

REQUEST FOR IDEAS
CO-CREATING BOSTON'S FUTURE-DECKER
Envisioning the future of multifamily housing in Boston's neighborhoods

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Proposal:

The DOMA Home Model



A NEW HOME TYPE, REIMAGINED FOR COMFORT, AFFORDABILITY, AND WELLBEING

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The DOMA Home Model



A NEW HOME TYPE, REIMAGINED FOR COMFORT, AFFORDABILITY, AND WELLBEING

The DOMA Home Model is designed to significantly improve quality of life, especially for middle-income families. The model is an innovative hybrid that combines qualities of a single and a multifamily home. While designed for conventional construction, its spatial plan features an unusual degree of adaptability and flexibility of use, accommodating effortless changes in use and lifestyle, allowing significantly better comfort, affordability, and wellbeing. It is designed to be a greatly improved new middle-income home ownership type of the future.

Home affordability is one of today's most burning issues and deeply affects us all. The typical approach to affordable home ownership has been a lifelong process of buying a modest starter home, upgrading, selling, buying again, and renovating or downsizing as income and needs fluctuate. Traditional income-generating home solutions, like double- and triple-deckers, have proved difficult to manage. New affordable home solutions have focused mainly on temporary or partial resolutions, on sacrificing quality, comfort or privacy, reducing size, lowering material and labor costs, overburdening the owners with investment and construction phasing. New multifamily options are often fragmented and unique solutions that are difficult to implement. The DOMA Home Model (DHM) eliminates the lifetime of compromise usually associated with affordable living.

Working as an architectural designer for over twenty years on some of the Boston area's most beautiful high-end, award-winning home renovations, it became my passion to bring increased quality of living to middle income families like mine. I have witnessed how even the most comfortably designed homes require modifications over time to accommodate changes of lifestyle. These modifications were costly and disruptive, as well as environmentally wasteful. I realized an outstanding home must be designed differently, to allow and support changes without modifications. Designed to make a difference, the DHM's flexibility in use allows for a home to suit an owner's needs over a lifetime.

At a first glance, the DHM is a conventional four-bedroom, three-bathroom compact home of about 2,000 sq. ft. (See Fig. 1). But by simply opening and closing a few doors and making furniture adjustments, the overall functional layout allows the home to be divided into separate units without any construction modifications. The innovative kitchen design allows it to readily split into two separate kitchens, while the master bedroom's built-in unit design allows it to be used as a kitchenette, or a workspace as well. These features allow a home to function as three separate units: a 345sf studio, a 588sf one-bedroom and a 824sf two-bedroom. Each of these three units can be used individually or combined in a variety of ways, for up to seven differently sized layouts and living options and over twenty live/work options, depending on zoning and

building type. Each layout is designed to feel like a home in itself. The model is suitable for various family structures and for up to eight people. It can be used by a single family, for an extended family, and for rental (See pages 3, 4 & 5).

This versatility of use allows for a homeownership entry at any stage of life—for a single owner, a young expanding family, an older family with children growing up and going off to college, or for empty-nesters. The DHM accommodates rapid, multiple and often precipitous changes we all face—changing spatial needs, working at home, developing and growing a business, as well as managing extended guest and family visits.

The model also supports changes in health status and physical abilities. With its universal/ADA design, it can be used and maintained regardless of a person's age or ability.

As a long-term solution, sociologically speaking, this home model improves possibilities for anchoring diverse mixed-income communities, connecting and stabilizing city neighborhoods, and strengthening neighborhood and social connections we all need.

The DHM is designed for a significantly improved financial wellbeing as well. In addition to eliminating the need for a lifetime of costly renovations and moves, wealth-building is enabled by the accommodation of a variety of live/work options, from working at home to developing and running a business, and by availability of areas not needed by the owner to be readily rented out. The model is sized for optimal rental manageability and outstanding monthly affordability for a wide variety of middle-income owners. The homeowners can save and invest the money they gain by spending less than the usual 30% of their income for housing (See table 4).

The variety of financial options give owners increased support while weathering the inevitable ups and downs of life, such as unplanned income fluctuations, financially vulnerable times, the need to provide child or elderly care. As such, the DHM is designed to support resiliency, stability, and upward mobility, giving middle-income families a means to own a home and prosper.

