



VISION HAVERHILL —2035—→

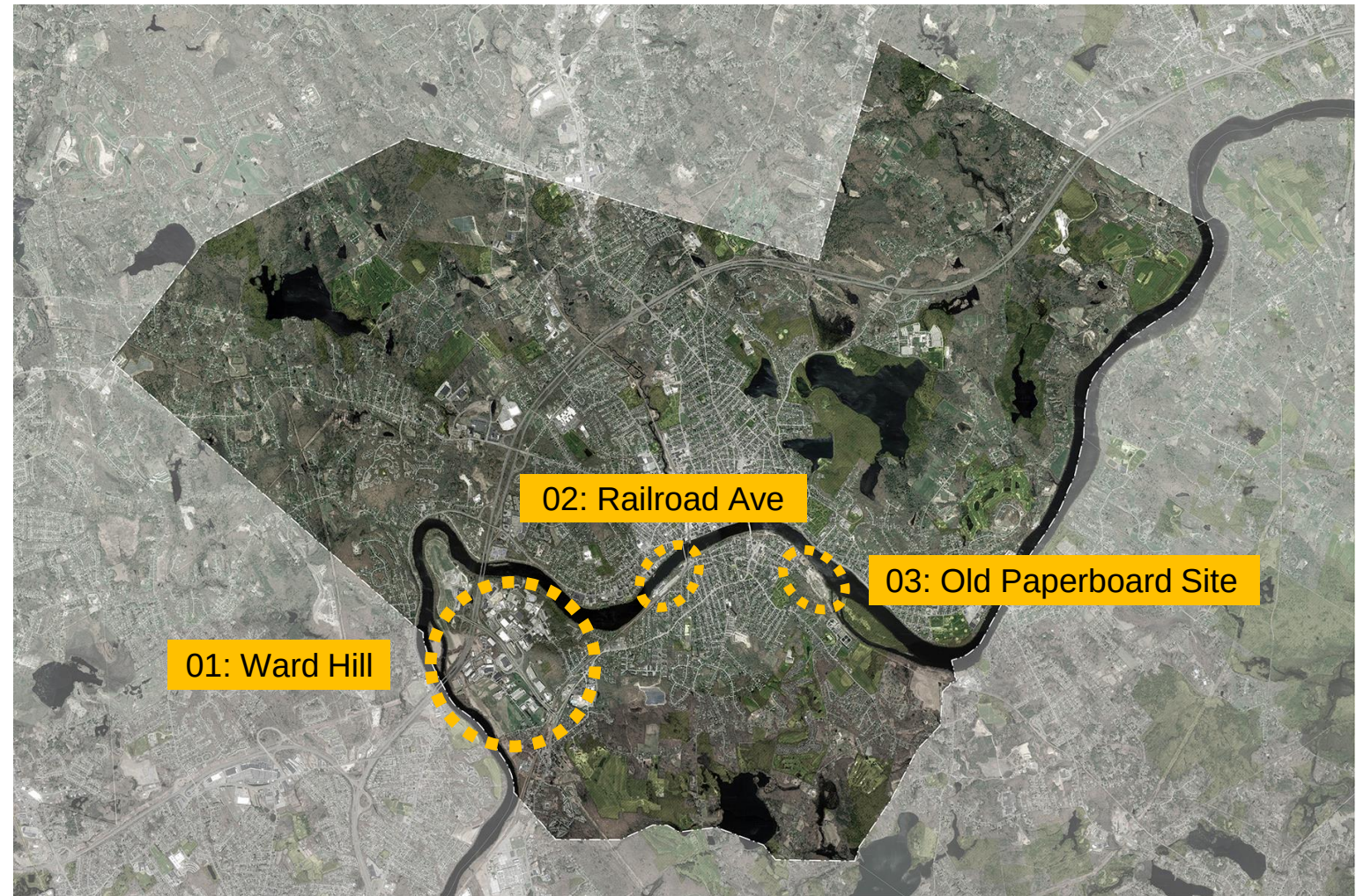
Steering Committee Meeting
October 9, 2019

Test Fits Sites

Site 1: **Ward Hill Business Park**

Site 2: **North Side of Railroad Ave**

Site 3: **Old Paperboard Site Area**



Ward Hill Test Fits

Baseline District: BP (Business Park)

Scenario Analysis Methodology:
District FAR

Use:
Commercial and Industrial



Ward Hill Test Fits

Test-fit Sites:

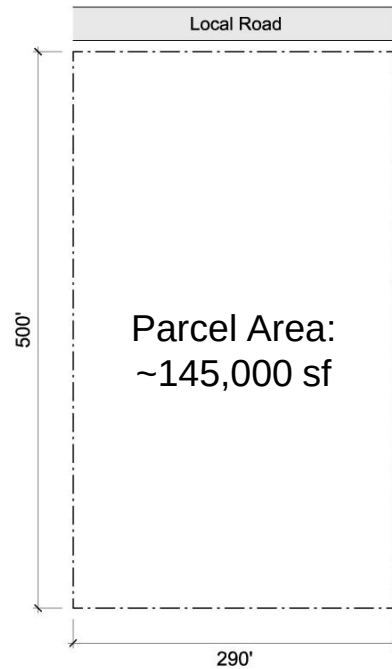
1. Generic Small Site (based on avg small site)
2. Generic Large Site (based on avg large site)

Zoning Regulations	Existing Zoning	Test Fits
<u>Parking Ratio</u>		
Industrial	1 / 600 gsf to 1 / 1000 gsf	1 / 1600 gsf
Commercial	1 / 300 gsf	1 / 500 gsf
Max Height	50'	85'
Min Green Space	20%	10-15%
<u>Setbacks</u>		
Front	Min 40'	Max 10'
Side	Min 15'	Min 15'
Rear	Min 25'	Min 25'

