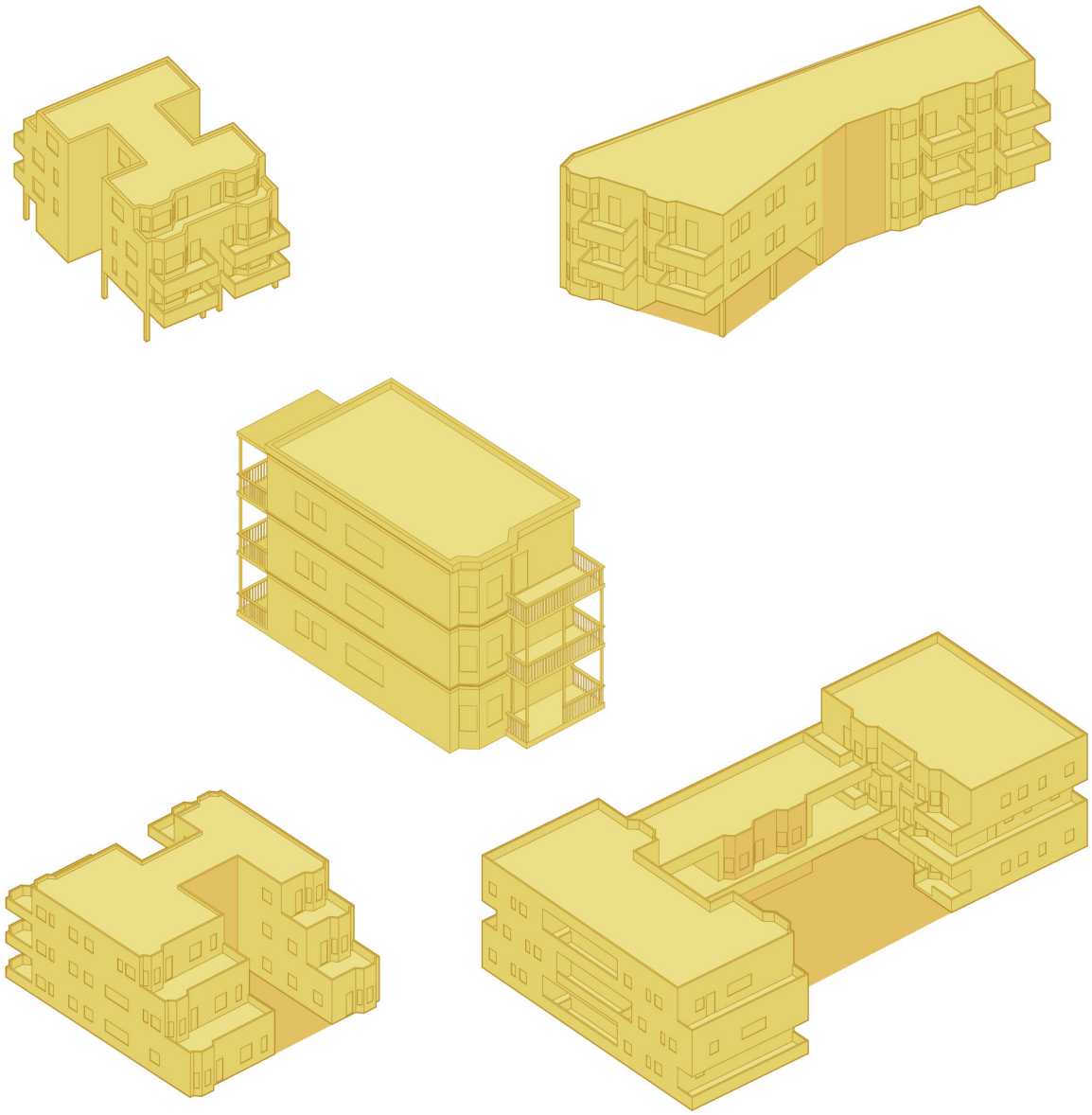
A Community-Minded More-phology: Towards a Denser Decker

Request for Ideas

July 30, 2021



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Project Goals

Originally conceived as an economical way to house rapidly growing urban populations, the triple-decker today also serves as a ubiquitous symbol that ties together disparate Boston neighborhoods. The pervasiveness of these stacked apartments with their individual balconies translates into shared experiences which strengthen the bonds of local communities. The ease and affordability of development and habitation of these multi-family homes, however, is now compromised by high construction costs and restrictive zoning.

