Evaluation of Real Estate Development Potential
City-Owned Parcels, Medford Square, Medford, MA

prepared for

MassDevelopment and City of Medford
under subcontract to Gamble Associates

prepared by

ABRAMSON & ASSOCIATES, Inc.

June 25, 2019

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Mr. David Gamble
Gamble Associates
Ms. Amanda Chisholm and Ms. Christine Madore
MassDevelopment
Ms. Lauren DiLorenzo
Community Development Department, City of Medford

Re. Evaluation of Real Estate Development Potential of City-Owned Parcels, Medford Square

Dear David, Amanda, Christine, and Lauren

The following report presents our evaluation of development potential and financial implications and strategies for private development of City-Owned Parcels in Medford Square, Medford, MA.

Thank you for the opportunity to assist you in this important project.

Sincerely,

ABRAMSON & ASSOCIATES, Inc.

Barry M. Abramson
President

Evaluation Purpose

Abramson & Associates, Inc. was engaged, under sub-contract to Gamble Associates, by MassDevelopment to assist the City of Medford, MA in strategizing and evaluating potential for development of three City-owned parking lots in the Medford Square area of Medford, MA to inform consideration of potential disposition for development of these properties by means of a request for proposals process.

A well-orchestrated RFP process should clearly define the City's objectives for the project relative to desired uses, private and public parking, key design preferences, and financial outcome, setting definitive requirements and restrictions as necessary, while allowing flexibility within reasonable parameters to encourage creative solutions.

Such an RFP process, to the extent providing an attractive development opportunity and supported by a clear indication of political commitment to the effort, would be expected to draw a strong response from the development community. Proposals may vary from the assumptions used in the present evaluation, providing different, creative approaches to mixed-use program, design, parking, and, possibly, even the development sites – in terms of which of the City-owned sites are proposed for development and/or integration of private property (e.g. assemblage of sites or use of underutilized private parking resources).

The development proposals will provide a more reliable understanding of potential financial outcome to the City, reflecting any requirements the City specifies in the RFP, the specifics of the proposed projects, and the market environment in which the proposals are made – all of which may evolve over the course of the selection and negotiation process.

Development Sites

The sites, labelled A, B, and C, are depicted in the following map.

Gamble Associates

Sites A and B, each approximately one acre in size, are better configured to accommodate development than the slightly smaller Site C and are more integral to the pattern of existing development in the area. Given the City's desire to retain at least some of the existing parking resources, the consultant team determined that initial development planning should focus on Sites A and B, leaving Site C as public parking for the foreseeable future.

Redevelopment of Sites A and B would take 170 spaces out of the public parking supply. Restriping of Lot C and the potential addition of on-street spaces on Clippership Drive might yield an estimated 45 spaces, resulting in a net reduction of 125 spaces. A parking study would be required to determine how many, if any, of these spaces would need to be replaced and the most appropriate location for this.

Programming

Mixed-use programs were formulated for Sites A and B in collaboration with Gamble Associates which created corresponding conceptual designs. The programs comprise multi-family residential with ground floor commercial, based on area and site characteristics, market and financial factors of development, and planning considerations.

Multi-family rental was selected as the primary use for evaluation based on its higher likelihood of feasibility versus other potential uses, as indicated by the primacy of this use in development of comparable suburban core locations. This use also would require less parking than alternate potential uses, an important factor given the relatively constrained project sites, as well as expand the local market for Medford Square businesses.

Ground floor commercial is considered essential to activating the public realm. Such space may accommodate retail, restaurant, service, professional office, co-locator/innovation, or other uses. While commercial use will likely have a negative impact on financial feasibility, a limited amount of such space is considered essential to provide activation of target street frontages.

This use mix provides both likely outcome and a baseline for estimating potential financial viability and revenues that could accrue to the City. A request for proposals can allow or encourage proposals for alternate uses to the extent they would meet City planning objectives.

Based on comparable projects and developer input, development programs assume a residential unit mix of 50% (or slightly more) one-bedroom units with some studios and 50% (or slightly less) two-bedroom units with a small number of three-bedrooms for an average unit size in the mid-800's square feet. Fifteen percent of units affordable to households at 80% of area median income is required by zoning.

Marketability would require parking of at least 1.25 spaces per unit, with all or nearly all of parking meeting that ratio on-site, possibly supplemented with additional shared parking available to residents evenings and weekends within approximately one block.

Commercial parking demand is assumed to be satisfied on-site to the extent spaces are available in off-peak hours for residents as well as in on-street and off-street public parking.

Two alternative programs were formulated for each of the two sites, yielding four alternative combined programs ranging from 132 to 196 units, each with 6,600 square feet of ground floor commercial space. It was assumed that development of the two sites would be undertaken as a combined project to maximize economies of scale and enhance appeal to the development and investment community, thereby enhancing prospects for feasibility, supportable land sale revenue to the City, and the project's ability to accommodate program and design requirements or other benefits the City may require.

COMPARISON OF ALTERNATIVE DEVELOPMENT SCENARIOS
BUILDING PROGRAM

	A.1 + B.1	A.1 + B.2	A.2 + B.1	A.2 + B.2
Floors	**4 + 4**	**4 + 5**	**5.5 + 4**	**5.5 + 5**
Residential Units	**132**	**154**	**174**	**196**
Commercial NSF	6,600	6,600	6,600	6,600
Parking Spaces				
Structured	98	98	202	202
Surface On-Site	72	72	28	28
Off-Site Shared for 1.25 /unit	-	23	-	15
Total Parking Spaces	**170**	**193**	**230**	**245**
Spaces per Unit	1.29	1.25	1.32	1.25

Market Assessment and Financial Analysis

Market assessment indicated a reasonable target rent of $3.00 per square foot per month for market rate residential apartments with typical one-bedroom units in the low-$2,000s and typical two-bedroom units in the mid- to high-$2,000s. The average unit rent for affordable units would be approximately $1,300. Commercial space rent is estimated at $17.50 triple net. These and all other financial estimates for potential development are expressed in "un-trended" 2019 dollars.

Land for sizable multi-family residential development in Medford has been selling for $60,000 per unit or more. These projects are typically at least 200 units, on sites that are large enough to accommodate significant surface parking and/or efficient structured parking layouts (and, unlike the subject, not divided by an active roadway), have been burdened by a lower

affordable housing requirement than required under the new zoning, and for the most part relatively proximate to the MBTA rail transit.

Financial feasibility analyses were conducted for each combined program and are presented in the appendix to this report. These analyses indicate supportable land cost (also referred to as "residual land value") – what the project economics (development costs and operating income) indicate a developer could reasonably be expected to pay for land, while achieving a market rate of return necessary to incentivize development effort, risk and investment.

Feasibility/residual value analysis is based on many assumptions rendering indicated supportable land cost (potential sale revenue) subject to significant variability. Accordingly, potential land sale revenues are presented in the summary in relatively broad ranges – in each case between $15,000 and $30,000 per unit, with the smaller projects more likely to be at (or possibly even below[1]) the low end of that range and the larger programs toward the middle to high end of the range, or possibly exceeding it.

This trend reflects the following factors. Project size impacts development economics in terms of economies of scale of development and operation and required financial returns, so increased project size can significantly enhance prospects for financial feasibility and return to land. Regional and national developers typically target projects with enough critical mass to adequately reward their effort and attract "institutional" investors. 200 units is frequently mentioned as a target for comparable suburban core area sites, though a somewhat smaller number may suffice for some major developers and investors.

The cost of parking supporting the development, based on the number and efficiency of spaces provided as structured (in-building) versus surface (on-site or shared off-site) is another significant factor impacting supportable land cost.

The estimated likely land sale revenues and real estate taxes for each combined program are summarized in the following exhibit.