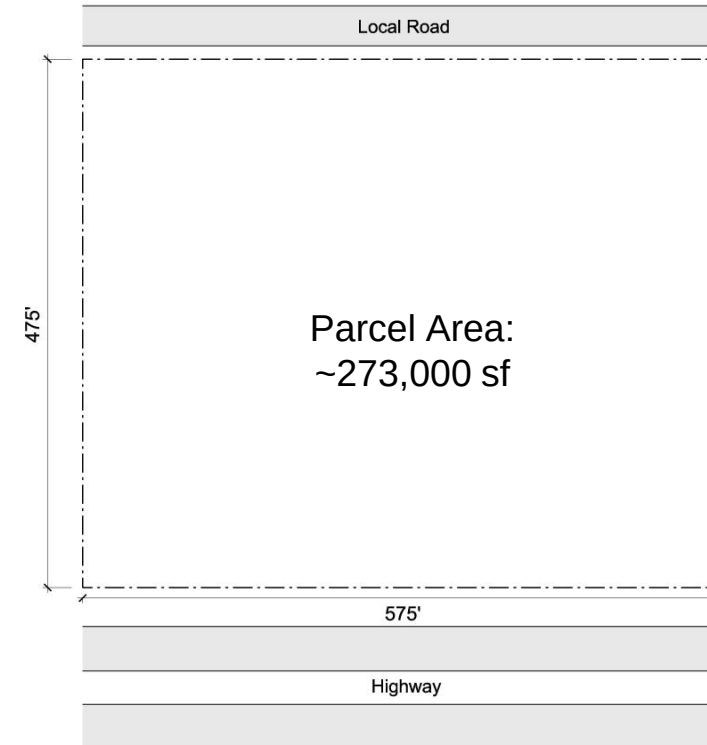
Note: Red indicates existing dimensional regulations that are exceeded in test fits