A future-decker represents an opportunity to create sorely-needed housing while drawing on the successful elements of the familiar triple-decker, but at a scale that requires innovation to make this future-decker future-proof:

Community Engagement
The future-decker will engage neighborhood residents in a participatory development process to understand and incorporate amenities and programming that will positively affect their surrounding communities. By accommodating more housing and community functions, the development is made both denser and a social con-denser.

Economic Empowerment
The future-decker will be constructed by a local labor force trained in the proposed panelized method of assembling a building. Equipped with these carbon-conscious construction skills, the economic and environmental impact of this labor force can multiply exponentially across the region.

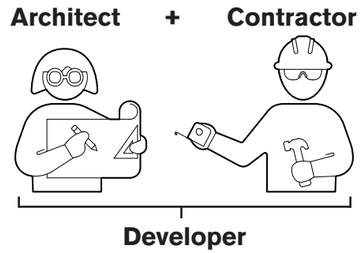
Affordability
The future-decker will be primarily composed of units affordable to those making below area median income, enabled by savings through efficiency in the integrated development model and panelized construction method.

Occupant Health and Energy Efficiency
The future-decker will be designed based upon Passive House principles and constructed of low-carbon, high performance materials and assemblies that contribute to high indoor air quality and efficient energy dissipation for residents.

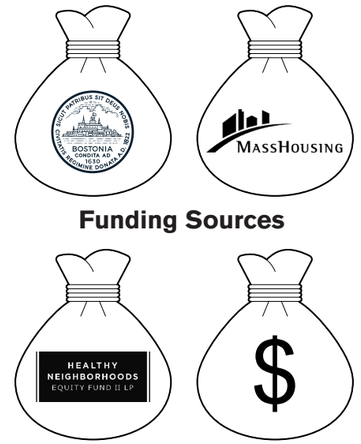
Currently constrained by zoning barriers including F.A.R., setbacks, use and unit limitations, the future-decker proposes a more flexible set of zoning regulations in which the community and development team collaborate, give-and-take to determine a density and distribution of units and amenities that may achieve these project goals.

Development Model

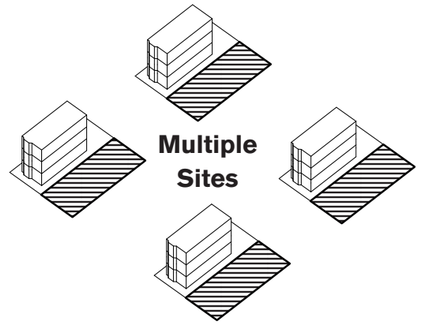
New Developer in Town
Through an integrated project delivery model, the team of architect and general contractor (no developer) will invest capital and labor into the development, generating efficiency through synergy and ensuring that the project outcomes remain the primary and shared focus.



Community Minded
By prioritizing affordability, energy efficiency, occupant health, community engagement, and economic empowerment (through quality job opportunities and targeted subcontractor partnerships), we will assemble mission-driven financial resources into a cohesive financial model. Relying on land conveyance and per-unit subsidies from the City of Boston, a subsidy from Mass Housing, and equity capital from the Healthy Neighborhoods Fund (MHIC), the goal is to provide 20% of units affordable to residents earning at or less than 60% of area median income (AMI), 20% of units affordable to residents earning less than 80% AMI, and 60% of units affordable to residents earning between 80% - 100% AMI.



Viability Through Scale
In order to accomplish this, we will intelligently increase site density as demonstrated in the diagrams to follow and bundle several parcels into a single development package. By simultaneously developing a minimum of 12 units across these sites, a viable financial and constructional logic can be achieved in which all parties - residents, neighbors, broader community, and development team (architect + general contractor) - benefit from the completed project.



Construction Method

Like the financial integration between development team members, the construction methodology of the proposal is driven by the integration of efficient envelope and simple foundation construction techniques to create housing that is a net-positive contributor to its context and healthy home for its occupants.