Setting a new standard of efficiency by being able to be used continuously and fully at any given time, either only by the owner or by the extended family, friends, or renters as well, the model allows for maximized use of precious building resources and increased sustainability.

Awards and publications- The model has been developed with the support of the Boston Housing Innovation Lab and won the Boston DND 2016 Compact Affordable Housing Competition Unconventional Excellence Award. It has also been published in The Boston Foundation's *The Greater Boston Housing Report Card 2017*, page 62, as one of the new promising models for home prototypes of the future.

The patent pending DHM is available to be scaled in size, modified for a specific building type, and readily developed for construction.

On the following pages the DHM is proposed as modified for a triple-decker building type in a few different ways. Flexibility of the floor plan design allows modifications for various site configurations.



DOMA HOMES



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I believe urban middle-income homes should not only be affordable, but also provide a high standard of living.

With over twenty years of experience in residential, commercial and mixed-use projects, my passion remains advancing residential architecture in all its aspects--affordability, historic and social, life-long value and quality of design and construction. My experience spans from multimillion-dollar award-winning residential projects and extensive experience through all project phases, including zoning, reviews and permitting, through a broader professional experience, including historic preservation, building envelope renovation, urban design, space planning and interior design. I hold a Master of Architecture from the Boston Architectural College and am currently preparing for a completion of the architectural licencing exam.

I founded Doma Homes back on 2016 with a belief that urban middle-income homes should be both affordable and provide a high standard of living. My focus has been on incorporating flexibility of use in the design of new homes and commercial spaces, as well as renovations and additions, for increased comfort, affordability and wellbeing, to better support us through constant changes of ways we live our lives.

Fig. 1

The DOMA Home Model: OPTION OF USE #1
Single Family Home: 4-BR Appt. (Owner Occupied)

DESIGNED FOR COMFORT, the DHM accomodates up to eight household members. Bedrooms can also be used as home offices with various degrees of privacy, and Master bdrm & Bdrm #3 as commercial spaces, depending on zoning, to support working at home and growing a business. The floor plan can be flipped, for living and dining rooms to face the street.