[1] Note that feasibility/residual value analysis for the first alternative indicated supportable land cost (i.e. land sale revenue) significanty below the range but, given the preliminary nature and vagaries of such analysis and the potential a developer might find a creative way to improve economic efficiency of the project, the above range (likely toward the low end) is considered a better basis for consideration of this alternative at this stage

COMPARISON OF ALTERNATIVE DEVELOPMENT SCENARIOS
POTENTIAL REVENUES TO CITY ($,000'S)

	A.1 + B.1	A.1 + B.2	A.2 + B.1	A.2 + B.2
Residential Units	132	154	174	196
Land Sale Revenue	$2,000 - $4,000	$2,300 - $4,600	$2,600 - $5,200	$2,900 - $5,900
Annual RE Tax	$404	$466	$524	$588

Note: All financial estimates in $2019 and are preliminary, for illustrative purposes and do not constitute appraised values

Potential to Support New Parking Deck

The alternative programs may be able to accommodate a limited amount of parking available to the public at non-peak residential hours (i.e. daytime on weekdays). This, along with proximate public parking, may enable sufficient parking to satisfy demand from users of the nearby senior center.

Should a parking study determine the need to replace a significant number of the full-time public spaces displaced by the development, it would likely be more economically efficient (and accrue to the City's financial benefit) to do this by means of construction of a new parking deck at an appropriate location rather than requiring the development to include such dedicated spaces.

The following exhibit presents a preliminary estimate of the number of new structured parking spaces whose capital cost could be supported by land sale revenues and/or by real estate taxes generated by the alternate programs.

These estimates assume use of a City-owned site and, so, do not include land cost. They also do not account for the potential funding from the Commonwealth or other sources.

In each case, a free-standing parking deck is assumed to entail hard costs of $25,000 - $30,000 per space, which industry sources report to be a reasonable hard cost for a generic, reasonably efficient public parking garage. An additional 15% for soft costs is added to the above-noted average hard cost for a total of $31,600 per space. The estimates for spaces supported by real estate taxes also assume capital costs of financing (costs of issuance and development period interest) equaling an additional 10% of hard and soft cost for a total cost of $34,800 for space. The tax-supported estimates assume debt service equaling first stabilized year real estate taxes financed over a 25-year amortization period at a 5% interest rate. Other assumptions are presented in the appendix.

It is emphasized that these estimates are preliminary in nature. A detailed parking study focused on a specific site, program, and design would be required to more reliably estimate capital cost and to estimate the ability of parking revenues to cover operating expenses. The

interest rate and other financing terms would reflect the City's bond rating and then-current financial market conditions.

COMPARISON OF ALTERNATIVE DEVELOPMENT SCENARIOS
NEW PARKING DECK SUPPORTED BY LAND SALE REVENUES AND REAL ESTATE TAXES ($,000'S)

	A.1 + B.1	A.1 + B.2	A.2 + B.1	A.2 + B.2
Floors	**4 + 4**	**4 + 5**	**5.5 + 4**	**5.5 + 5**
Residential Units	**132**	**154**	**174**	**196**
Land Sale Revenue	**$2,000 - $4,000**	**$2,300 - $4,600**	**$2,600 - $5,200**	**$2,900 - $5,900**
Annual RE Tax	**$404**	**$466**	**$524**	**$588**
Bond Financing Supported by Taxes	**$5,700**	**$6,600**	**$7,400**	**$8,300**
# Parking Deck Spaces Supported by Land Sale Revenues	**63 - 126**	**73 - 145**	**82 - 164**	**92 - 187**
# Parking Deck Spaces Supported by Taxes	**164**	**190**	**213**	**239**

Note: All financial estimates in $2019 and are preliminary, for illustrative purposes and do not constitute appraised values

ASSUMPTIONS AND LIMITING CONDITIONS

- Information provided by others for use in this analysis is believed to be reliable, but in no sense is guaranteed. All information concerning physical, market or cost data is from sources deemed reliable. No warranty or representation is made regarding the accuracy thereof, and is subject to errors, omissions, changes in price, rental, or other conditions.

- The Consultant assumes no responsibility for legal matters nor for any hidden or unapparent conditions of the property, subsoils, structure or other matters which would materially affect the marketability, developability or value of the property.

- The analysis assumes a continuation of current economic and real estate market conditions, without any substantial improvement or degradation of such economic or market conditions except as otherwise noted in the report.

- Any forecasts of the effective demand for space are based upon the best available data concerning the market, but are projected under conditions of uncertainty.

- Since any projected mathematical models are based on estimates and assumptions, which are inherently subject to uncertainty and variation depending upon evolving events, the Consultant does not represent them as results that will actually be achieved.

- The report and analyses contained therein should not be regarded as constituting an appraisal or estimate of market value. Any values discussed in this analysis are provided for illustrative purposes.

- Possession of this report or any copy or portion thereof does not carry with it the right of publication nor may the same be used for any other purpose by anyone without the previous written consent of The Consultant and, in any event, only in its entirety.

- The Consultant shall not be responsible for any unauthorized excerpting or reference to this report.

- The Consultant shall not be required to give testimony or to attend any governmental hearing regarding the subject matter of this report without agreement as to additional compensation and without sufficient notice to allow adequate preparation.

TECHNICAL APPENDIX

Program and Financial Analyses of Alternative Programs

Parking Cost Assumptions

Site A
Alternative 1
Program

Site B
Alternative 1

	Site A Alternative 1	Site B Alternative 1	Combined	
Site Area	46,135	41,015	**87,150**	
Acres	1.06	0.94	**2.00**	
Building Footprint	26,980	23,540	**50,520**	
Surface Parking Area SF	14,375	8,115	**22,490**	
# Surface Parking Spaces	44	28	**72**	
SF/Surface Space	327	290	**312**	
Other Open Area SF	4,780	9,360	**14,140**	
Adjustment Factor to back out walls from Net SF	95%	95%		
GSF Including Structured Parking	94,490	86,820	**181,310**	
GSF Structured Parking	13,380	18,400	**31,780**	
GSF Excluding Parking	81,110	68,420	**149,530**	
Residential GSF	76,150	66,420	**142,570**	
Commercial GSF	4,960	2,000	**6,960**	
# Residential Units	69	63	**132**	
Res Units NSF	59,475	53,518	**112,993**	
Avg NSF/Unit	862	849	**856**	
Res Net: Gross Efficiency	78%	81%	**79%**	
Residential Comty/Activity Space NSF	1,000	-	**1,000**	
Commercial NSF	4,712	1,900	**6,612**	
Total NSF (Excl Comty/Actvy Space); Effcy	64,187	55,418	**119,605**	80%
# Structured Parking Spaces - Enclosed At Grade	24	55	**79**	
# Structured Parking Spaces - Enclosed Partial Below Grade	-	-	**-**	
# Structured Parking Spaces - Tuck-In	19	-	**19**	
# Parking Spaces Fully Below Grade	-	-	**-**	
# Surface Spaces	44	28	**72**	
Total # On-Site Spaces Including Surface	87	83	**170**	
On-Site Spaces per Unit (not considering commercial)	1.26	1.32	**1.29**	
Residential (rental or condo)	Rental	Rental		
				effective %
Market Rate Units			**112**	84.8%
Affordable Units			**15%**	
@ 80% of AMI		15%	**20**	15.2%

Combined Development
Site A **Site B**
Alternative 1 **Alternative 1**
Illustrative Feasibility and Supportable Land Cost