Efficient Envelope

Simple building geometries that can be adapted to a variety of site conditions and contexts will be executed in a panelized wall assembly system. Produced off site by a high-performance prefabricated panel vendor, this method ensures cost and quality control while reducing exposure to volatile New England weather conditions and avoiding prolonged disruption to neighboring residents. The envelope panels will be assembled on site by a local workforce, providing a unique employment opportunity in the environmentally-conscious construction sector to City of Boston residents.

Simple Foundation

The air-tight, insulated envelope will be mated with a slab-on-grade foundation that minimizes excavation complexity and reduces concrete consumption. The slab-on-grade method will also allow for creation of ADA accessible units at the ground floor.

Future Focused

These components will be constructed with low-carbon materials and underpinned by Passive House design principles. Comfortable, energy efficient, and - as a collective - this housing can capture more energy than it dissipates with the addition of rooftop solar; an all-electric enclave powered by renewable energy. Supplied with electric car charging and/or battery storage, the development will also be provided a source of back-up energy in the event of a power-outage.

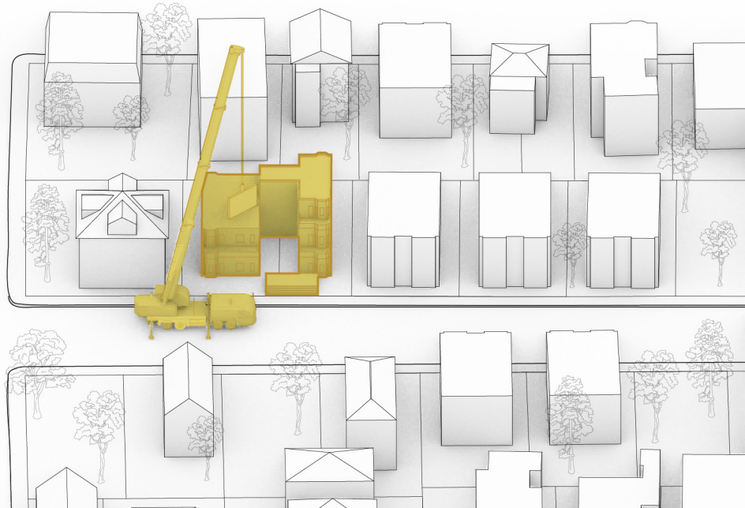
Site Selection

The group of 13 sites given in the RFI spans a range of neighborhoods, sizes, contexts, and zoning restrictions. Given this mix, we have grouped the parcels into types based upon their urban condition and relationship to neighbors. The four categories are:

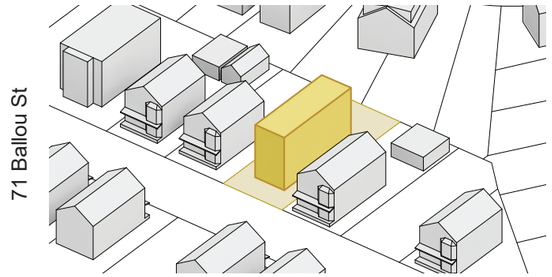
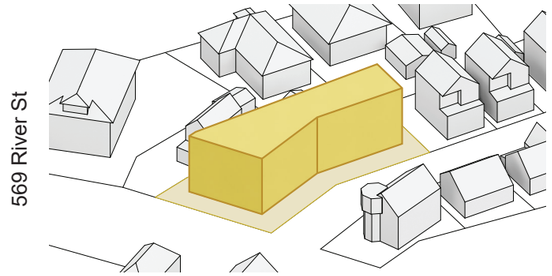
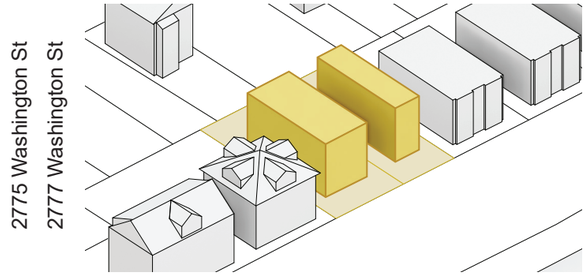
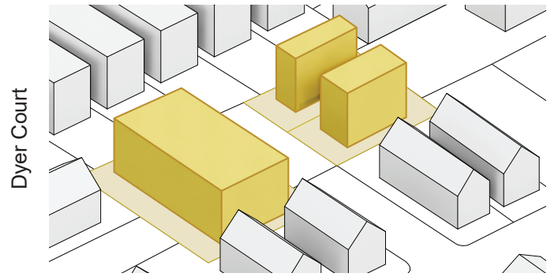
Single Parcel	**Corner Parcel**	**Side-by-Side Parcels**	**Parcels Across-a-Public-Way**
65 Ballou Ave.	569 River St.	2775 Washington St.	1 Dyer Court
71 Ballou Ave.	379 Geneva Ave.	2777 Washington St.	3 Dyer Court
11 Capen St.	18 Colchester St.		6 Dyer Court
2751 Washington St.			
22 Colchester St.			

