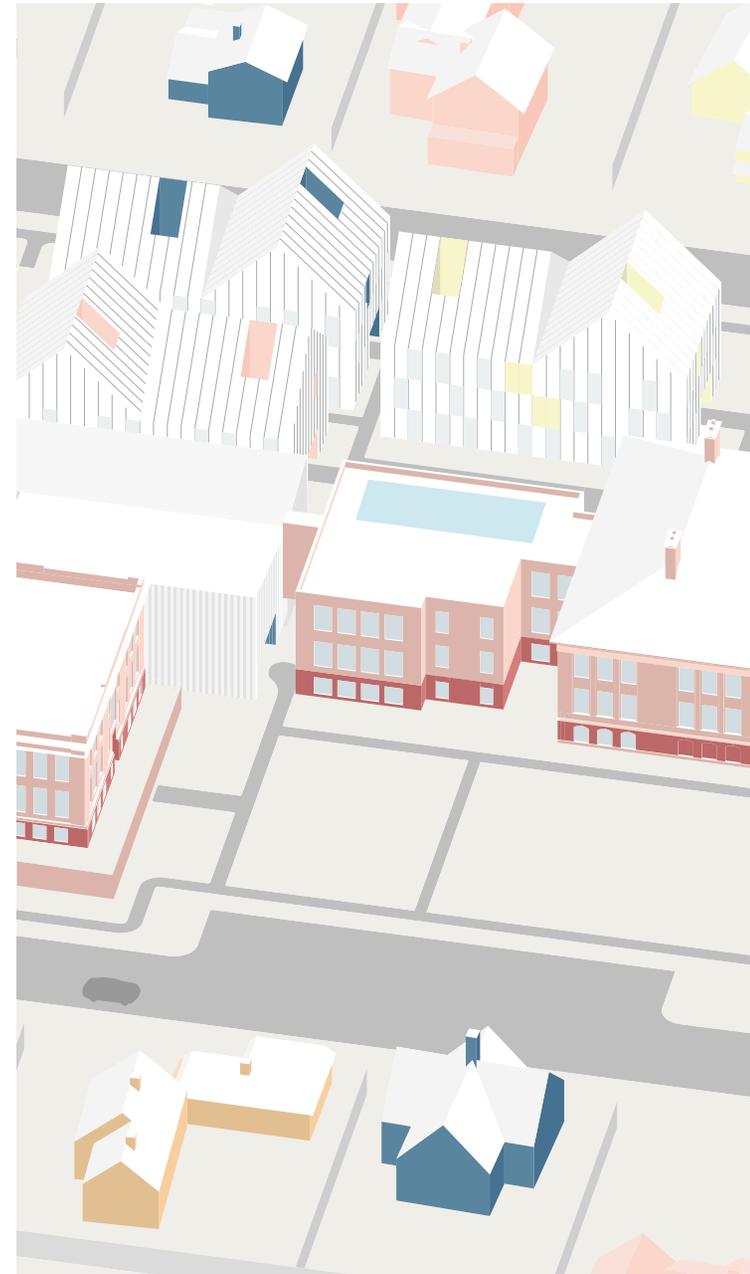
Creating affordable housing opportunities for low-income families was an important priority for Riverbend Row. Our financing strategy allows for 87% of units in our development to meet families at income levels of 50% AMI or below, with 15% of those units reserved for those with extremely low incomes (30% AMI). Riverbend Row will both create new, high quality affordable housing, and guarantee long-term affordability for Athol's growing community.

## AFFORDABILITY & UNIT MIX - EXHIBIT 1

UNIT MIX: AFFORDABILITY & UNIT MIX	1-BED	2-BED	3-BED	TOTAL
	# of Units Monthly Rent			# of Units Annual Rent
<b>Extremely Low Income</b>	-	2	1	3
(30% of Area Median Income)	-	\$545	\$682	\$21,258
<b>Very Low Income</b>	10	25	15	50
(50% of Area Median Income)	\$757	\$909	\$1,049	\$552,338
<b>Section 8*</b>	-	4	4	8
(110% of Fair Market Rent)	-	\$1,014	\$1,447	\$118,114
<b>Community Based Housing**</b>	5	4	-	9
(100% of Fair Market Rent)	\$730	\$922	-	\$88,056
<b>TOTAL UNITS</b>	15	35	20	70
<b>TOTAL ANNUAL RENT</b>				\$779,765

\*Section 8 units generate 110% fair market rent but only charge residents 30% of residents' income.