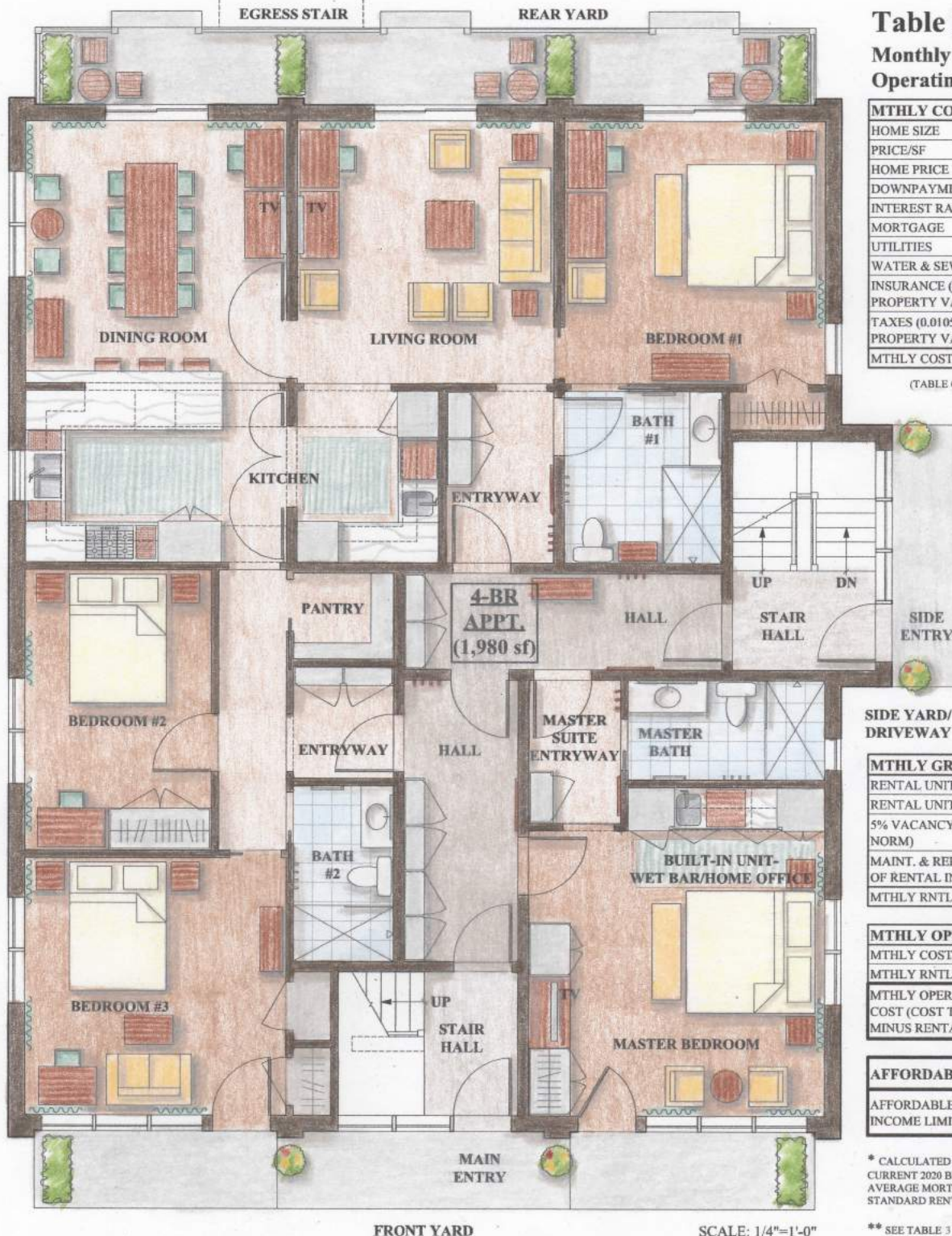


Table 1
Monthly Property
Operating Data*

MTHLY COST TO OWN	
HOME SIZE	1,980 SF
PRICE/SF	340 \$/SF
HOME PRICE	\$673,200
DOWNPAYMENT	20%
INTEREST RATE	3.80%
MORTGAGE	\$2,509
UTILITIES	\$307
WATER & SEWER	\$227
INSURANCE (0.005% OF PROPERTY VALUE)	\$281
TAXES (0.01054% OF PROPERTY VALUE)	\$591
MTHLY COST TO OWN	\$3,915

(TABLE CONTINUED BELOW)

**SIDE YARD/
DRIVEWAY**

MTHLY GROSS RNTL INCOME	
RENTAL UNIT 1 INCOME	\$0
RENTAL UNIT 2 INCOME	\$0
5% VACANCY (INDUSTRY NORM)	\$0
MAINT. & REPAIRS (0.09% OF RENTAL INCOME)	\$0
MTHLY RNTL INCOME	\$0

MTHLY OPERATING COST	
MTHLY COST TO OWN	\$3,915
MTHLY RNTL INCOME	\$0
MTHLY OPERATING COST (COST TO OWN MINUS RENTAL INCOME)	\$3,915

AFFORDABILITY TO OWN	
AFFORDABLE TO INCOME LIMIT	120% AMI**

* CALCULATED FOR BOSTON, USING CURRENT 2020 BPDA INCOME & RENT LIMITS, AVERAGE MORTGAGE FACTORS & INDUSTRY STANDARD RENTAL INCOME FACTORS.

** SEE TABLE 3

The DOMA Home Model: **Kitchen & Built-in Unit**

THE KITCHEN: The DHM design is centered around the kitchen. The innovative kitchen design allows it to readily split into two separate kitchens by closing the door, without any construction modifications needed.



THE BUILT-IN UNIT: The master bedroom's built-in unit design allows it to be used as a kitchenette or a work space, also without any construction modifications needed, so the master bedroom can readily be used as a studio or a work space.

Option of use: wet bar (closed)



Option of use: wet bar (open)



Option of use: kitchenette



Option of use: work space



The DOMA Home Model: Options of use #2 through #7

DESIGNED FOR COMFORT: the kitchen, built-in unit and the floor plan design allow effortless changes in use and lifestyle by simply opening and closing a few doors and making furniture adjustments, without any construction required. The design allows for up to seven differently sized layouts and living options, and over twenty live/work options, depending on zoning and building type.

DESIGNED FOR AFFORDABILITY: the DHM design allows for areas not needed by the owner to be readily rented out. The model is sized for optimal rental manageability and outstanding monthly affordability for a wide variety of middle-income owners (See tables below and tables 1 & 2).