For the purposes of analysis, the proposal focuses on one parcel from each category in order to demonstrate possible architectural and programmatic responses to the diverse set of conditions. In line with the proposed development model and construction methodology, building on several parcels - at least 12 housing units - will be undertaken simultaneously to ensure the project's viability. This may take any number of forms given the analyzed conditions - from a single geographically grouped set of parcels (i.e. 1,3, and 6 Dyer Court) to a diffuse combination of parcels across the city (i.e. 65 Ballou St. + 569 River St.).

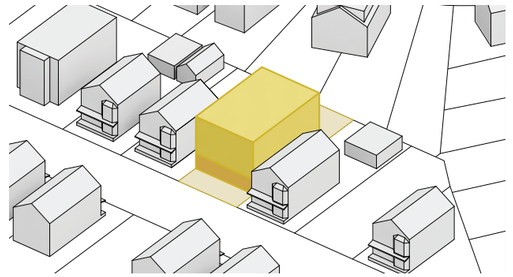
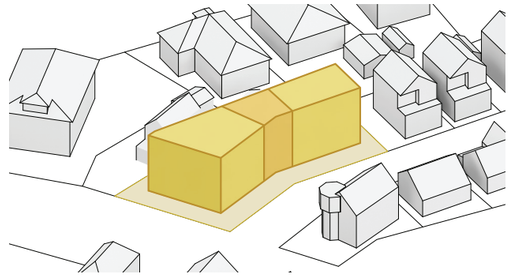
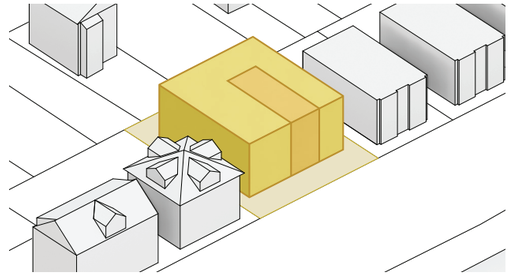
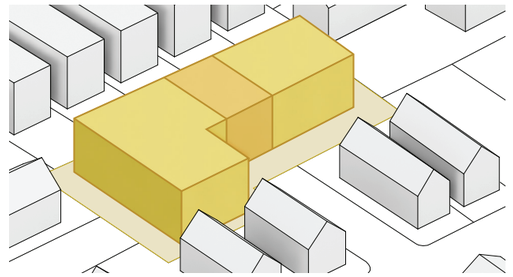
We will ensure that the particular set of sites will be truly co-created by forging relationships with the community surrounding each parcel. Applying a model of participatory development, we will establish priorities for the project with neighbors and local residents who stand to benefit from the community amenity offered as part of the higher density housing proposal.