Generic Sites in District for Test Fits

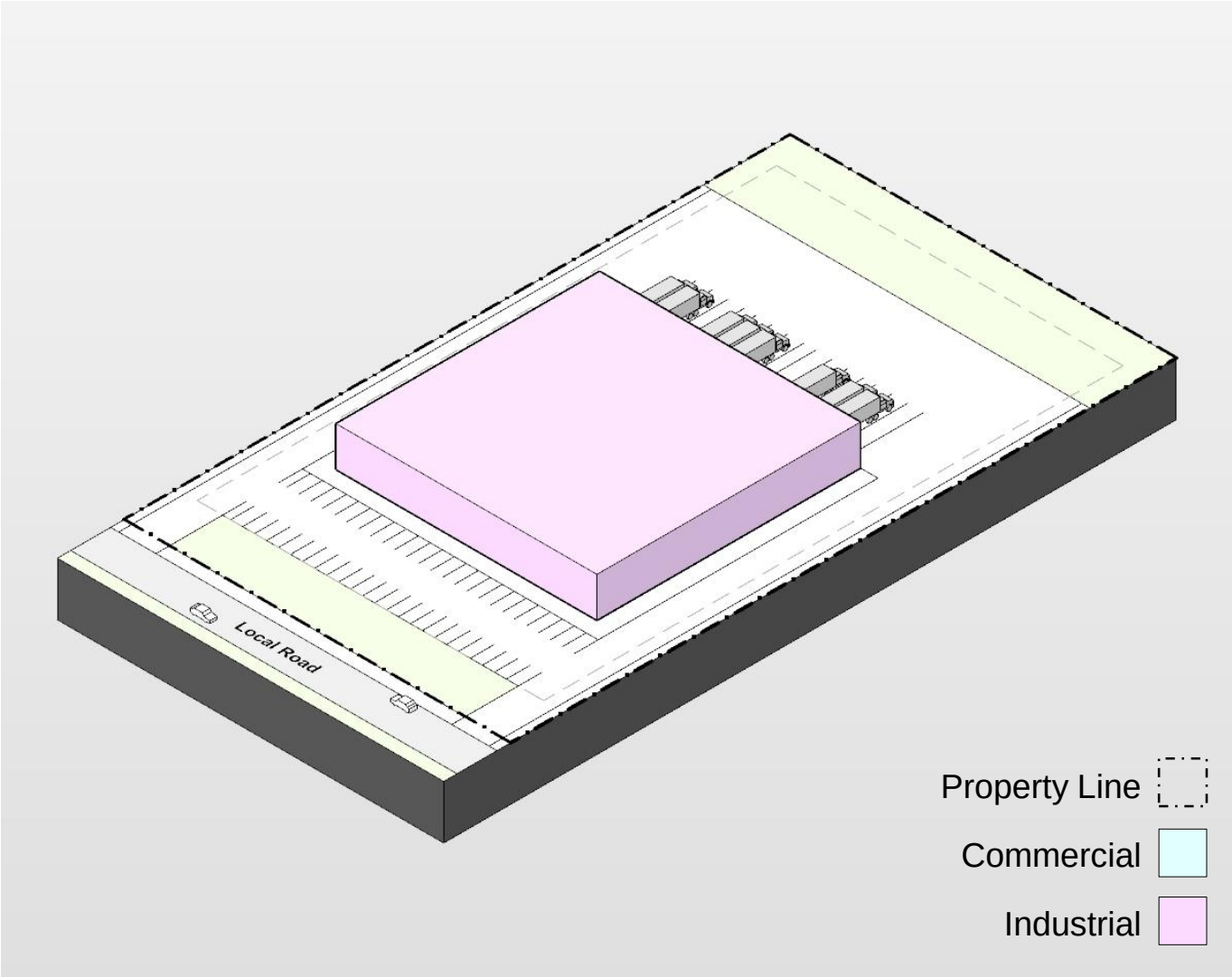


Generic Small Site



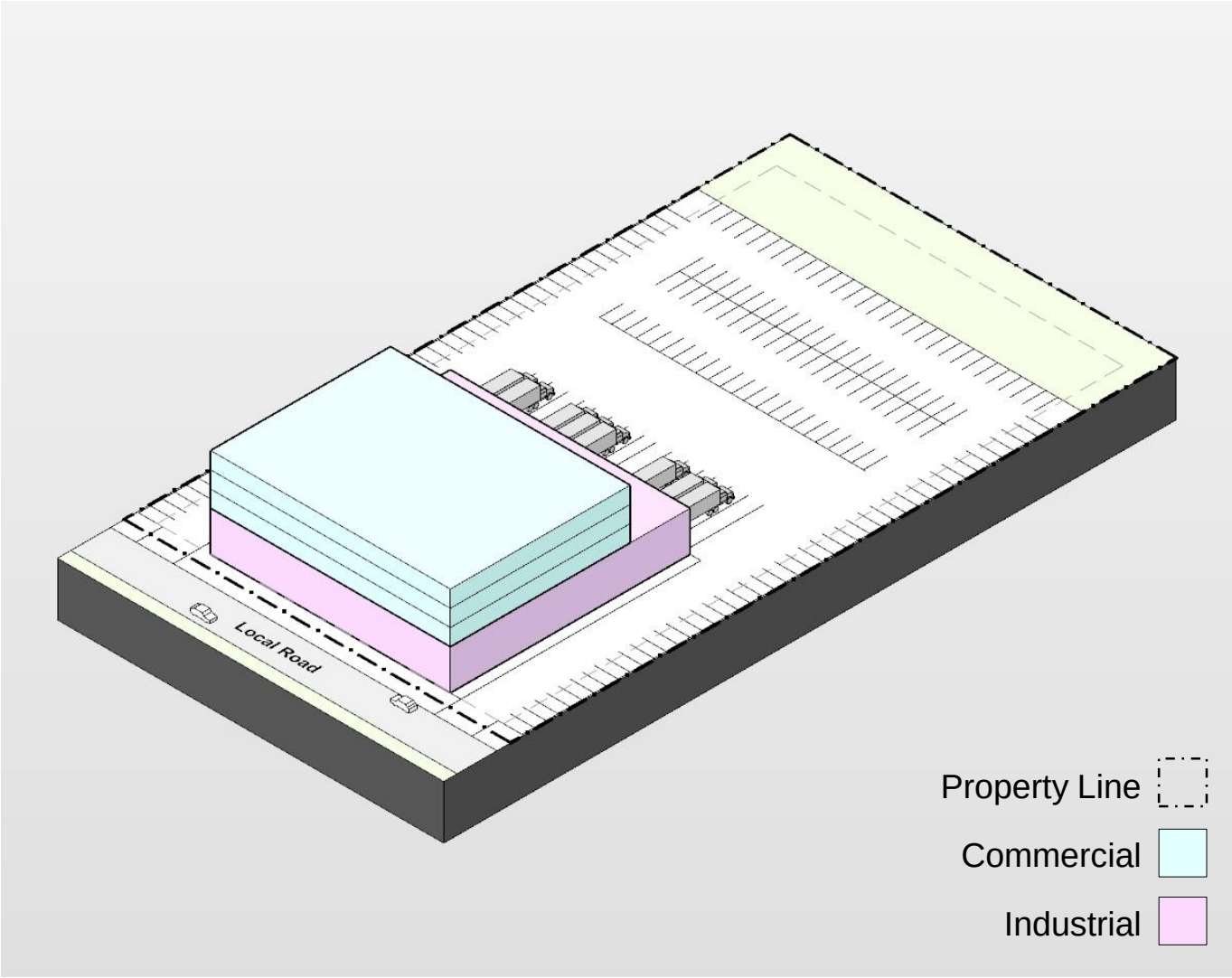
Generic Large Site

Generic Small Site - Industrial Use under Existing Zoning



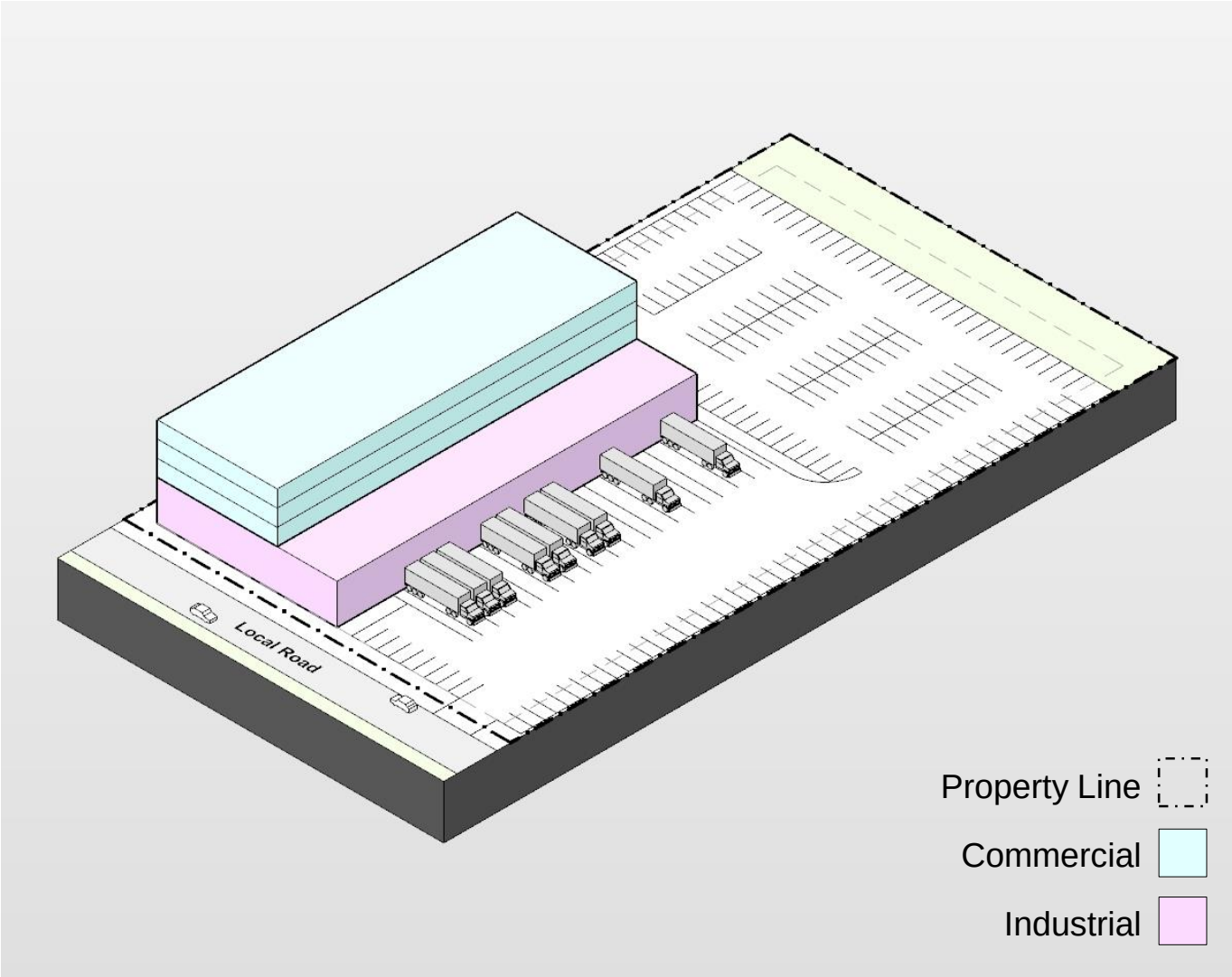
Small Site - Existing	Count
Industrial	38,800 gsf
Parking Ratio	Assumed 1 / 800 gsf
Total Parking Spaces	48
Height	1 story
Green Space	20%
FAR	0.25