\*\*Community Based Housing units generate 100% fair market rent but only charge residents 80% of AMI, part of which is typically covered by other subsidies.



## TOTAL DEVELOPMENT COSTS - EXHIBIT 2

LINE ITEM	TOTAL COST	\$/GSF	\$/UNIT	% TDC
<b>Acquisition Costs:</b>				
Land + Building Acquisition	-	-	-	-
<b>Construction Costs:</b>				
New Construction	\$10,307,200	\$160.00	\$224,070	40.3%
Existing Rehab	\$8,189,280	\$176.00	\$341,220	32.0%
Solar Paneling	\$200,000	\$1.80	\$2,857	0.8%
Other Site Work	\$50,000	\$0.45	\$714	0.2%
Hard Cost Contingency	\$1,334,288	\$12.03	\$19,061	5.2%
<b>Soft Costs:</b>				
Architectural & Engineering	\$1,430,500	\$12.89	\$20,436	5.6%
Surveys & Permits	\$35,285	\$0.32	\$504	0.1%
Acquisition & Zoning Approvals	\$25,000	\$0.23	\$357	0.1%
Appraisals & Market Studies	\$15,000	\$0.14	\$214	0.1%
Organization	\$25,000	\$0.23	\$357	0.1%
Loan Closings	\$100,000	\$0.90	\$1,429	0.4%
Legal	\$110,000	\$0.99	\$1,571	0.4%
Title & Recording	\$20,000	\$0.18	\$286	0.1%
Accounting	\$20,000	\$0.18	\$286	0.1%
Marketing/Rent-up	\$175,000	\$1.58	\$2,500	0.7%
Real Estate Taxes	\$6,023	\$0.05	\$86	0.0%
Insurance	\$155,330	\$1.40	\$2,219	0.6%
Utility Connections	\$100,000	\$0.90	\$1,429	0.4%
Furniture, Fixtures, & Equipment	\$70,000	\$0.63	\$1,000	0.3%
Development Consultants	\$185,000	\$1.67	\$2,643	0.7%
Soft Cost Contingency	\$74,164	\$0.67	\$1,059	0.3%
<b>Financing Fees</b>				
Capitalized Loan Interest	\$760,117	\$6.85	\$10,859	3.0%
Loan Arrangement Fees	\$107,184	\$0.97	\$1,531	0.4%
LIHTC Facilitation Fees	\$66,750	\$0.60	\$954	0.3%
DHDC Application Fees	\$4,200	\$0.04	\$60	0.0%
<b>Other Costs</b>				
Developer Fee	\$1,700,000	\$15.32	\$24,286	6.6%
Capitalized Reserves	\$332,068	\$2.99	\$4,744	1.3%
<b>TOTAL DEVELOPMENT COSTS</b>	<b>\$25,597,389</b>	<b>\$230.71</b>	<b>\$365,677</b>	<b>100.0%</b>

## Total Development Costs

In terms of historic preservation, we referred to precedents from past preservation projects completed by NewVue, our sponsor. Overall, roughly 80% of total development costs were attributed to hard construction costs, with 40% attributed to new construction and 32% to the rehabilitation of existing structures. New construction (64,420 SF) is expected to cost \$160 / SF, and rehab (46,530 SF) expected to cost 9% more, or \$176 / SF.

Total Development Cost	Cost Per Unit	Cost Per Square Foot
<b>\$26 M</b>	<b>\$365,677</b>	<b>\$231</b>

# Sources & Uses

For sources of funds for construction, we are expecting to assume a roughly \$18M construction loan, \$2M MHIC bridge loan (at 0% interest), and almost \$2M from our deferred developer's fee. Permanent sources of funds include equity from federal and state LIHTC and federal and state historic tax credit (Exhibit 3). In addition, we expect to use a number of grants and other forms of soft debt.

## OTHER SUBSIDIES

### Soft Debt

**Mass HOME** is administered through the Continuum of Care Program by the State of Massachusetts. Riverbend Row will apply for \$100,000, in line with the average allotment NewVue has received in past years.

**DHCD Housing Stabilization Fund** offers funding for developments including units which serve households with incomes no greater than 80% AMI. Riverbend Row will apply for \$500,000 maximum, based on precedents of past awards received by NewVue for similar projects.