Option of use #2



MTHLY OPERATING COST	
MTHLY COST TO OWN	\$3,915
MTHLY OPERATING COST (COST TO OWN MINUS RENTAL INCOME)	\$2,485
AFFORDABLE TO INCOME LIMIT	90% AMI**

Option of use #3



MTHLY OPERATING COST	
MTHLY COST TO OWN	\$3,915
MTHLY OPERATING COST (COST TO OWN MINUS RENTAL INCOME)	\$2,071
AFFORDABLE TO INCOME LIMIT	70% AMI**

Option of use #4



MTHLY OPERATING COST	
MTHLY COST TO OWN	\$3,915
MTHLY OPERATING COST (COST TO OWN MINUS RENTAL INCOME)	\$1,781
AFFORDABLE TO INCOME LIMIT	70% AMI**

Option of use #5



MTHLY OPERATING COST	
MTHLY COST TO OWN	\$3,915
MTHLY OPERATING COST (COST TO OWN MINUS RENTAL INCOME)	\$644
AFFORDABLE TO INCOME LIMIT	30% min. AMI**

Option of use #6



MTHLY OPERATING COST	
MTHLY COST TO OWN	\$3,915
MTHLY OPERATING COST (COST TO OWN MINUS RENTAL INCOME)	\$352
AFFORDABLE TO INCOME LIMIT	30% min. AMI**

Option of use #7



MTHLY OPERATING COST	
MTHLY COST TO OWN	\$3,915
MTHLY OPERATING COST (COST TO OWN MINUS RENTAL INCOME)	\$0
AFFORDABLE TO INCOME LIMIT	30% min. AMI**

The DOMA Home Model: **Affordability**

As shown below, the DHM provides an outstanding affordability to own and a possibility of savings (see table 4), supporting financial stability, upward mobility and a long-term financial wellbeing. Affordability is calculated using affordable rents as a rental income, for a potential affordability for renters as well, in case rents can be controlled in some way.

Note: The DHM Affordability is calculated for Boston, using current 2020 BPDA Compact Unit (see Table 5) income and rent limits (see Tables 2 & 3), average mortgage factors and industry standard rental income factors. Affordability calculations are based on variable mortgage factors, construction price and other variables, are listed as an example and are subject to change. Affordability can be increased further by improved financing methods and lower prices of construction materials and methods.

Table 2
The DHM affordability table, per yearly gross income*

HH Size	30% AMI	40% AMI	50% AMI	60% AMI	70% AMI	80% AMI	90% AMI	100% AMI	120% AMI	150% AMI
1	\$23,800	\$31,750	\$39,700	\$47,600	\$55,550	\$63,500	\$71,400	\$79,350	\$95,200	\$119,000
2	\$27,200	\$36,250	\$45,350	\$54,400	\$63,450	\$72,550	\$81,600	\$90,650	\$108,800	\$136,000
3	\$30,600	\$40,800	\$51,000	\$61,200	\$71,400	\$81,600	\$91,800	\$102,000	\$122,400	\$153,000
4	\$34,000	\$45,300	\$56,650	\$68,000	\$79,300	\$90,650	\$101,950	\$113,300	\$135,950	\$169,950
5	\$36,750	\$48,950	\$61,200	\$73,450	\$85,650	\$97,950	\$110,150	\$122,400	\$146,850	\$183,550
6	\$39,450	\$52,550	\$65,750	\$78,900	\$92,000	\$105,200	\$118,300	\$131,450	\$157,750	\$197,150

*Area Median Income (AMI) table based on BPDA Inclusionary Development Policy, 2020 Income Limits Table. AMI as determined by the U.S. Department of Housing and Urban Development for the Boston-Cambridge-Quincy HUD FMR Area