Generic Small Site - Scenario A



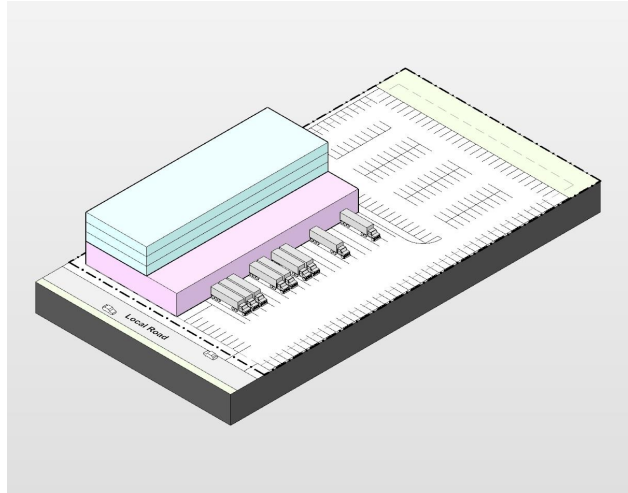
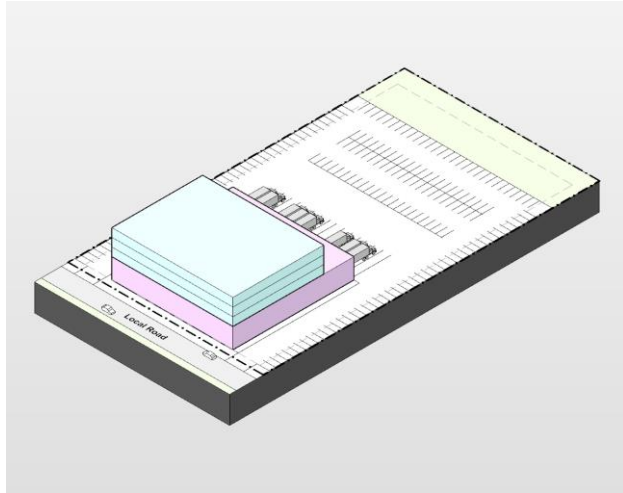
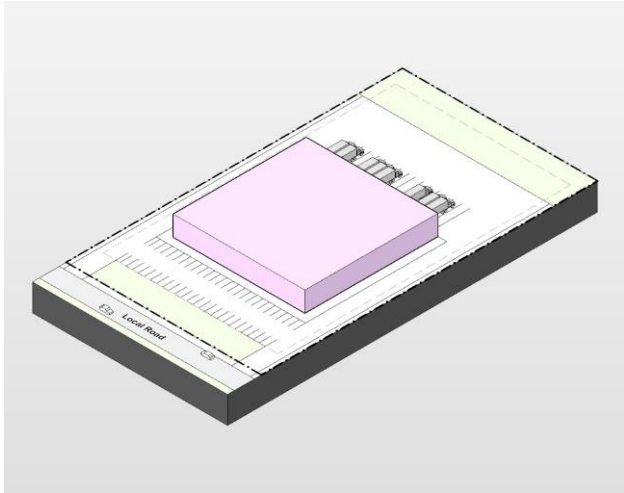
Small Site - Scenario A	Count
Commercial	72,900 gsf
Parking Required	146 Spaces
High Bay Industrial	32,400 gsf
Parking Required	21 Spaces
Height	4 stories, 75'
Total Gross Floor Area	105,300 gsf
Total Parking Spaces	167 Spaces
Green Space	15%
FAR	0.73

Generic Small Site - Scenario B



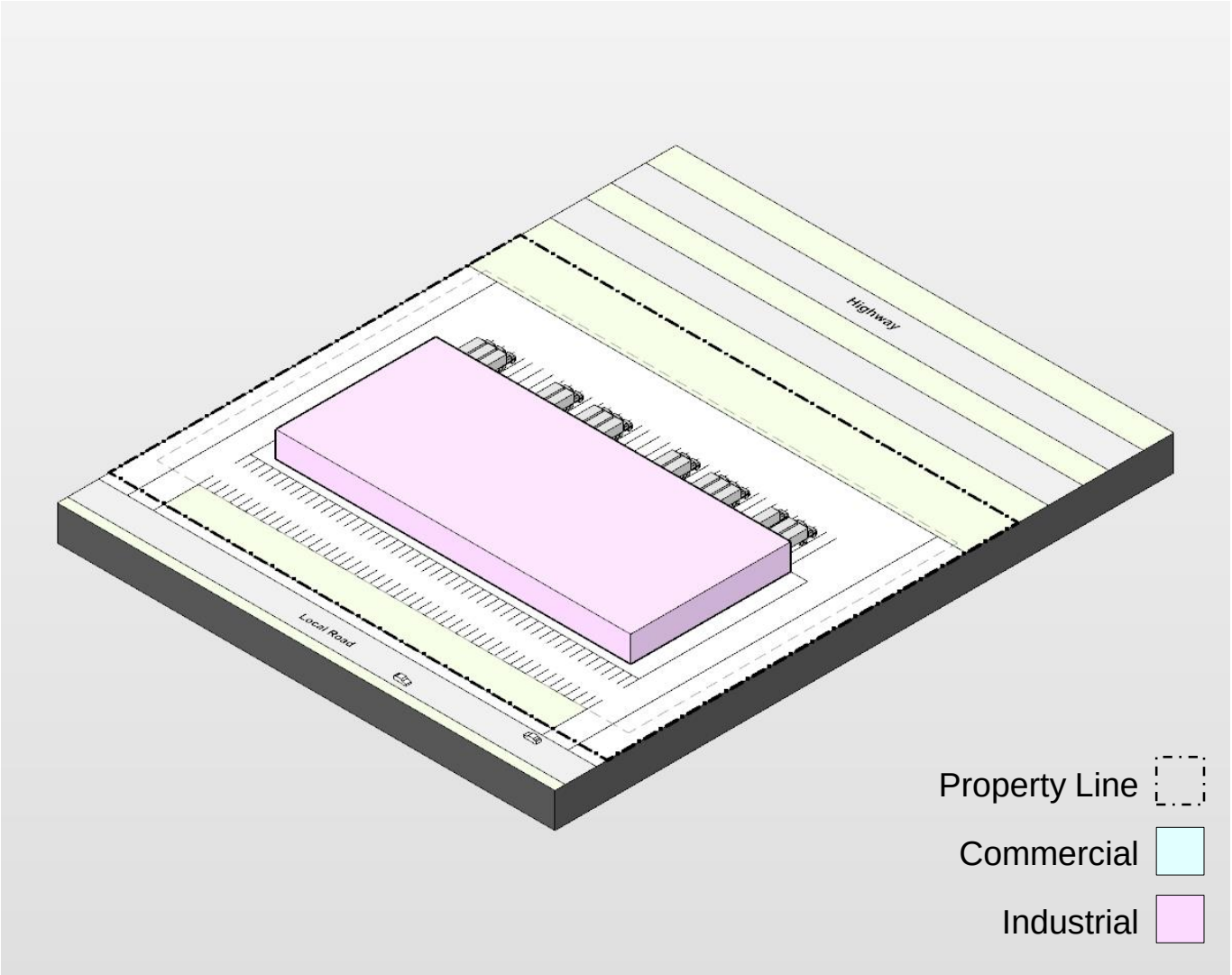
Small Site - Scenario B	Count
Commercial	72,900 gsf
Parking Required	146 Spaces
High Bay Industrial	36,450 gsf
Parking Required	23 Spaces
Height	4 stories, 75'
Total Gross Floor Area	109,350 gsf
Total Parking Spaces	169 Spaces
Green Space	10%
FAR	0.75