Development Cost								
					Total	$/Unit	$/GSF	$/NetSF
Construction (including standard site costs except surface parking)							*(finished area)*	*(NSF units)*
Residential			$195	/Res GSF	$27,801,150	$210,615	$186	$232
Commercial Shell			$125	/Comcl GSF	$870,000	$6,591	$6	$7
Structured Parking At Grade - Enclosed			$37,500	/space	$2,962,500	$22,443	$20	$25
Structured Parking Above or Partial Below Grade - Enclosed			$42,500	/space	$0	$0	$0	$0
Structured Parking - Tuck-In			$18,750	/space	$356,250	$2,699	$2	$3
Structured Parking Fully Below Grade			$55,000	/space	$0	$0	$0	$0
Surface Parking			$4,000	/space	$288,000	$2,182	$2	$2
TI & Subdivision of Commercial Tenant Spaces			$100	/Comcl NSF	$661,200	$5,009	$4	$6
Total Hard Costs					$32,939,100	$249,539	$220	$275
Soft Costs (Incl Dev OH&Fee, Financing Costs, Lease-Up)			22.5%	of hard	$7,411,298	$56,146	$50	$62
Total Development Cost Not Including Land					**$40,350,398**	**$305,685**	**$270**	**$337**
Operating Income, Supportable Land Value								
Residential Rental			$/unit/mo	$/NSF/mo				
Gross Potential Rent								
Market Rate Units			$2,568	$3.00	$3,451,423	$26,147	$23.08	$28.86
Affordable Units	@ 80% of AMI	70% effective	$1,306	$1.53	$313,447	$2,375	$2.10	$2.62
Total Gross Potential Apartment Rent					$3,764,870	$28,522	$25.18	$31.48
Parking Rental - In-Building			$100		$0	$0	$0.00	$0.00
Other Income @ $/mo/unit			$50		$79,200	$600	$0.53	$0.66
Potential Gross Income					$3,844,070	$29,122	$25.71	$32.14
Vacancy			5%		($192,203)	($1,456)	($1.29)	($1.61)
Effective Gross Income					**$3,651,866**	**$27,666**	**$24.42**	**$30.53**
			$/unit/yr					
Operating Expenses			$5,750		$759,000	$5,750	$5.08	$6.35
RE Taxes								
Market Rate Units			$3,168		$354,816	$2,688	$2.37	$2.97
Affordable Units	@ 80% of AMI		$1,248		$24,960	$189	$0.17	$0.21
Total RE Taxes			$2,877		$379,776	$2,877	$2.54	$3.18
Total RE Tax + Oper Exps - % of EGI =			**31.2%**		**$1,138,776**	**$8,627**	**$7.62**	$9.52
NOI					**$2,513,090**	**$19,039**	**$16.81**	**$21.01**
Commercial Rental								
Gross Potential Rent			$17.50	Triple Net	$115,710	$877	$0.77	$0.97
Vacancy			7.5%		($8,678)	($66)	($0.06)	($0.07)
Effective Gross Income					$107,032	$0	$0.00	$0.00
Management & Unreimbursed Expenses			5.0%		($5,352)	($41)	($0.04)	($0.04)
NOI					$101,680	$770	$0.68	$0.85
Combined Residential & Commercial NOI					$2,614,770	$19,809	$17.49	$21.86
Total Supportable Development Cost			**6.30%**		**$41,504,291**	**$314,426**	**$277.56**	**$347.01**
SUPPORTABLE LAND COST (Supportable Dev Cost less Dev Cost Without Land)					**$1,153,894**	**$8,742**	**$7.72**	**$9.65**
Estimated RE Tax		AV/unit or NSF	Tax Rate	Tax/Uni	Tax/ NSF			
Market Rate Units		$330,000	$9.60	$3,168	$3.70	$354,816	$2,688	$2.37	$2.97
Affordable Units	@ 80% of AMI	$130,000	$9.60	$1,248	$1.46	$24,960	$189	$0.17	$0.21
Subtotal Residential		$299,697	$9.60	$2,877	$3.36				
Commercial		$202	$18.43		$3.72	$24,581	$186	$0.16	$0.21
Total						**$404,357**	**$3,063**	**$2.70**	**$3.38**

Notes and Assumptions
Above estimates of potential building values and supportable land cost for illustrative purposes and do not constitute appraised values
Estimates based on input of industry sources, experience with comparable projects prior to environmental/geotech assessment, design development
All assumptions in untrended $2019

Combined Development
Site A Site B
Alternative 1 Alternative 2
Program

	Site A	Site B	Combined	
	Alternative 1	Alternative 2		
Site Area	46,135	41,015	**87,150**	
Acres	1.06	1	**2.00**	
Building Footprint	26,980	23,540	**50,520**	
Surface Parking Area SF	14,375	8,115	**22,490**	
# Surface Parking Spaces	44	28	**72**	
SF/Surface Space	327	290	**312**	
Other Open Area SF	4,780	9,360	**14,140**	
Adjustment Factor to back out walls from Net SF	95%	1		
GSF Including Structured Parking	94,490	108,980	**203,470**	
GSF Structured Parking	13,380	18,400	**31,780**	
GSF Excluding Parking	81,110	90,580	**171,690**	
Residential GSF	76,150	88,580	**164,730**	
Commercial GSF	4,960	2,000	**6,960**	
# Residential Units	69	85	**154**	
Res Units NSF	59,475	71,977	**131,452**	
Avg NSF/Unit	862	847	**854**	
Res Net: Gross Efficiency	78%	81%	**80%**	
Residential Comty/Activity Space NSF	1,000	-	**1,000**	
Commercial NSF	4,712	1,900	**6,612**	
Total NSF (Excl Comty/Actvy Space); Effcy	64,187	73,877	**138,064**	80%
# Structured Parking Spaces - Enclosed At Grade	24	55	**79**	
# Structured Parking Spaces - Enclosed Partial Below Grade	-	-	**-**	
# Structured Parking Spaces - Tuck-In	19	-	**19**	
# Parking Spaces Fully Below Grade	-	-	**-**	
# Surface Spaces	44	28	**72**	
Total # On-Site Spaces Including Surface	87	83	**170**	
On-Site Spaces per Unit (not considering commercial)	1.26	0.98	**1.10**	
Residential (rental or condo)	Rental	Rental		
				effective %
Market Rate Units			**130**	84.4%
Affordable Units			**15%**	
@ 80% of AMI		15%	**24**	15.6%

Combined Development
Site A **Site B**
Alternative 1 **Alternative 2**
Illustrative Feasibility and Supportable Land Cost