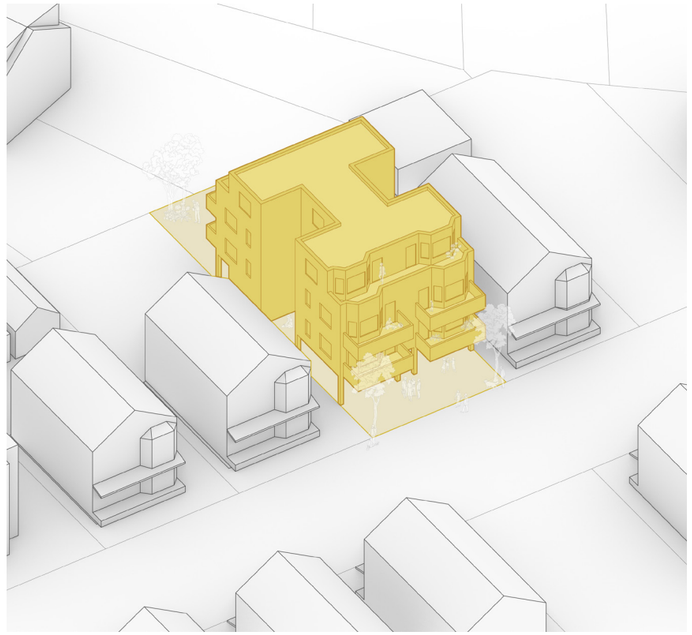
Zoning Barriers

Site Condition	Current As Of Right Zoning
Single Parcel	
Corner Parcel	
Side-by-Side Parcels	
Parcels Across-a-Public-Way	

Zoning Alternatives

New Zoning	'Co-Created' Community Program	Proposed Zoning Envelope
More Units Higher F.A.R. Reduced Setbacks Taller Height	Daycare	
More Units Higher F.A.R. Setback Compliant Reduced Parking	Public Library	
Units Compliant F.A.R. Compliant Occupied Setbacks Merged Lots Reduced Parking	Cafe Art Gallery	
More Units Higher F.A.R. Occupied Public-Way (Dead End) Merged Lots	Recreation Center Playing Field	

Single Parcel



This proposal mirrors a traditional triple decker to create a pair of the type that extend to the side lot lines. These units are raised to create a semi-covered ground floor area connected to side courtyards. Beyond these courts is a day care at the rear of the site that has access to the backyard.

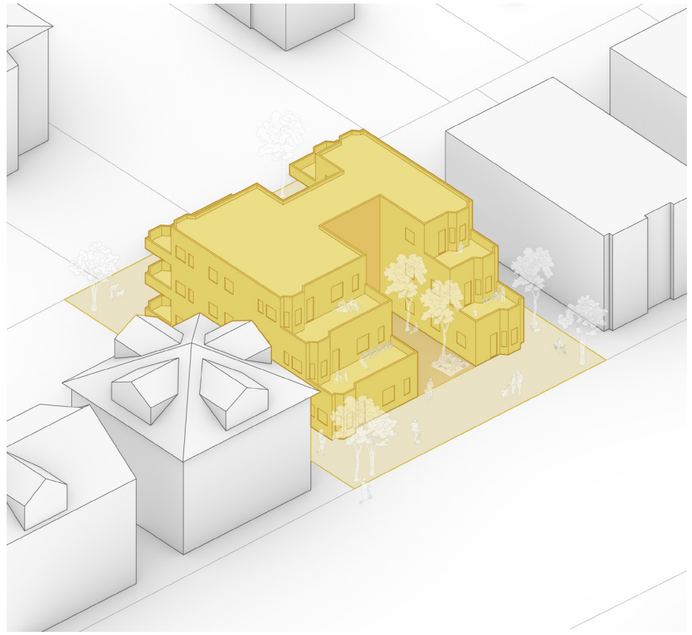
Though exceeding the max. height zoning, the massing retains a 3-story expression through a recessed upper level providing large terraces.

5,780 SF residential, 5 units

600 SF community space

6,380 SF total

Side-by-Side Parcels



This proposal activates the interstitial space between two adjacent sites. The design places a shared circulation core between triple-decker types, demarcating public front and private rear gardens in what was previously empty setback. Residential units step back at the front facade to create private balconies and allow light to enter the garden space. A café and art gallery occupy the two ground floors at the street front, inticing passerby into the site.