Generic Small Site - Summary



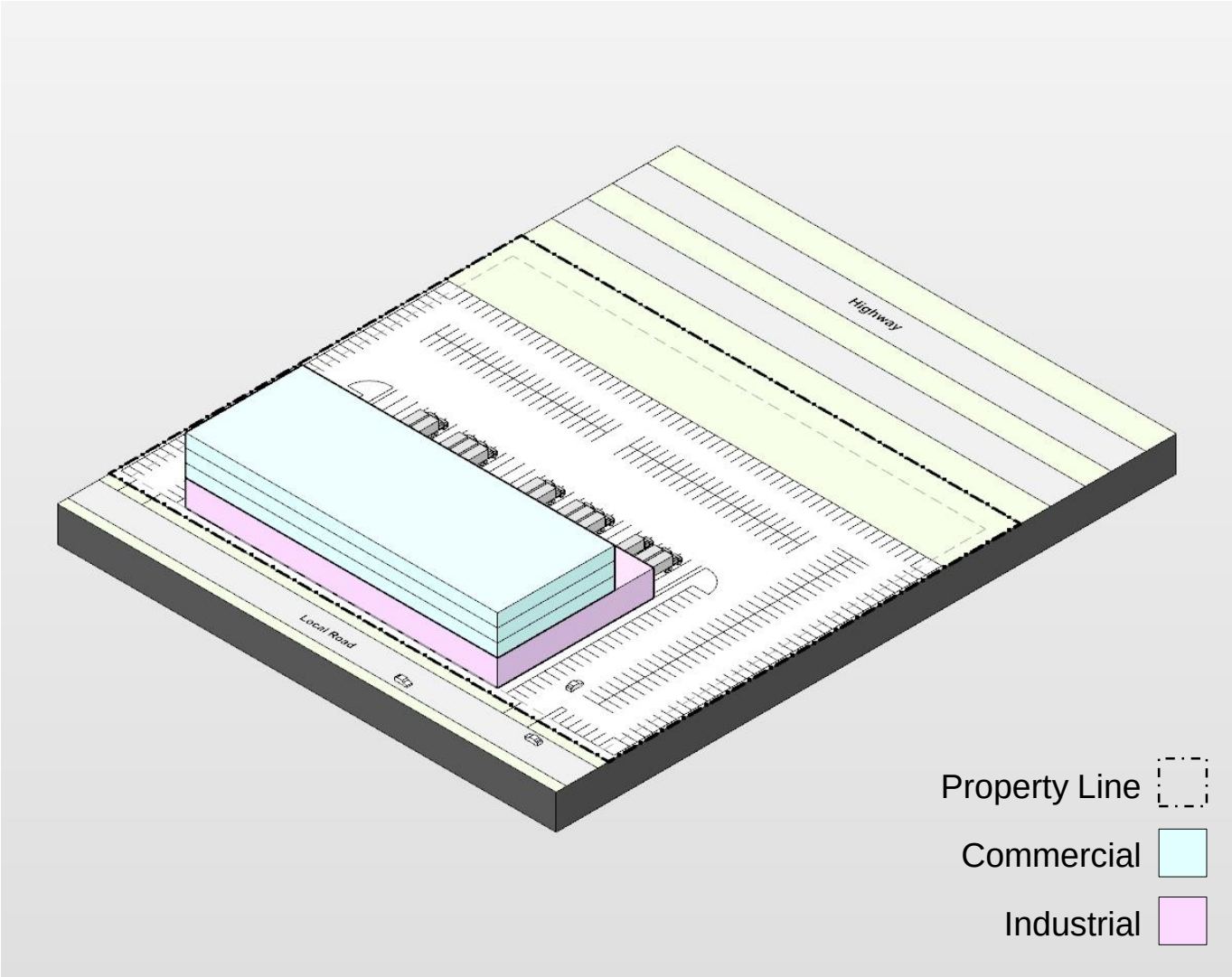
Generic Small Site	Industrial Use under Existing Zoning	Scenario A	Scenario B
Height	1 story	4 stories, 75'	4 stories 75'
Total Gross Floor Area	38,800 gsf	105,300 gsf	109,350 gsf
Total Parking Spaces	48 Spaces	167 Spaces	169 Spaces
Green Space	20%	15%	10%
FAR	0.25	0.73	0.75