Table 3
The DHM affordability table, per monthly gross income*

HH Size/Bdrms	30% AMI	40% AMI	50% AMI	60% AMI	70% AMI	80% AMI	90% AMI	100% AMI	120% AMI	150% AMI
1/Studio	\$595	\$794	\$993	\$1,190	\$1,389	\$1,588	\$1,785	\$1,984	\$2,380	\$2,975
2/1-BR	\$680	\$906	\$1,134	\$1,360	\$1,586	\$1,814	\$2,040	\$2,266	\$2,720	\$3,400
3/2-BR	\$765	\$1,020	\$1,275	\$1,530	\$1,785	\$2,040	\$2,295	\$2,550	\$3,060	\$3,825
4/3-BR	\$850	\$1,133	\$1,416	\$1,700	\$1,983	\$2,266	\$2,549	\$2,833	\$3,399	\$4,249
5/3-BR	\$919	\$1,224	\$1,530	\$1,836	\$2,141	\$2,449	\$2,754	\$3,060	\$3,671	\$4,589
6/4-BR	\$986	\$1,314	\$1,644	\$1,973	\$2,300	\$2,630	\$2,958	\$3,286	\$3,944	\$4,929

*Affordable maximum monthly total housing payment is calculated as 30% of yearly gross income (See Table 2), and is inclusive of mortgage, taxes and insurance (See Table 5), as well as estimated utilities (Per HUD Income and Rent Limits 10/01/19, Utility Allowance Table)

Table 4
The DHM affordability summary table, with monthly savings*

Income	Bedrooms	Affordable monthly pymt**	The DHM monthly pymt***	The DHM monthly savings
30% AMI	Studio	\$595	-\$108	\$703
	1-BR	\$680	\$352	\$328
	2-BR	\$765	\$644	\$121
	3-BR(4HHS)	\$850	\$2,071	-\$1,221
	3-BR(5HHS)	\$919	\$2,071	-\$1,152
	4-BR	\$986	\$3,915	-\$2,929
40% AMI	Studio	\$794	-\$108	\$902
	1-BR	\$906	\$352	\$554
	2-BR	\$1,020	\$644	\$376
	3-BR(4HHS)	\$1,133	\$2,071	-\$938
	3-BR(5HHS)	\$1,224	\$2,071	-\$847
	4-BR	\$1,314	\$3,915	-\$2,601
60% AMI	Studio	\$1,190	-\$108	\$1,298
	1-BR	\$1,360	\$352	\$1,008
	2-BR	\$1,530	\$644	\$886
	3-BR(4HHS)	\$1,700	\$2,071	-\$371
	3-BR(5HHS)	\$1,836	\$2,071	-\$235
	4-BR	\$1,973	\$3,915	-\$1,943
80% AMI	Studio	\$1,588	-\$108	\$1,696
	1-BR	\$1,814	\$352	\$1,462
	2-BR	\$2,040	\$644	\$1,396
	3-BR(4HHS)	\$2,266	\$2,071	\$195
	3-BR(5HHS)	\$2,449	\$2,071	\$378
	4-BR	\$2,630	\$3,915	-\$1,285
100% AMI	Studio	\$1,984	-\$108	\$2,092
	1-BR	\$2,266	\$352	\$1,914
	2-BR	\$2,550	\$644	\$1,906
	3-BR(4HHS)	\$2,833	\$2,071	\$762
	3-BR(5HHS)	\$3,060	\$2,071	\$989
	4-BR	\$3,286	\$3,915	-\$629
120% AMI	Studio	\$2,380	-\$108	\$2,488
	1-BR	\$2,720	\$352	\$2,368
	2-BR	\$3,060	\$644	\$2,416
	3-BR(4HHS)	\$3,399	\$2,071	\$1,328
	3-BR(5HHS)	\$3,671	\$2,071	\$1,600
	4-BR	\$3,944	\$3,915	\$29
150% AMI	Studio	\$2,975	-\$108	\$3,083
	1-BR	\$3,400	\$352	\$3,048
	2-BR	\$3,825	\$644	\$3,181
	3-BR(4HHS)	\$4,249	\$2,071	\$2,178
	3-BR(5HHS)	\$4,589	\$2,071	\$2,518
	4-BR	\$4,929	\$3,915	\$1,014

*Monthly savings leftover from affordable 30% of income allocated for total monthly housing expenses

**See Table 3

***Monthly cost to the owner, calculated using rental income minus mortgage and expenses (utilities, taxes, insurance, maintenance & repairs)