## SOURCES & USES - EXHIBIT 3

USES OF FUNDS	AMOUNT	% TOTAL
<b>Acquisition</b>		
Land + Building	-	-
<b>Construction Hard Costs</b>		
New Construction	\$10,307,200	40.3%
Existing Rehab	\$8,189,280	32.0%
Solar Paneling + Other Site Work	\$250,000	1.0%
Hard Cost Contingency	\$1,334,288	5.2%
<b>Soft Costs</b>		
Architectural & Engineering	\$1,430,500	5.6%
Predevelopment	\$100,285	0.4%
Legal, Accounting, & Admin	\$425,000	1.7%
Taxes + Insurance	\$161,353	0.6%
Other Soft Costs	\$355,000	1.4%
Soft Cost Contingency	\$74,164	0.3%
<b>Financing Fees</b>		
Capitalized Loan Interest	\$760,117	3.0%
Loan Arrangement Fees	\$107,184	0.4%
Other Financing Fees	\$70,950	0.3%
<b>Other Costs</b>		
Developer's Fee	\$1,700,000	6.6%
Capitalized Reserves	\$332,068	1.3%
<b>TOTAL USES</b>	<b>\$25,597,389</b>	<b>100.0%</b>

**DHCD Home Innovations Fund** offers funds for developments which create units for individuals or families experiencing homelessness. Riverbend Row will apply for \$750,000 maximum, based on precedents of past awards received by NewVue for similar projects.

**DHCD Affordable Housing Trust Fund (AHF)** offers funds available for the acquisition, development or preservation

SOURCES OF FUNDS	AMOUNT	% TOTAL
<b>Equity</b>		
Federal LIHTC	\$14,213,708	55.5%
State LIHTC	\$1,500,000	5.9%
Federal Historic Tax Credit	\$1,400,367	5.5%
State Historic Tax Credit	\$1,326,663	5.2%
Energy Efficiency Tax Credit	\$57,000	0.2%
<b>Conventional Financing</b>		
First Mortgage	\$3,335,193	13.0%
Construction Loan	\$18,101,656	70.7%
<b>Repay</b> Construction Loan	(\$18,101,656)	(70.7%)
MHIC Bridge Loan	\$2,145,734	8.4%
<b>Repay</b> MHIC Bridge Loan	(\$2,145,734)	(8.4%)
<b>Soft Debt</b>		
DHCD Affordable Housing Trust Fund	\$1,000,000	3.9%
DHCD Home Innovations Fund	\$750,000	2.9%
DHCD CBH (4 Units)	\$750,000	2.9%
DHCD Housing Stabilization Fund	\$500,000	2.0%
Federal Home Loan Bank of Boston Grant	\$500,000	2.0%
Mass HOME	\$100,000	0.4%
Neighborhoodworks Grant	\$50,000	0.2%
Deferred Developer's Fee	\$114,458	0.4%
<b>TOTAL SOURCES</b>	<b>\$25,597,389</b>	<b>100.0%</b>

of affordable housing units. Riverbend Row will apply for the maximum of 1,000,000, based on precedents of past awards received by NewVue for similar projects.

**Community Based Housing (CBH)** offers funding for development projects that offer integrated housing for individuals with disabilities who are at risk of being homeless or institutionalized. Riverbend Row hosts nine units to cater to this demographic.

*Grant Funding*

**Federal Home Loan Bank of Boston Grant** is available to rental housing projects participating in the Affordable Housing Development Competition in which at least 20 percent of the units are for households with incomes that do not exceed 50 percent of the median income for the area. Riverbend Row will apply for the full \$500,000 of eligible funding.

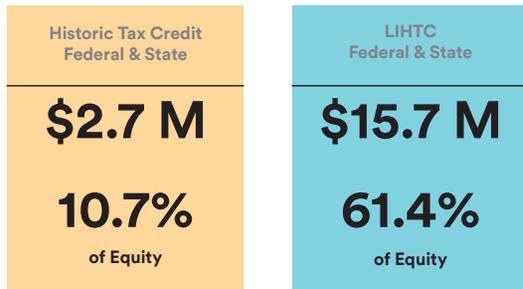
**NeighborWorks** is an organization and nonprofit industry leader which provides funding and technical assistance to nonprofit organizations, affordable housing developers and other affiliates. Given NewVue is a NeighborWorks affiliate, we also included a grant based on past awards received from the organization.