Generic Large Site - Industrial Use under Existing Zoning



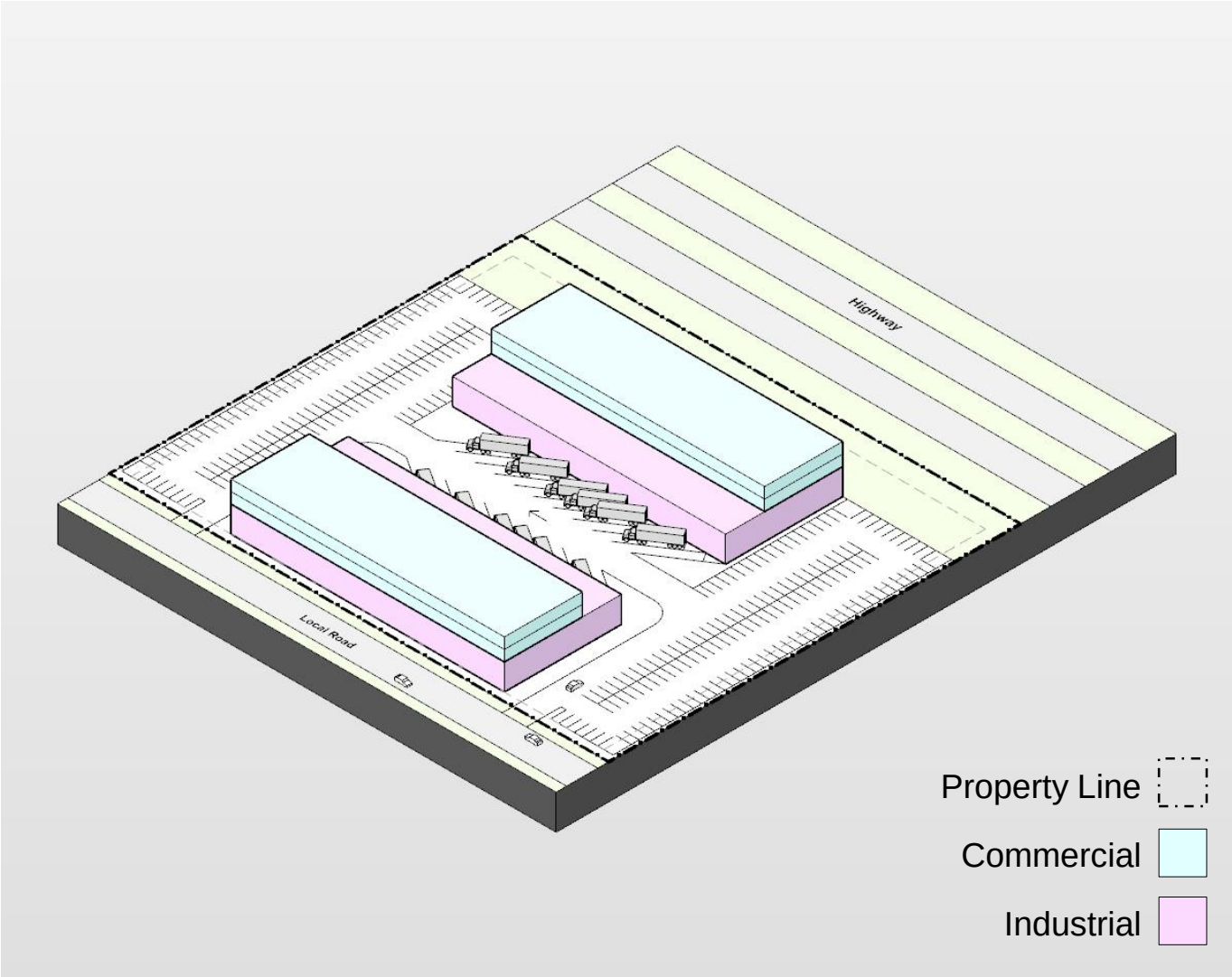
Small Site - Existing	Count
Industrial	75,800 gsf
Parking Ratio	Assumed 1 / 800 gsf
Total Parking Spaces	95
Height	1 story
Green Space	20%
FAR	0.28

Generic Large Site - Scenario A



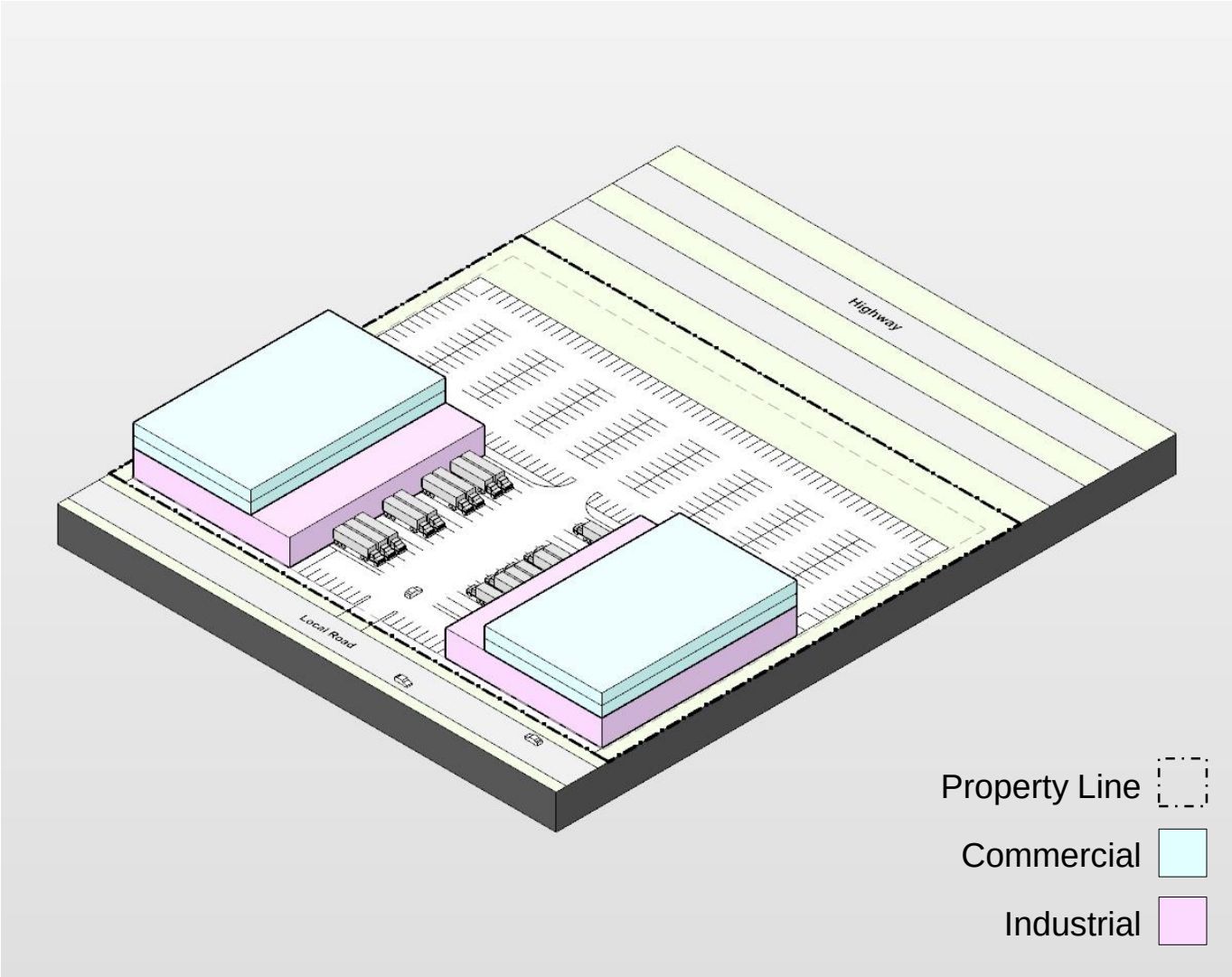
Large Site - Scenario B	Count
Commercial	145,800 gsf
Parking Required	291 Spaces
High Bay Industrial	64,800 gsf
Parking Required	40 Spaces
Height	4 stories, 75'
Total Gross Floor Area	210,600 gsf
Total Parking Spaces	331 Spaces
Green Space	20%
FAR	0.77