Development Cost								
					Total	$/Unit	$/GSF	$/NetSF
Construction (including standard site costs except surface parking)							*(finished area)*	*(NSF units)*
Residential			$195	/Res GSF	$32,122,350	$208,587	$187	$233
Commercial Shell			$125	/Comcl GSF	$870,000	$5,649	$5	$6
Structured Parking At Grade - Enclosed			$37,500	/space	$2,962,500	$19,237	$17	$21
Structured Parking Above or Partial Below Grade - Enclosed			$42,500	/space	$0	$0	$0	$0
Structured Parking - Tuck-In			$18,750	/space	$356,250	$2,313	$2	$3
Structured Parking Fully Below Grade			$55,000	/space	$0	$0	$0	$0
Surface Parking			$4,000	/space	$288,000	$1,870	$2	$2
TI & Subdivision of Commercial Tenant Spaces			$100	/Comcl NSF	$661,200	$4,294	$4	$5
Total Hard Costs					$37,260,300	$241,950	$217	$270
Soft Costs (Incl Dev OH&Fee, Financing Costs, Lease-Up)			22.5%	of hard	$8,383,568	$54,439	$49	$61
Total Development Cost Not Including Land					**$45,643,868**	**$296,389**	**$266**	**$331**
Operating Income, Supportable Land Value								
Residential Rental			$/unit/mo	$/NSF/mo				
Gross Potential Rent								
Market Rate Units			$2,561	$3.00	$3,994,760	$25,940	$23.27	$28.93
Affordable Units	@ 80% of AMI	70% effective	$1,306	$1.53	$376,137	$2,442	$2.19	$2.72
Total Gross Potential Apartment Rent					$4,370,896	$28,382	$25.46	$31.66
Parking Rental - In-Building			$100		$0	$0	$0.00	$0.00
Other Income @ $/mo/unit			$50		$92,400	$600	$0.54	$0.67
Potential Gross Income					$4,463,296	$28,982	$26.00	$32.33
Vacancy			5%		($223,165)	($1,449)	($1.30)	($1.62)
Effective Gross Income					**$4,240,132**	**$27,533**	**$24.70**	**$30.71**
			$/unit/yr					
Operating Expenses			$5,750		$885,500	$5,750	$5.16	$6.41
RE Taxes								
Market Rate Units			$3,168		$411,840	$2,674	$2.40	$2.98
Affordable Units	@ 80% of AMI		$1,248		$29,952	$194	$0.17	$0.22
Total RE Taxes			$2,869		$441,792	$2,869	$2.57	$3.20
Total RE Tax + Oper Exps - % of EGI =			**31.3%**		**$1,327,292**	**$8,619**	**$7.73**	$9.61
NOI					**$2,912,840**	**$18,915**	**$16.97**	**$21.10**
Commercial Rental								
Gross Potential Rent			$17.50	Triple Net	$115,710	$751	$0.67	$0.84
Vacancy			7.5%		($8,678)	($56)	($0.05)	($0.06)
Effective Gross Income					$107,032	$0	$0.00	$0.00
Management & Unreimbursed Expenses			5.0%		($5,352)	($35)	($0.03)	($0.04)
NOI					$101,680	$660	$0.59	$0.74
Combined Residential & Commercial NOI					$3,014,520	$19,575	$17.56	$21.83
Total Supportable Development Cost			**6.30%**		**$47,849,520**	**$310,711**	**$278.70**	**$346.58**
SUPPORTABLE LAND COST (Supportable Dev Cost less Dev Cost Without Land)					**$2,205,653**	**$14,322**	**$12.85**	**$15.98**
Estimated RE Tax		AV/unit or NSF	Tax Rate	Tax/Uni	Tax/ NSF			
Market Rate Units		$330,000	$9.60	$3,168	$3.71	$411,840	$2,674	$2.40	$2.98
Affordable Units	@ 80% of AMI	$130,000	$9.60	$1,248	$1.46	$29,952	$194	$0.17	$0.22
Subtotal Residential		$298,831	$9.60	$2,869	$3.36				
Commercial		$202	$18.43		$3.72	$24,581	$160	$0.14	$0.18
Total						**$466,373**	**$3,028**	**$2.72**	**$3.38**

Notes and Assumptions

Above estimates of potential building values and supportable land cost for illustrative purposes and do not constitute appraised values

Estimates based on input of industry sources, experience with comparable projects prior to environmental/geotech assessment, design development

All assumptions in untrended $2019

Combined Development
Site A **Site B**
Alternative 2 **Alternative 1**
Program

	Site A	Site B	Combined	
	Alternative 2	Alternative 1		
Site Area	46,135	41,015	**87,150**	
Acres	1	0.94	**2.00**	
Building Footprint	42,220	23,540	**65,760**	
Surface Parking Area SF	-	8,115	**8,115**	
# Surface Parking Spaces	-	28	**28**	
SF/Surface Space	-	290	**290**	
Other Open Area SF	3,915	9,360	**13,275**	
Adjustment Factor to back out walls from Net SF	1	95%		
GSF Including Structured Parking	178,030	86,820	**264,850**	
GSF Structured Parking	56,660	18,400	**75,060**	
GSF Excluding Parking	121,370	68,420	**189,790**	
Residential GSF	116,410	66,420	**182,830**	
Commercial GSF	4,960	2,000	**6,960**	
# Residential Units	111	63	**174**	
Res Units NSF	94,953	53,518	**148,471**	
Avg NSF/Unit	855	849	**853**	
Res Net: Gross Efficiency	82%	81%	**81%**	
Residential Comty/Activity Space NSF	1,000	-	**1,000**	
Commercial NSF	4,712	1,900	**6,612**	
Total NSF (Excl Comty/Actvy Space); Effcy	99,665	55,418	**155,083**	82%
# Structured Parking Spaces - Enclosed At Grade	67	55	**122**	
# Structured Parking Spaces - Enclosed Partial Below Grade	80	-	**80**	
# Structured Parking Spaces - Tuck-In	-	-	**-**	
# Parking Spaces Fully Below Grade	-	-	**-**	
# Surface Spaces	-	28	**28**	
Total # On-Site Spaces Including Surface	147	83	**230**	
On-Site Spaces per Unit (not considering commercial)	1.32	1.32	**1.32**	
Residential (rental or condo)	Rental	Rental		
				effective %
Market Rate Units			**147**	84.5%
Affordable Units			**15%**	
@ 80% of AMI		15%	**27**	15.5%

Combined Development
Site A **Site B**
Alternative 2 **Alternative 1**
Illustrative Feasibility and Supportable Land Cost

Development Cost								
					Total	$/Unit	$/GSF	$/NetSF
Construction (including standard site costs except surface parking)							*(finished area)*	*(NSF units)*
Residential			$190	/Res GSF	$34,737,700	$199,642	$183	$224
Commercial Shell			$125	/Comcl GSF	$870,000	$5,000	$5	$6
Structured Parking At Grade - Enclosed			$37,500	/space	$4,575,000	$26,293	$24	$30
Structured Parking Above or Partial Below Grade - Enclosed			$42,500	/space	$3,400,000	$19,540	$18	$22
Structured Parking - Tuck-In			$18,750	/space	$0	$0	$0	$0
Structured Parking Fully Below Grade			$55,000	/space	$0	$0	$0	$0
Surface Parking			$4,000	/space	$112,000	$644	$1	$1
TI & Subdivision of Commercial Tenant Spaces			$100	/Comcl NSF	$661,200	$3,800	$3	$4
Total Hard Costs					$44,355,900	$254,919	$234	$286
Soft Costs (Incl Dev OH&Fee, Financing Costs, Lease-Up)			20.0%	of hard	$8,871,180	$50,984	$47	$57
Total Development Cost Not Including Land					**$53,227,080**	**$305,903**	**$280**	**$343**
Operating Income, Supportable Land Value								
Residential Rental			$/unit/mo	$/NSF/mo				
Gross Potential Rent								
Market Rate Units			$2,560	$3.00	$4,515,559	$25,951	$23.79	$29.12
Affordable Units	@ 80% of AMI	70% effective	$1,306	$1.53	$423,154	$2,432	$2.23	$2.73
Total Gross Potential Apartment Rent					$4,938,712	$28,383	$26.02	$31.85
Parking Rental - In-Building			$100		$66,000	$379	$0.35	$0.43
Other Income @ $/mo/unit			$50		$104,400	$600	$0.55	$0.67
Potential Gross Income					$5,109,112	$29,363	$26.92	$32.94
Vacancy			5%		($255,456)	($1,468)	($1.35)	($1.65)
Effective Gross Income					**$4,853,657**	**$27,895**	**$25.57**	**$31.30**
			$/unit/yr					
Operating Expenses			$5,600		$974,400	$5,600	$5.13	$6.28
RE Taxes								
Market Rate Units			$3,168		$465,696	$2,676	$2.45	$3.00
Affordable Units	@ 80% of AMI		$1,248		$33,696	$194	$0.18	$0.22
Total RE Taxes			$2,870		$499,392	$2,870	$2.63	$3.22
Total RE Tax + Oper Exps - % of EGI =			**30.4%**		**$1,473,792**	**$8,470**	**$7.77**	$9.50
NOI					**$3,379,865**	**$19,425**	**$17.81**	**$21.79**
Commercial Rental								
Gross Potential Rent			$17.50	Triple Net	$115,710	$665	$0.61	$0.75
Vacancy			7.5%		($8,678)	($50)	($0.05)	($0.06)
Effective Gross Income					$107,032	$0	$0.00	$0.00
Management & Unreimbursed Expenses			5.0%		($5,352)	($31)	($0.03)	($0.03)
NOI					$101,680	$584	$0.54	$0.66
Combined Residential & Commercial NOI					$3,481,545	$20,009	$18.34	$22.45
Total Supportable Development Cost			**6.15%**		**$56,610,485**	**$325,348**	**$298.28**	**$365.03**
SUPPORTABLE LAND COST (Supportable Dev Cost less Dev Cost Without Land)					**$3,383,405**	**$19,445**	**$17.83**	**$21.82**
Estimated RE Tax		AV/unit or NSF	Tax Rate	Tax/Uni	Tax/ NSF			
Market Rate Units		$330,000	$9.60	$3,168	$3.71	$465,696	$2,676	$2.45	$3.00
Affordable Units	@ 80% of AMI	$130,000	$9.60	$1,248	$1.46	$33,696	$194	$0.18	$0.22
Subtotal Residential		$298,966	$9.60	$2,870	$3.36				
Commercial		$202	$18.43		$3.72	$24,581	$141	$0.13	$0.16
Total						**$523,973**	**$3,011**	**$2.76**	**$3.38**