**LIHTC & HISTORIC TAX**

Riverbend Row will be funded by LIHTC and historic tax credits from both federal and state programs. Assuming the 9% tax credit, eligible basis for this tax credit will be reduced by federal historic tax credits as well as other soft debt. Since the site is not in a HUD Qualified Census Tract or Difficult Development Area, we conservatively assume no boost in our model. However, our site is directly adjacent to a QCT, and our project could potentially be counted within this boundary. Given our assumption of \$0.90 raise per \$1.00 credit, we expect \$14.7M equity raise from federal LIHTC. For historical tax credits, we assume an eligible basis of 20% of that for federal LIHTC, accounting for only construction costs of the rehab of the existing structures. We expect a one-year credit of 20% of this existing basis at both the federal and state levels. The result, given our assumption of \$0.95 raise per \$1.00 of federal credit and \$0.90 raise per \$1.00 of federal credit, is a total of \$2.7M (see Exhibit 4).

**FEDERAL LOW-INCOME HOUSING TAX CREDIT CALCULATION - EXHIBIT 4**

FEDERAL LOW-INCOME HOUSING TAX CREDIT CALCULATION	
<b>Total Eligible Basis</b>	<b>\$22,598,155</b>
Less: Federal HTC	(\$1,400,367)
Less: Applicable Grant Funding	(\$3,650,000)
<b>Adjusted Eligible Basis</b>	<b>\$17,547,788</b>
<i>Applicable Fraction</i>	<i>100%</i>
<b>Qualified Basis</b>	<b>\$17,547,788</b>
<i>Credit Percentage</i>	<i>9.00%</i>
<b>Annual Credit</b>	<b>\$1,579,301</b>
<b>Allocation LIHTC 10 Years</b>	<b>\$15,793,009</b>
<i>Projected Raise per \$1.00 of credit</i>	<i>\$0.90</i>
<b>TOTAL PROJECTED EQUITY RAISED</b>	<b>\$14,213,708</b>



# Pro forma

Riverbend Row's operating pro forma reflects yearly rent increases at 2% per year for all units. Operating expenses are assumed to increase at a slightly higher rate, 2.5% per year. In year 1, we assume the 50% AMI units ramp up linearly to steady state over the first 6 months. Accordingly, our first year rental income for those units is 75% of fully leased income, and maintenance expenses are scaled down to match. A 5% vacancy rate is assumed in each year.

## OPERATING EXPENSES

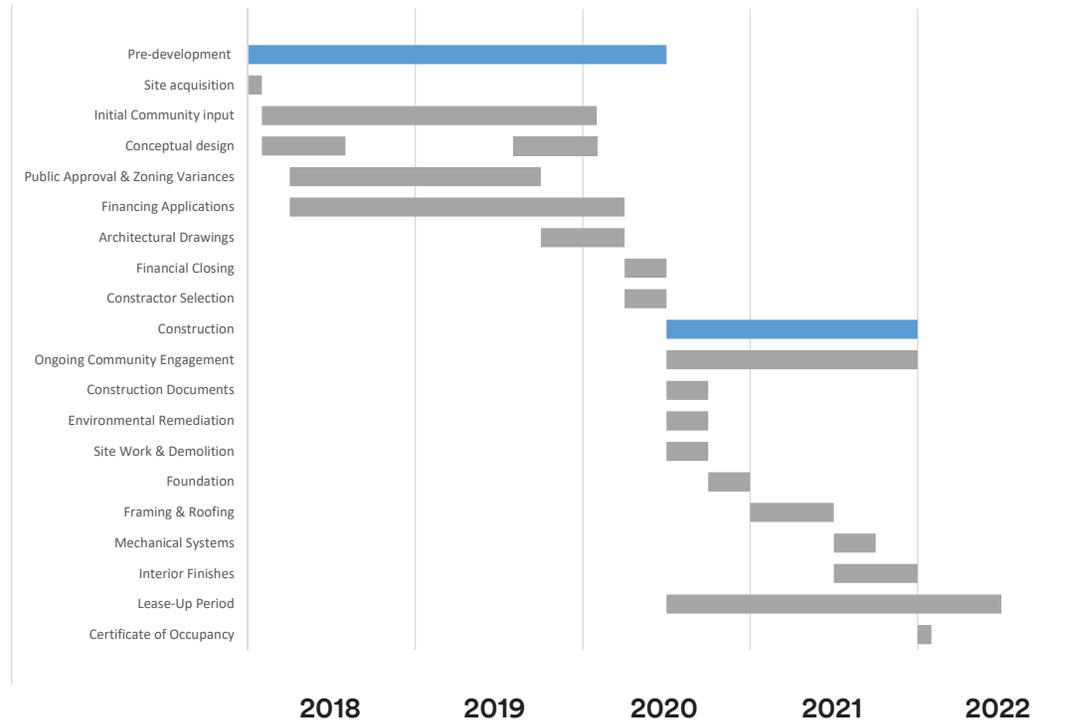
Operating expenses include management fees, general and administrative (including marketing), maintenance, resident services, security, utilities, water & sewer, replacement reserve, real estate taxes, and insurance. Management fees and general and administrative expenses are calculated as roughly 5% and 10%, respectively, of expected gross revenue. Real estate taxes are 0.2% of total development costs. Other costs are based on a fixed dollar amount per unit.