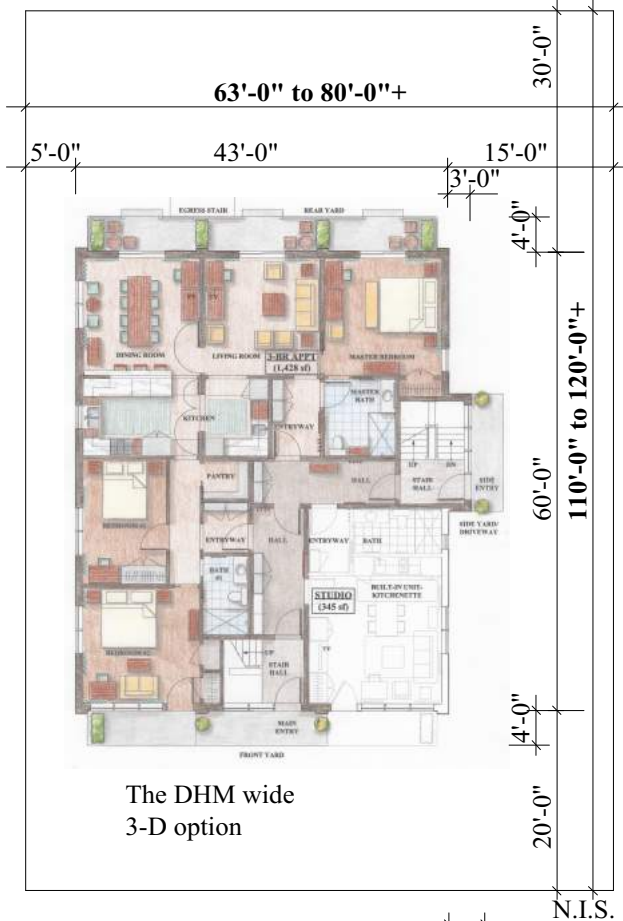
Legend:	
	Affordable, with monthly savings (See Table 4 for monthly saving details)
	Not affordable. Since DHM is designed for up to 8 HH Size, affordability is possible by adult family members participating in monthly payments.
	Not affordable

Table 5
Compact Unit Size*

Unit Type	Maximum Size
Studio	450 sq ft
1-BR	625 sq ft
2-BR	850 sq ft
3-BR	950 sq ft

*Per City of Boston's 2020 Compact Living Pilot guidelines

The DOMA Home Model: **Site applicability**



The DHM wide 3-D option, as shown on pages 3 through 5, is applicable to wider lots, as shown, or two connected lots. Flexibility of the plan allows for further adjustments.

Applicable lots listed in the RFI are:

- 2775-2777 Washington Street, Roxbury
- 6 Dyer Street, Dorchester
- 379 Geneva Ave, Dorchester

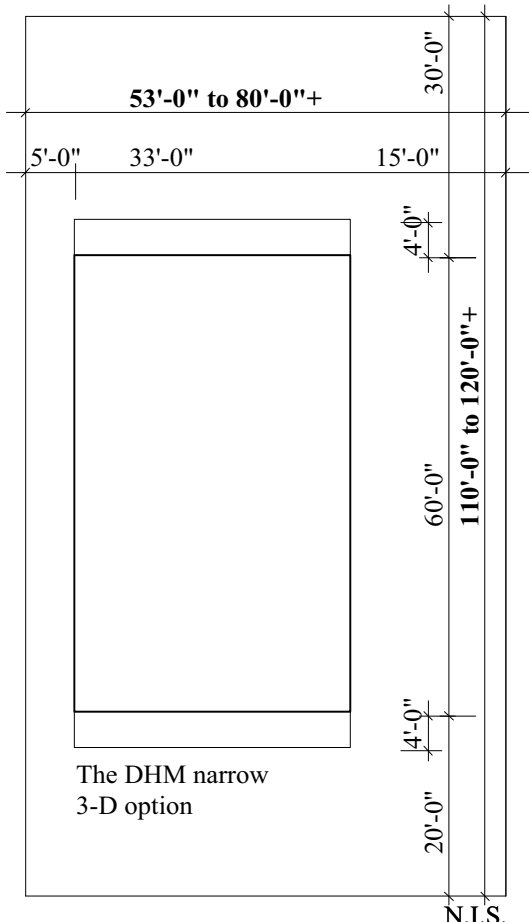
For this building type three DHM dwellings would be stacked, one on each floor, with a common, mechanical, laundry and storage areas located in the basement, and open common areas possibly at the roof level.

Balconies and porches are optional. They offer possibility of outdoor open or enclosed green spaces and vertical gardens.