Notes and Assumptions

Above estimates of potential building values and supportable land cost for illustrative purposes and do not constitute appraised values

Estimates based on input of industry sources, experience with comparable projects prior to environmental/geotech assessment, design development

All assumptions in untrended $2019

Combined Development
Site A Alternative 2 Program
Site B Alternative 2

	Site A Alternative 2	Site B Alternative 2	Combined	
Site Area	46,135	41,015	**87,150**	
Acres	1	1	**2.00**	
Building Footprint	42,220	23,540	**65,760**	
Surface Parking Area SF	-	8,115	**8,115**	
# Surface Parking Spaces	-	28	**28**	
SF/Surface Space	-	290	**290**	
Other Open Area SF	3,915	9,360	**13,275**	
Adjustment Factor to back out walls from Net SF	1	1		
GSF Including Structured Parking	178,030	108,980	**287,010**	
GSF Structured Parking	56,660	18,400	**75,060**	
GSF Excluding Parking	121,370	90,580	**211,950**	
Residential GSF	116,410	88,580	**204,990**	
Commercial GSF	4,960	2,000	**6,960**	
# Residential Units	111	85	**196**	
Res Units NSF	94,953	71,977	**166,929**	
Avg NSF/Unit	855	847	**852**	
Res Net: Gross Efficiency	82%	81%	**81%**	
Residential Comty/Activity Space NSF	1,000	-	**1,000**	
Commercial NSF	4,712	1,900	**6,612**	
Total NSF (Excl Comty/Actvy Space); Effcy	99,665	73,877	**173,541**	82%
# Structured Parking Spaces - Enclosed At Grade	67	55	**122**	
# Structured Parking Spaces - Enclosed Partial Below Grade	80	-	**80**	
# Structured Parking Spaces - Tuck-In	-	-	**-**	
# Parking Spaces Fully Below Grade	-	-	**-**	
# Surface Spaces	-	28	**28**	
Total # On-Site Spaces Including Surface	147	83	**230**	
On-Site Spaces per Unit (not considering commercial)	1.32	0.98	**1.17**	
Residential (rental or condo)	Rental	Rental		
				effective %
Market Rate Units			**166**	84.7%
Affordable Units			**15%**	
@ 80% of AMI		15%	**30**	15.3%

Combined Development
Site A **Site B**
Alternative 2 **Alternative 2**
Illustrative Feasibility and Supportable Land Cost

Development Cost								
					Total	$/Unit	$/GSF	$/NetSF
Construction (including standard site costs except surface parking)							*(finished area)*	*(NSF units)*
Residential			$190	/Res GSF	$38,948,100	$198,715	$184	$224
Commercial Shell			$125	/Comcl GSF	$870,000	$4,439	$4	$5
Structured Parking At Grade - Enclosed			$37,500	/space	$4,575,000	$23,342	$22	$26
Structured Parking Above or Partial Below Grade - Enclosed			$42,500	/space	$3,400,000	$17,347	$16	$20
Structured Parking - Tuck-In			$18,750	/space	$0	$0	$0	$0
Structured Parking Fully Below Grade			$55,000	/space	$0	$0	$0	$0
Surface Parking			$4,000	/space	$112,000	$571	$1	$1
TI & Subdivision of Commercial Tenant Spaces			$100	/Comcl NSF	$661,200	$3,373	$3	$4
Total Hard Costs					$48,566,300	$247,787	$229	$280
Soft Costs (Incl Dev OH&Fee, Financing Costs, Lease-Up)			20.0%	of hard	$9,713,260	$49,557	$46	$56
Total Development Cost Not Including Land					**$58,279,560**	**$297,345**	**$275**	**$336**
Operating Income, Supportable Land Value								
Residential Rental			$/unit/mo	$/NSF/mo				
Gross Potential Rent								
Market Rate Units			$2,555	$3.00	$5,089,639	$25,968	$24.01	$29.33
Affordable Units	@ 80% of AMI	70% effective	$1,306	$1.53	$470,171	$2,399	$2.22	$2.71
Total Gross Potential Apartment Rent					$5,559,809	$28,366	$26.23	$32.04
Parking Rental - In-Building			$100		$43,200	$220	$0.20	$0.25
Other Income @ $/mo/unit			$50		$117,600	$600	$0.55	$0.68
Potential Gross Income					$5,720,609	$29,187	$26.99	$32.96
Vacancy			5%		($286,030)	($1,459)	($1.35)	($1.65)
Effective Gross Income					**$5,434,579**	**$27,727**	**$25.64**	**$31.32**
			$/unit/yr					
Operating Expenses			$5,600		$1,097,600	$5,600	$5.18	$6.32
RE Taxes								
Market Rate Units			$3,168		$525,888	$2,683	$2.48	$3.03
Affordable Units	@ 80% of AMI		$1,248		$37,440	$191	$0.18	$0.22
Total RE Taxes			$2,874		$563,328	$2,874	$2.66	$3.25
Total RE Tax + Oper Exps - % of EGI =			**30.6%**		**$1,660,928**	**$8,474**	**$7.84**	$9.57
NOI					**$3,773,651**	**$19,253**	**$17.80**	**$21.74**
Commercial Rental								
Gross Potential Rent			$17.50	Triple Net	$115,710	$590	$0.55	$0.67
Vacancy			7.5%		($8,678)	($44)	($0.04)	($0.05)
Effective Gross Income					$107,032	$0	$0.00	$0.00
Management & Unreimbursed Expenses			5.0%		($5,352)	($27)	($0.03)	($0.03)
NOI					$101,680	$519	$0.48	$0.59
Combined Residential & Commercial NOI					$3,875,331	$19,772	$18.28	$22.33
Total Supportable Development Cost			**6.15%**		**$63,013,515**	**$321,498**	**$297.30**	**$363.10**
SUPPORTABLE LAND COST (Supportable Dev Cost less Dev Cost Without Land)					**$4,733,955**	**$24,153**	**$22.34**	**$27.28**
Estimated RE Tax		AV/unit or NSF	Tax Rate	Tax/Unit	Tax/ NSF			
Market Rate Units		$330,000	$9.60	$3,168	$3.72	$525,888	$2,683	$2.48	$3.03
Affordable Units	@ 80% of AMI	$130,000	$9.60	$1,248	$1.47	$37,440	$191	$0.18	$0.22
Subtotal Residential		$299,388	$9.60	$2,874	$3.37				
Commercial		$202	$18.43		$3.72	$24,581	$125	$0.12	$0.14
Total						**$587,909**	**$3,000**	**$2.77**	**$3.39**