### OPERATING PRO FORMA - EXHIBIT 5

<b>RENTAL INCOME</b>																
Extremely Low Income Units (30%)	\$21.3	\$21.3	\$21.7	\$22.1	\$22.6	\$23.0	\$23.5	\$23.9	\$24.4	\$24.9	\$25.4	\$25.9	\$26.4	\$27.0	\$27.5	\$28.0
Very Low Income Units (50%)	\$552.3	\$414.3	\$563.4	\$574.7	\$586.1	\$597.9	\$609.8	\$622.0	\$634.5	\$647.2	\$660.1	\$673.3	\$686.8	\$700.5	\$714.5	\$728.8
Section 8 Units	\$118.1	\$118.1	\$120.5	\$122.9	\$125.3	\$127.8	\$130.4	\$133.0	\$135.7	\$138.4	\$141.2	\$144.0	\$146.9	\$149.8	\$152.8	\$155.8
Community Based Housing Units	\$88.1	\$88.1	\$89.8	\$91.6	\$93.4	\$95.3	\$97.2	\$99.2	\$101.1	\$103.2	\$105.2	\$107.3	\$109.5	\$111.7	\$113.9	\$116.2
<b>POTENTIAL GROSS INCOME</b>	<b>\$779.8</b>	<b>\$641.7</b>	<b>\$795.4</b>	<b>\$811.3</b>	<b>\$827.5</b>	<b>\$844.0</b>	<b>\$860.9</b>	<b>\$878.1</b>	<b>\$895.7</b>	<b>\$913.6</b>	<b>\$931.9</b>	<b>\$950.5</b>	<b>\$969.5</b>	<b>\$988.9</b>	<b>\$1,008.7</b>	<b>\$1,028.9</b>
Vacancy	(\$39.0)	(\$32.1)	(\$39.8)	(\$40.6)	(\$41.4)	(\$42.2)	(\$43.0)	(\$43.9)	(\$44.8)	(\$45.7)	(\$46.6)	(\$47.5)	(\$48.5)	(\$49.4)	(\$50.4)	(\$51.4)
<b>EFFECTIVE GROSS INCOME</b>	<b>\$740.8</b>	<b>\$609.6</b>	<b>\$755.6</b>	<b>\$770.7</b>	<b>\$786.1</b>	<b>\$801.8</b>	<b>\$817.9</b>	<b>\$834.2</b>	<b>\$850.9</b>	<b>\$867.9</b>	<b>\$885.3</b>	<b>\$903.0</b>	<b>\$921.1</b>	<b>\$939.5</b>	<b>\$958.3</b>	<b>\$977.4</b>
<b>OPERATING EXPENSES</b>																
Management Fee	\$37.0	\$30.5	\$31.2	\$32.0	\$32.8	\$33.6	\$34.5	\$35.3	\$36.2	\$37.1	\$38.1	\$39.0	\$40.0	\$41.0	\$42.0	\$43.1
General & Admin (incl. marketing)	\$74.1	\$61.0	\$77.4	\$79.4	\$81.4	\$83.4	\$85.5	\$87.6	\$89.8	\$92.1	\$94.4	\$96.7	\$99.1	\$101.6	\$104.2	\$106.8
Maintenance	\$105.0	\$78.8	\$107.6	\$110.3	\$113.1	\$115.9	\$118.8	\$121.8	\$124.8	\$127.9	\$131.1	\$134.4	\$137.8	\$141.2	\$144.7	\$148.4