Floor plan can be flipped for living and dining rooms to face the street, depending on preference and orientation.

Elevations style can vary, depending on preference and the specific environment, from modern to traditional.

The floor plan flexibility allows adjustments to irregular lots.



The DHM narrow 3-D option, as shown on the lot to the left, is applicable to narrower lots. Flexibility of the plan allows for further adjustments.

Applicable lots listed in the RFI are:

- 2775-2777 Washington Street, Roxbury
- 6 Dyer Street, Dorchester
- 379 Geneva Ave, Dorchester,

For this building type two DHM dwellings would be stacked, occupying one and a half floors each, sharing the second floor. Common, mechanical, laundry and storage areas would be located in the basement, and open common areas possibly at the roof level.

Balconies and porches are optional. They offer possibility of outdoor open or enclosed green spaces and vertical gardens.

Elevations style can vary, depending on preference and the specific environment, from modern to traditional.

The floor plan flexibility allows adjustments to irregular lots.

The DOMA Home Model: **Project advantages**

- | | |
|--|--|
| <input checked="" type="checkbox"/> Holistic solution | <input checked="" type="checkbox"/> Minimized needs for upsizing or downsizing |
| <input checked="" type="checkbox"/> Promoting equitability and inclusiveness | <input checked="" type="checkbox"/> A wide variety of live/work options |
| <input checked="" type="checkbox"/> Promoting diversity | <input checked="" type="checkbox"/> Promoting home ownership |
| <input checked="" type="checkbox"/> Promoting holistically healthy neighborhoods | <input checked="" type="checkbox"/> Affordable for a wide middle-income range |
| <input checked="" type="checkbox"/> Promoting mixed-income communities | <input checked="" type="checkbox"/> Promoting financial long-term wellbeing |
| <input checked="" type="checkbox"/> Providing a variety of housing options | <input checked="" type="checkbox"/> Promoting economic empowerment |
| <input checked="" type="checkbox"/> Promoting neighborhood stabilizing and strengthening | <input checked="" type="checkbox"/> Supporting upward mobility |
| <input checked="" type="checkbox"/> Long-term solution | <input checked="" type="checkbox"/> Mixed home ownership & rental opportunities |
| <input checked="" type="checkbox"/> Livability | <input checked="" type="checkbox"/> Promoting affordable rents |
| <input checked="" type="checkbox"/> Flexibility and versatility of use | <input checked="" type="checkbox"/> Quality construction |
| <input checked="" type="checkbox"/> Centered on comfort and long-term wellbeing | <input checked="" type="checkbox"/> High efficiency of spaces |
| <input checked="" type="checkbox"/> Universal/ADA design | <input checked="" type="checkbox"/> Minimized needs for renovations or relocations |
| <input checked="" type="checkbox"/> Suitable for a wide range of family structures | <input checked="" type="checkbox"/> Promoting efficient use of building resources |
| <input checked="" type="checkbox"/> Suitable for students, young couples & seniors | <input checked="" type="checkbox"/> Applicable to a variety of building types |
| <input checked="" type="checkbox"/> Suitable for seniors to remain in their homes | <input checked="" type="checkbox"/> Applicable to a variety of lot shapes and sizes |
| <input checked="" type="checkbox"/> Suitable for extended families | <input checked="" type="checkbox"/> Applicable to small and large lots |
| <input checked="" type="checkbox"/> Promoting better family and social connections | <input checked="" type="checkbox"/> Promoting next-generation housing that is greener, safer, smarter and more enjoyable |

The DOMA Home Model: **Project barriers**

Due to the innovative nature of the project, being a new home type with a flexibility in use, the existing zoning, financing and permitting systems do not readily apply to it and present barriers. Some of them are:

1. ZONING: Present density & parking requirements.
2. FINANCING: Limited mortgage financing options for innovative models. Rental income not considered. as income.
3. FINANCING: Affordability to buy limited for lower middle-income buyers. Alternative financing would be helpful. Use of subsidies to purchase property could be a good solution, allowing self-sufficiency and a reduction or elimination of long-term subsidies.
4. PERMITTING: Every change of use would require a change of occupancy.

In addition, a risk and complexity of rental management may present a barrier for some owners. Possible solution may be to engage a rental management company.

The DOMA Home Model: **Public release permission**

Public release of the DHM Future-Decker RFI submission is allowed.