Notes and Assumptions

Above estimates of potential building values and supportable land cost for illustrative purposes and do not constitute appraised values

Estimates based on input of industry sources, experience with comparable projects prior to environmental/geotech assessment, design development

All assumptions in untrended $2019

Parking Cost Assumptions

		per space
Hard Cost (say $25,000 - $30,000/space)		$27,500
Soft @ % of Hard	15.0%	$4,125
Subtotal - Cost if funded by cash		**$31,625**
Financing Cap I & COI	10.0%	$3,163
Total - Cost if funded with bond financing		**$34,788**

Annual Debt Service	**$2,468**
Interest rate	5.00%
Amort Term	25
P&I Payment	7.10%

Note: Costs are in $2019, do not include land cost, and are preliminary in nature

MEDFORD MA

URBAN DESIGN PRINCIPLES
for surface lot redevelopment

1. GROUND FLOOR ACTIVATION: Concentrate active ground floor uses in areas that reinforce existing corridors and grow the downtown commercial core. Encourage mixed-use development that increases vitality and stimulates economic development downtown.

2. MOBILITY AND SITE CIRCULATION: Balance modes of transportation to ensure that development creates a safe and attractive place to walk and bike, as well as being accessible by car. Optimize parking, vehicular circulation and street grid connections around the property.

3. PARKING: Ensure sufficient parking is available on site for the development's needs, possibly supplemented with shared parking opportunities on proximate sites. Shield parking from the public way by placing it behind buildings or attractively screened. Ensure convenient parking continues to be available to serve current users of public parking with a combination of shared use on-site and off-site.

4. OPEN SPACE CONNECTIONS: Enhance connections between the city-owned properties and the streets surrounding Medford Square to the Mystic River. Provide open spaces that promote public life through creative place-making and public realm improvements that leverage the presence of the adjacent riverfront park. Include outdoor seating areas, pathways and landscape buffers within and around the development that are resilient, attractive and increase the quality of life for residents.

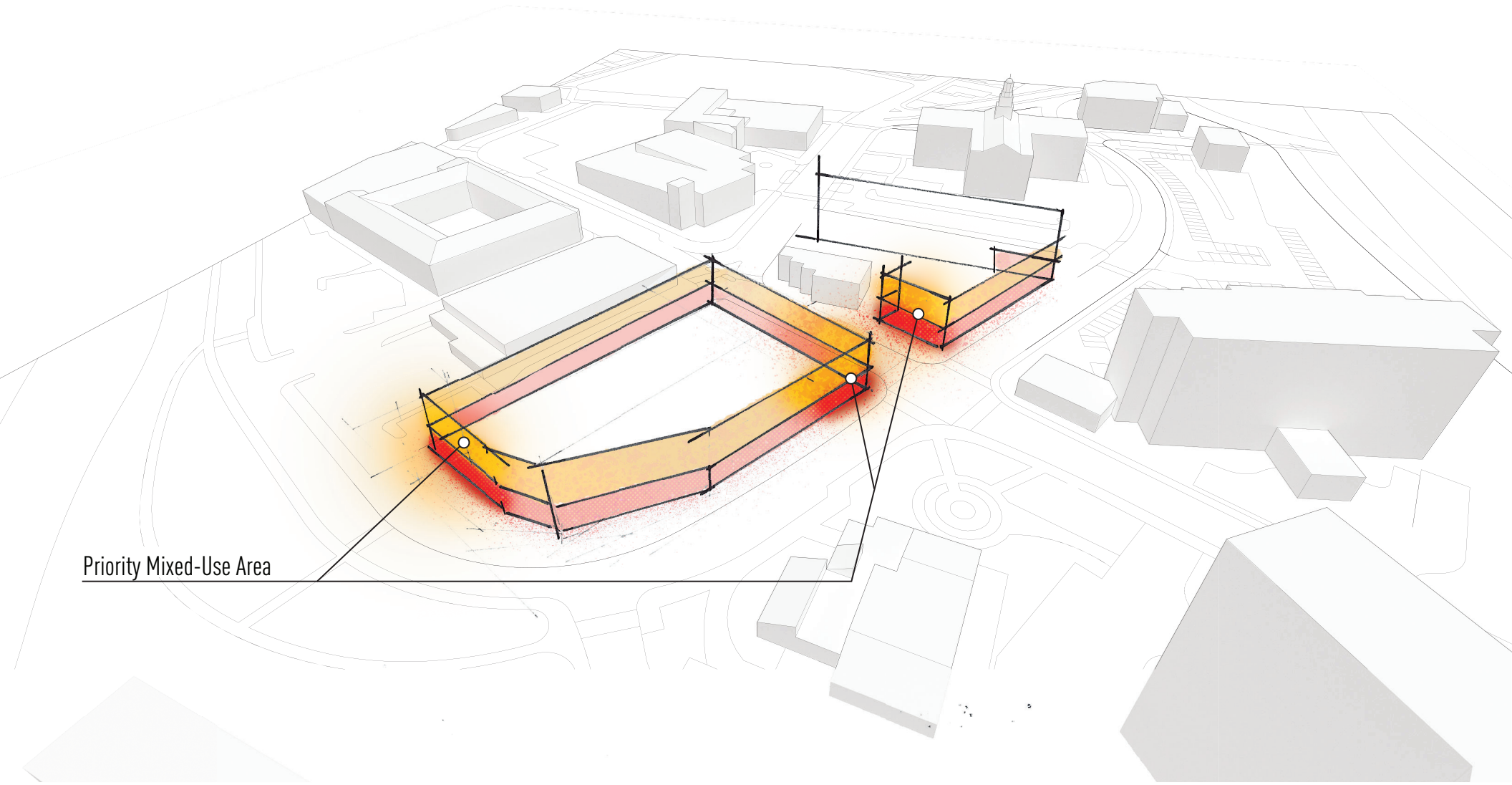
5. BUILDING SCALE: Address scale discrepancies with surrounding buildings by transitioning building heights and using building setbacks and step-backs to ensure context-sensitive, mixed-use development by right.

**These urban design principles reflect the community goals expressed in the Medford Square Master Plan (MAPC, 2017) as well as site-specific analysis of redevelopment potential on the town-owned parcels.*