Resident Services	\$35.0	\$35.0	\$35.9	\$36.8	\$37.7	\$38.6	\$39.6	\$40.6	\$41.6	\$42.6	\$43.7	\$44.8	\$45.9	\$47.1	\$48.2	\$49.5
Security	\$7.0	\$7.0	\$7.2	\$7.4	\$7.5	\$7.7	\$7.9	\$8.1	\$8.3	\$8.5	\$8.7	\$9.0	\$9.2	\$9.4	\$9.6	\$9.9
Utilities	\$98.0	\$98.0	\$100.5	\$103.0	\$105.5	\$108.2	\$110.9	\$113.6	\$116.5	\$119.4	\$122.4	\$125.4	\$128.6	\$131.8	\$135.1	\$138.5
Water & Sewer	\$24.5	\$24.5	\$25.1	\$25.7	\$26.4	\$27.0	\$27.7	\$28.4	\$29.1	\$29.9	\$30.6	\$31.4	\$32.1	\$32.9	\$33.8	\$34.6
Replacement Reserve	\$24.5	\$24.5	\$25.1	\$25.7	\$26.4	\$27.0	\$27.7	\$28.4	\$29.1	\$29.9	\$30.6	\$31.4	\$32.1	\$32.9	\$33.8	\$34.6
Real Estate Taxes	\$51.2	\$51.2	\$52.5	\$53.8	\$55.1	\$56.5	\$57.9	\$59.4	\$60.9	\$62.4	\$63.9	\$65.5	\$67.2	\$68.9	\$70.6	\$72.3
Insurance	\$49.0	\$49.0	\$50.2	\$51.5	\$52.8	\$54.1	\$55.4	\$56.8	\$58.2	\$59.7	\$61.2	\$62.7	\$64.3	\$65.9	\$67.5	\$69.2
<b>TOTAL OPERATING EXPENSES</b>	<b>\$505.3</b>	<b>\$459.4</b>	<b>\$512.7</b>	<b>\$525.6</b>	<b>\$538.7</b>	<b>\$552.2</b>	<b>\$566.0</b>	<b>\$580.1</b>	<b>\$594.6</b>	<b>\$609.5</b>	<b>\$624.7</b>	<b>\$640.3</b>	<b>\$656.4</b>	<b>\$672.8</b>	<b>\$689.6</b>	<b>\$706.8</b>
<b>NET OPERATING INCOME</b>	<b>\$235.5</b>	<b>\$150.2</b>	<b>\$242.9</b>	<b>\$245.1</b>	<b>\$247.4</b>	<b>\$249.7</b>	<b>\$251.9</b>	<b>\$254.1</b>	<b>\$256.3</b>	<b>\$258.5</b>	<b>\$260.6</b>	<b>\$262.7</b>	<b>\$264.7</b>	<b>\$266.7</b>	<b>\$268.7</b>	<b>\$270.6</b>
Debt Service	(\$204.8)	(\$204.8)	(\$204.8)	(\$204.8)	(\$204.8)	(\$204.8)	(\$204.8)	(\$204.8)	(\$204.8)	(\$204.8)	(\$204.8)	(\$204.8)	(\$204.8)	(\$204.8)	(\$204.8)	(\$204.8)
<b>NET CASH FLOW</b>	<b>\$30.7</b>	<b>(\$54.5)</b>	<b>\$38.1</b>	<b>\$40.4</b>	<b>\$42.7</b>	<b>\$44.9</b>	<b>\$47.2</b>	<b>\$49.4</b>	<b>\$51.5</b>	<b>\$53.7</b>	<b>\$55.8</b>	<b>\$57.9</b>	<b>\$60.0</b>	<b>\$62.0</b>	<b>\$63.9</b>	<b>\$65.9</b>