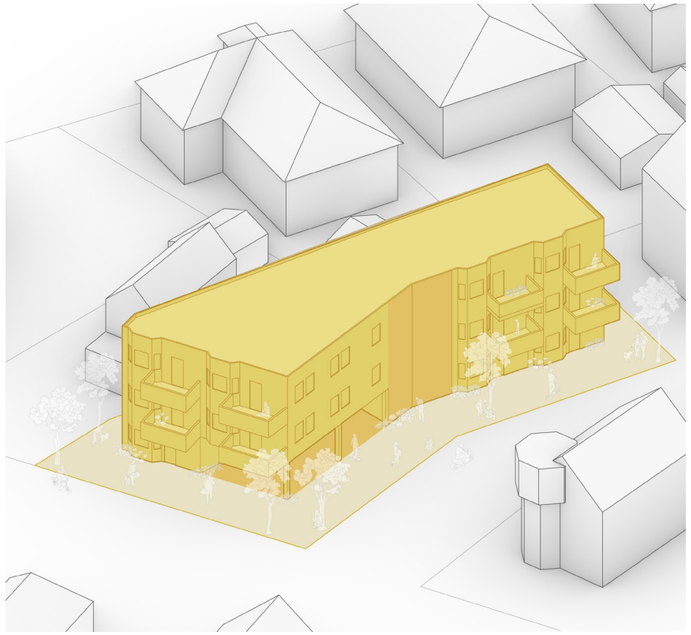
6,785 SF unit total, 6 units

900 SF shared residential

460 SF community space

8,145 SF total

Corner Parcel



Located on a site with two potential frontages, this proposal draws on an original intent of the triple-decker to appear as a single house. A vertical shared space for residents divides the 10-unit building into two contextually-scaled blocks.

While adhering to the setbacks, the proposed FAR. increases from 0.8 to 1.3 in order to create more units. The front corner of the ground floor becomes a library and reading room, welcoming the neighborhood into the site.

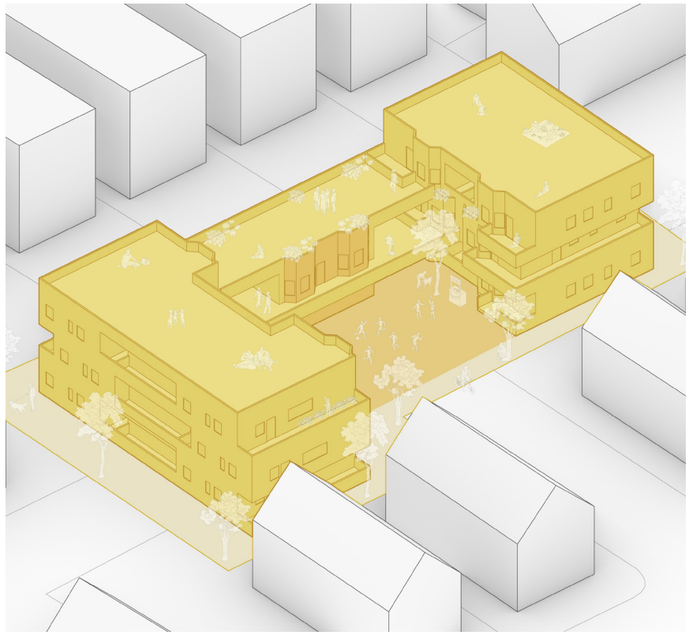
6,940 SF residential, 10 units

1,660 SF shared residential

700 SF community space

9,300 SF total

Parcels Across-a-Public-Way



Located on a terminal street, this proposal contains a congregation of units and community recreation space about - and atop - the presently gated public way. The triple-decker type is arrayed, stacked, and shifted on the 3 merged sites to maximize F.A.R. Breezeways allow air and light to enter the U-shaped massing and overlook a central playing field. The focus upon fitness continues inside to a recreation center open to the community.

14,732 SF residential, 15 units

1,906 SF shared residential

627 SF community space

17,265 SF total

About Us

MERGE ARCHITECTS inc

Merge Architects is a Boston-based architectural practice that capitalizes on opportunities for invention in the ordinary. The firm's work aims to re-define the social boundaries of architectural and urban space, addressing a wide range of scale and program including multi-family residential, commercial, institutional, retail, furniture design, and environmental graphics. The Future-Decker RFI extends the firm's interest in adapting and reinventing regional housing typologies to comfortably accommodate urban living at the smallest scale while addressing societal challenges at the largest.

mergearchitects.com

Instagram @mergearchitectsinc

STARCO STAR CONTRACTING

Star Contracting Company is a Dorchester-based general contractor specializing in high-performance residential construction. With experience in both single and multi-family projects, the Future-Decker RFI presents an exciting opportunity to bring our passion for healthy, sustainable homes to a larger and more diverse market while creating a model that other builders and developers can emulate throughout Boston.

starcontractinginc.com

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