Design Guidelines

1. GROUND FLOOR ACTIVATION

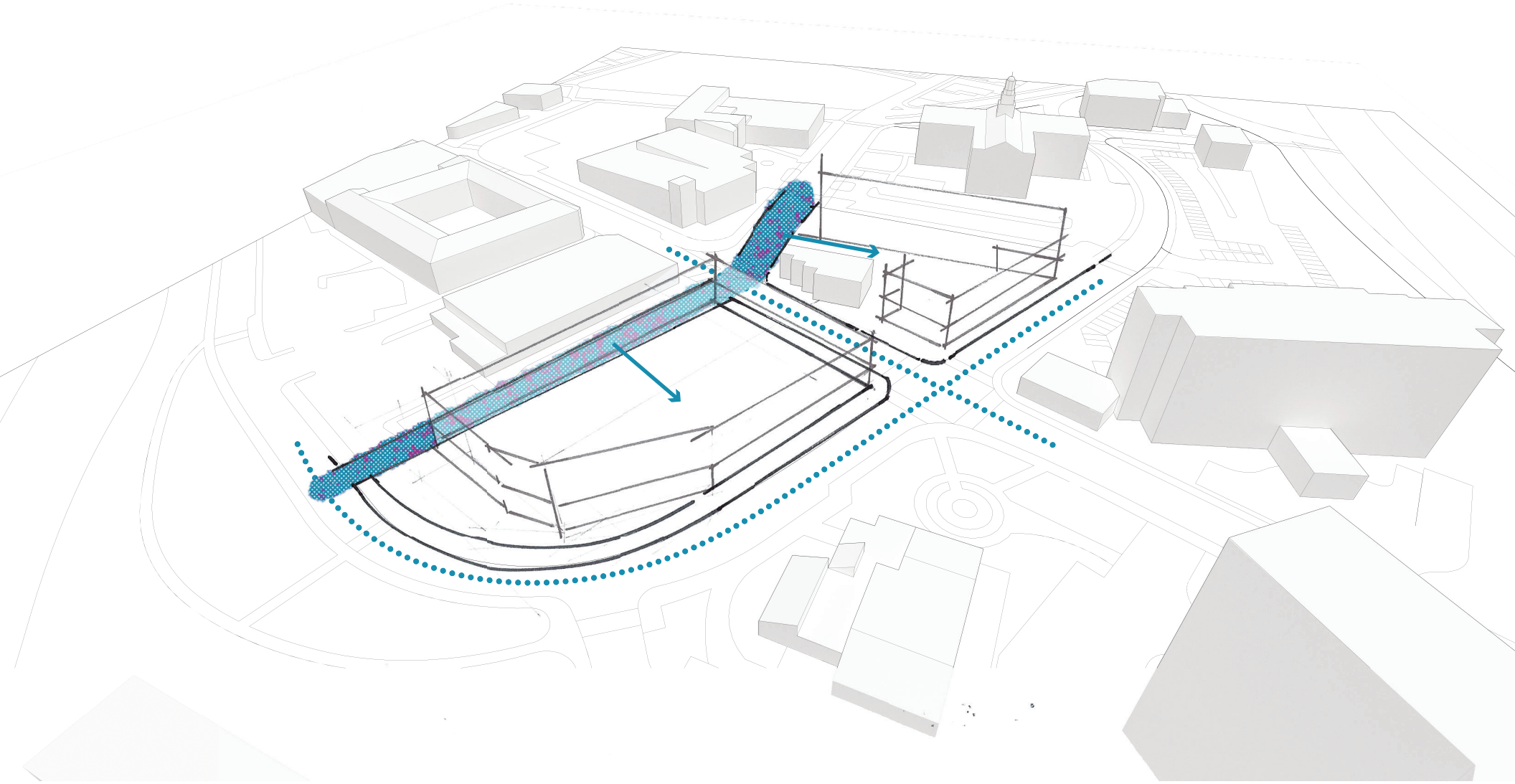
Concentrate active ground floor uses in areas that reinforce existing corridors and grow the downtown commercial core. Encourage mixed-use development that increases vitality and stimulates economic development downtown.



There Diagrams are for conceptual purposes. Actual building massing will vary.

2. MOBILITY AND SITE CIRCULATION

Balance modes of transportation to ensure that development creates a safe and attractive place to walk and bike, as well as being accessible by car. Optimize parking, vehicular circulation and street grid connections around the property.



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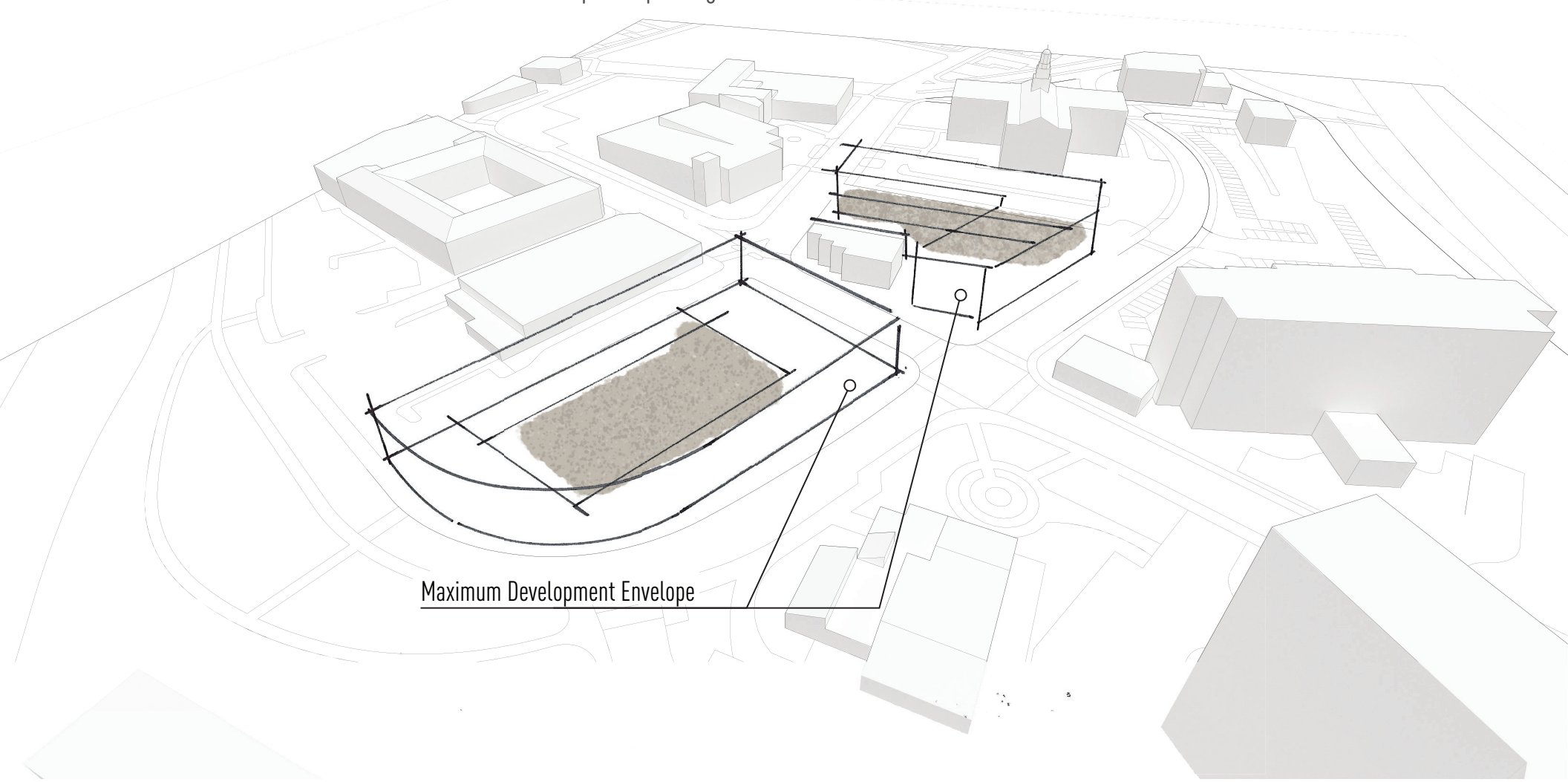
3. PARKING

Ensure sufficient parking is available on site for the development's needs, possibly supplemented with shared parking opportunities on proximate sites. Shield parking from the public way by placing it behind buildings or attractively screened. Ensure convenient parking continues to be available to serve current users of public parking with a combination of shared use on-site and off-site.