# Implementation

Fair Market Rents in Athol tend to hover near the 60% AMI threshold (see 2018 HUD Income Limits). Given a large portion of unit distribution is dedicated to 50% AMI, falling just below market rent, we have calculated in a brief period for lease-up both during construction and within the first six months of year 1. In doing so, operating expenses have been adjusted in year 1 to reflect 75% occupancy. Given this adjustment, year 2 most accurately reflects our base year. During our implementation process, we have two phases of conceptual design to incorporate community feedback.



## ZONING / VARIANCES

Our site is currently zoned for multifamily. It is in a Resident A multifamily zone as well as an Adaptive Reuse Overlay District, which encourages the reuse of existing buildings.

Current zoning limitations include a minimum of 2 parking spaces per unit. The maximum lot coverage for our site is 20%, maximum height is 35 feet, and maximum FAR is 0.3. The existing school buildings on our site meet the 0.3 threshold for FAR and any additional development will require a zoning variance. Minimum building square footage is 8,000 square feet for the first dwelling unit and 4,000 for each additional unit. Buildings must be at least 65 feet wide, have frontage of 65 feet, depth of 80 feet, a front yard of 25 feet, a side yard of 10 feet, and a rear yard of 30 feet 12.

Athol has only 6.02% of its units designated affordable, meaning it does not fulfill the 40B requirement of 10% affordable units<sup>13</sup>. We recommend using the 40B process to obtain exceptions to the current FAR of 0.3 and parking minimum of 2 spaces per unit. Our proposed development gets Athol closer to meeting the 40B state standard, while also improving the lives of the town's current and future residents.

### 40B VARIANCE REQUEST- EXHIBIT 5

Zoning Category	As of Right	Proposed	Variance
Zoning Use	Multi-family	Multi-family Residential	No
Floor Area Ratio (FAR)	0.30	0.65	Yes
Parking Requirement	2.0	1.5	Yes
Maximum Lot Coverage	20%	24%	Yes
Maximum Building Height	35 ft	35 ft	No
Minimum Front Yard Requirements	25 ft	25 ft	No
Minimum Side Yard Requirements	10 ft	20 ft	No
Minimum Landscaping per Dwelling Unit	2,000 sqft	1,200 sqft	Yes

#### 40B Timeline



# Conclusions

Athol has many strengths, including its natural resources, community commitment, and history of craft and innovation. Riverbend Row carries these strengths into the future by converting two schools that have historically brought residents together into affordable housing and shared spaces.

With units available to households at 50% and even 30% of area median income, and a corridor and elevator system able to accommodate a range of mobility needs, Riverbend Row will truly be a residence accessible to all. The development is designed to provide a new housing typology in Athol at a time when demand is increasing, while using innovative design techniques to blend new multifamily structures with the single-family houses in the surrounding neighborhood.

Riverbend Row provides much more than housing; in addition to bringing Athol 70 new affordable units, it will create spaces where residents and members of the wider community can come together. Through partnerships with organizations like the YMCA and Orange Innovation Lab, basement space will be converted to an arts and makerspace that builds on Athol's strength as a community of makers. The site's community garden will create green space in the downtown area, while the courtyard and playground will provide outdoor spaces for people of all ages. As Riverbend Row, Athol's historic school buildings will continue to serve the community as spaces that unite generations.

## WORKS CITED

1. NewVue Communities. Retrieved March 30, 2018, from <http://newvuecommunities.org/>
2. Suhoski, S. (2016). Request for Proposals: Former Neighborhood Elementary Schools in Athol, Massachusetts.
3. Tuholski, R. (1999). Athol, Massachusetts. Arcadia, Charleston, SC
4. Foreclosure Monitor (2014). Boston, MA: Massachusetts Housing Partnership.
5. Curtis, C. Report: \$100M invested in Athol over two years. Retrieved March 30, 2018, from <http://www.recorder.com/Archives/2016/01/standupAtholMillions-GR-012016.aspx>
6. Town of Athol Housing Action Plan. (2014). Montachusett Regional Planning Commission.
7. U.S. Census Bureau (2016). Median income in the past 12 months (in 2016 inflation-adjusted dollars). Retrieved from [https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?\\_afid=ACS\\_16\\_1YR\\_S1903&prodType=table](https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?_afid=ACS_16_1YR_S1903&prodType=table).
8. Massachusetts Department of Public Health (2017). Suicide Data Bulletin Winter 2017.
9. FY16 CPPI Preschool Planning Grant Legislative Report. (2016). The Commonwealth of Massachusetts: Department of Early Education and Care.
10. Montachusett Regional Transit Authority. Athol/Orange Link. Retrieved March 30, 2018, from <http://www.mrta.us/routes-schedules/athol-link>
11. Enterprise Community Partners. Enterprise Green Communities Criteria & Certification. Retrieved March 30, 2018, from <https://www.enterprisecommunity.org/solutions-and-innovation/green-communities/criteria-and-certification>
12. Town Of Athol. Massachusetts Zoning Bylaws. (2016).
13. Chapter 40 B Planning and Information. Retrieved March 30, 2018, from <https://www.mass.gov/chapter-40-b-planning-and-information>
14. Montachusett Opportunity Council. Retrieved March 30, 2018, from <https://www.mocinc.org/>