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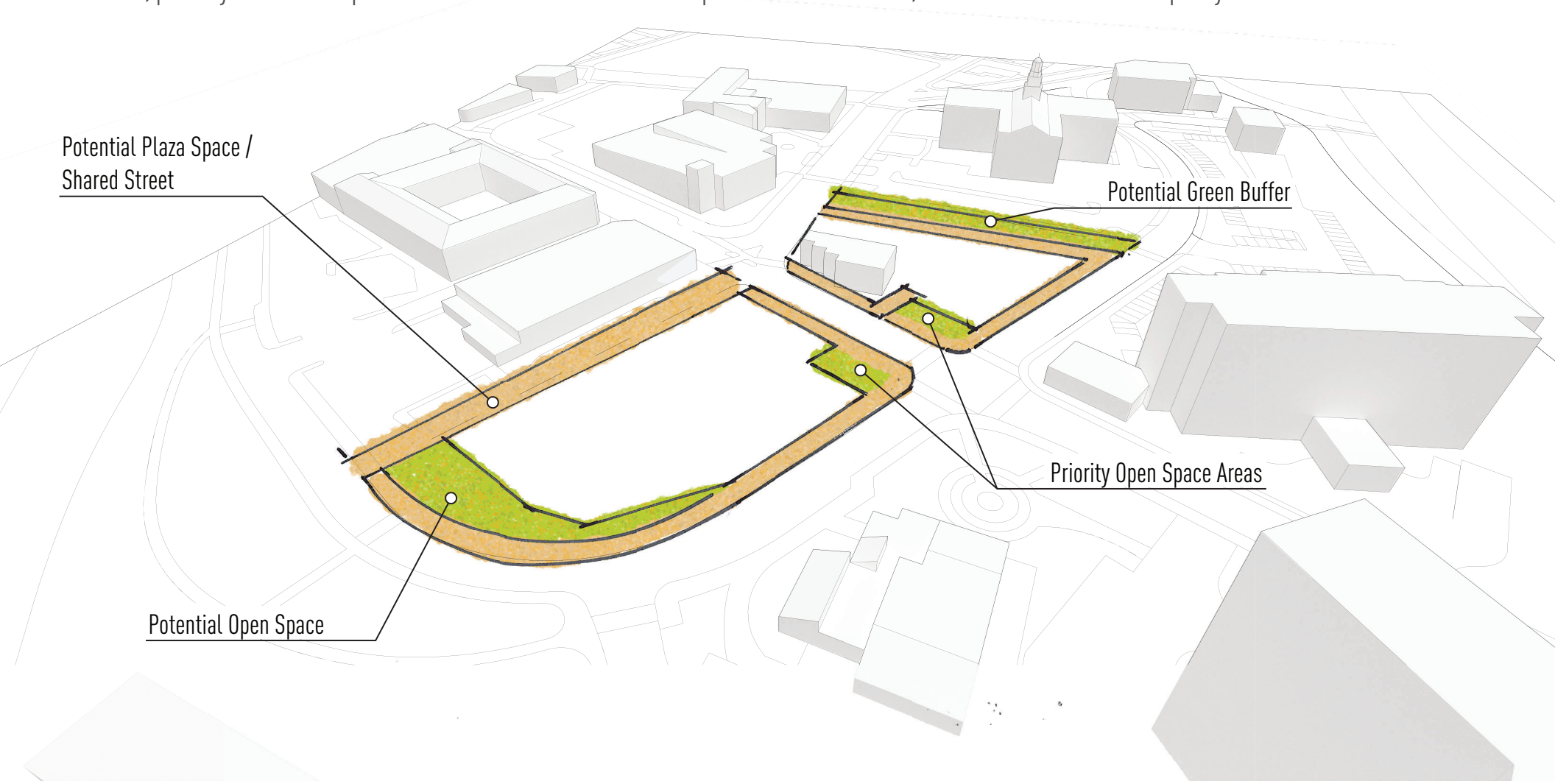
4. OPEN SPACE CONNECTIONS

Enhance connections between the city-owned properties and the streets surrounding Medford Square to the Mystic River. Provide open spaces that promote public life through creative place-making and public realm improvements that leverage the presence of the adjacent riverfront park. Include outdoor seating areas, pathways and landscape buffers within and around the development that are resilient, attractive and increase the quality of life for residents.



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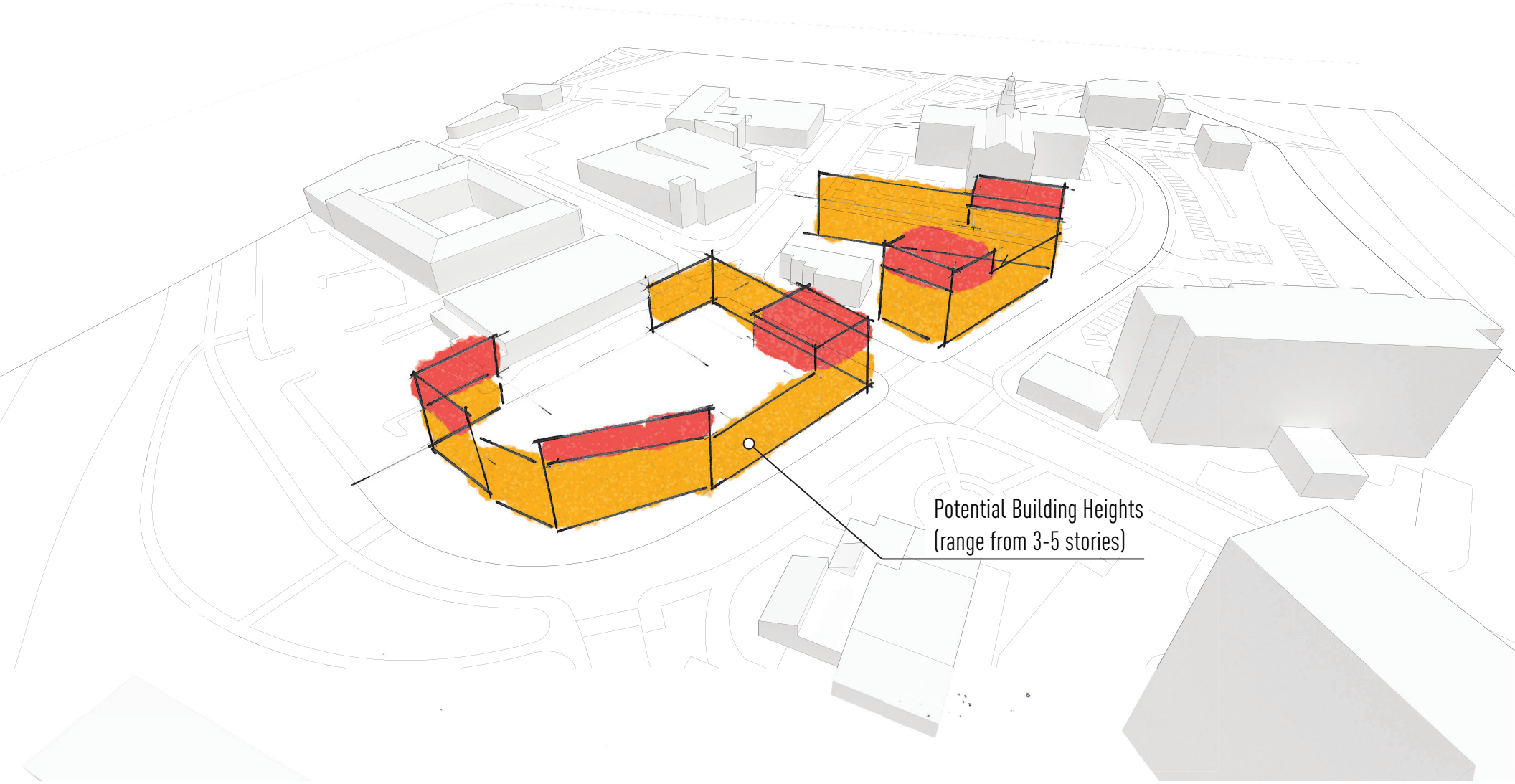
5. BUILDING SCALE

Address scale discrepancies with surrounding buildings by transitioning building heights and using building setbacks and step-backs to ensure context-sensitive, mixed-use development by right.



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