Generic Large Site - Scenario B



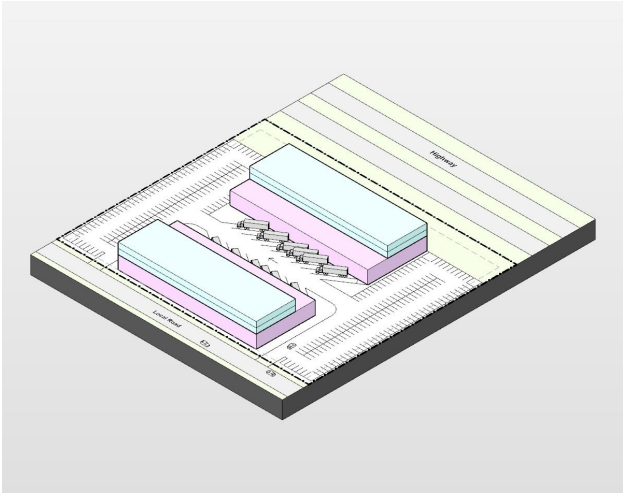
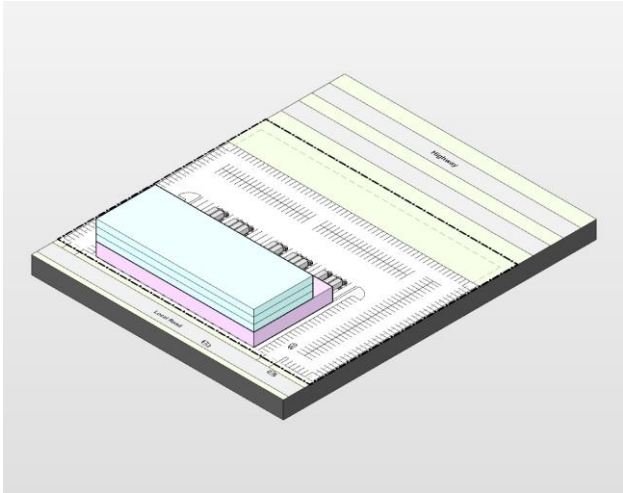
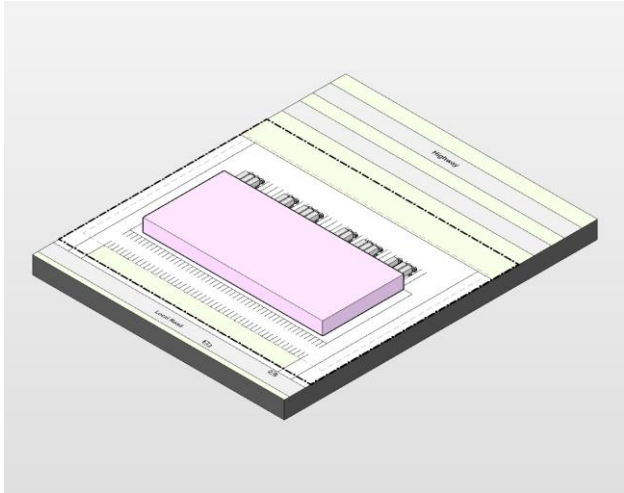
Large Site - Scenario B	Count
Commercial	113,400 gsf
Parking Required	224 Spaces
High Bay Industrial	85,000 gsf
Parking Required	52 Spaces
Height	3 stories, 60'
Total Gross Floor Area	198,450 gsf
Total Parking Spaces	276 Spaces
Green Space	15%
FAR	0.73

Generic Large Site - Scenario C



Large Site - Scenario C	Count
Commercial	121,500 gsf
Parking Required	240 Spaces
High Bay Industrial	81,000 gsf
Parking Required	48 Spaces
Height	3 stories, 60'
Total Gross Floor Area	202,500 gsf
Total Parking Spaces	288 Spaces
Green Space	15%
FAR	0.74

Generic Large Site - Summary



Generic Large Site	Industrial Use under Existing Zoning	Scenario A	Scenario B
Height	1 story	4 stories, 75'	3 stories, 60'
Total Gross Floor Area	75,800 gsf	210,600 gsf	198,450 gsf
Total Parking Spaces	95 Spaces	331 Spaces	276 Spaces
Green Space	20%	20%	15%
FAR	0.28	0.77	0.73

North Side of Railroad Ave Test Fits

Baseline District: WD-H

(Waterfront District, North Side of Railroad Ave)

Scenario Analysis Methodology:

District FAR

Use:

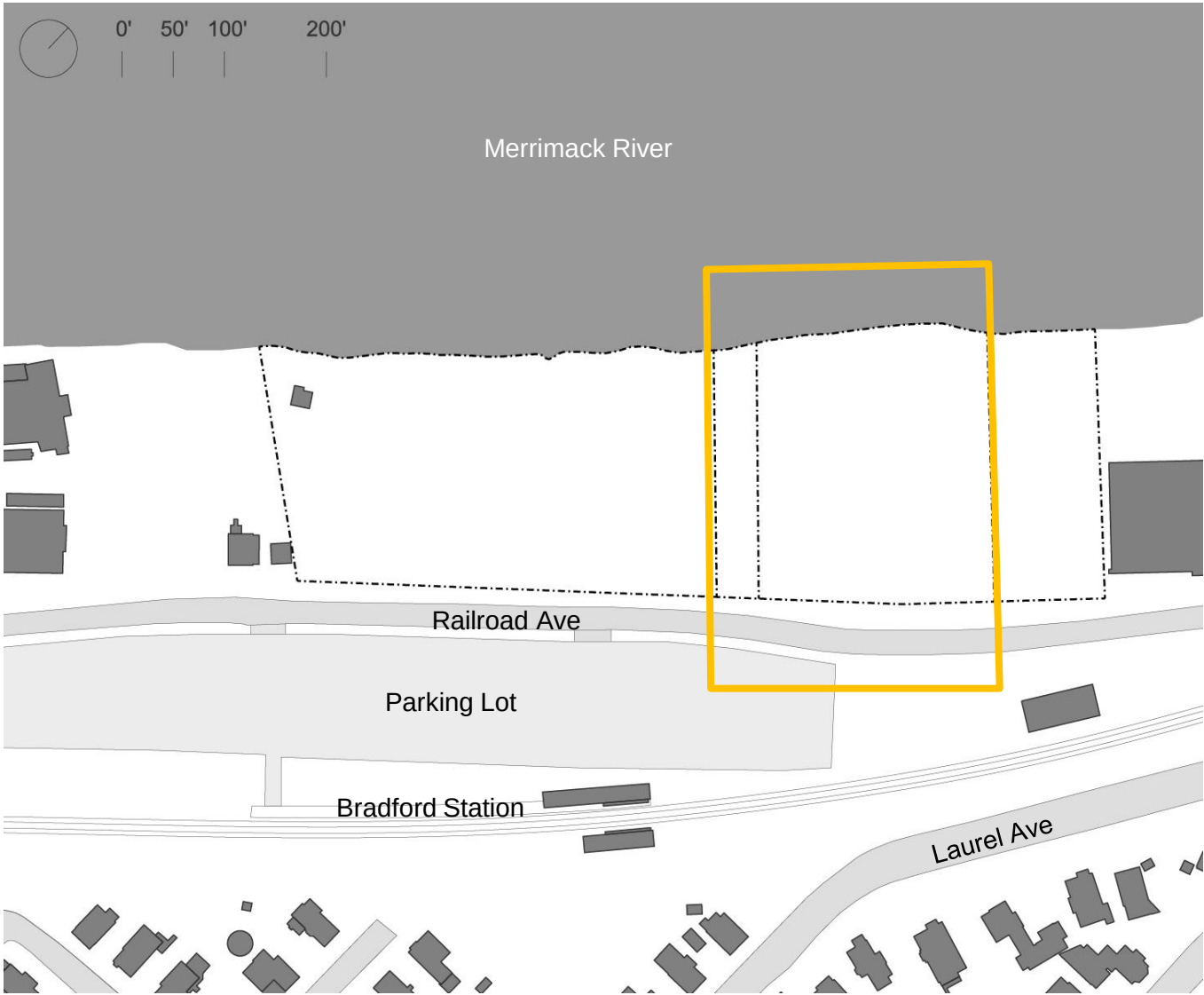
Residential (and potential ground floor retail)



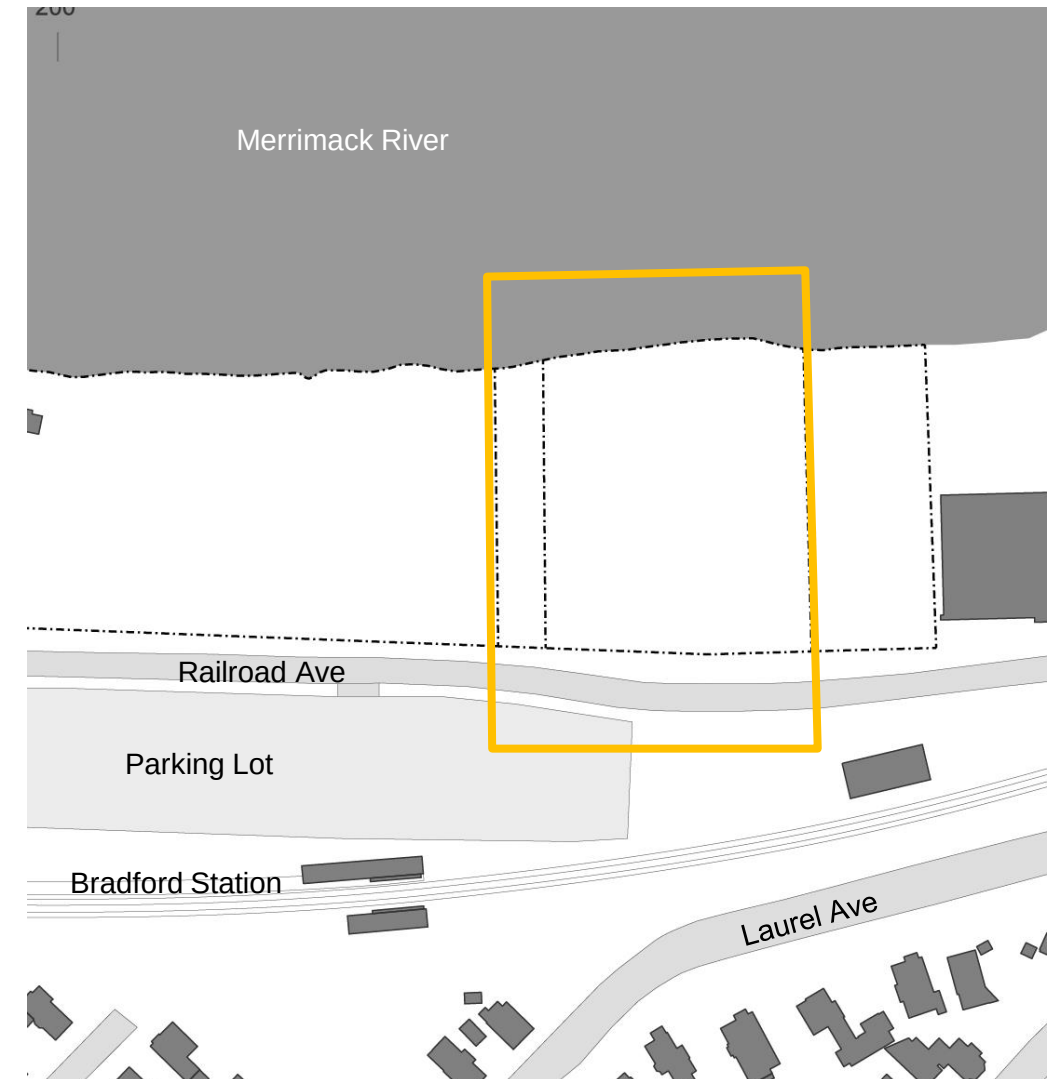
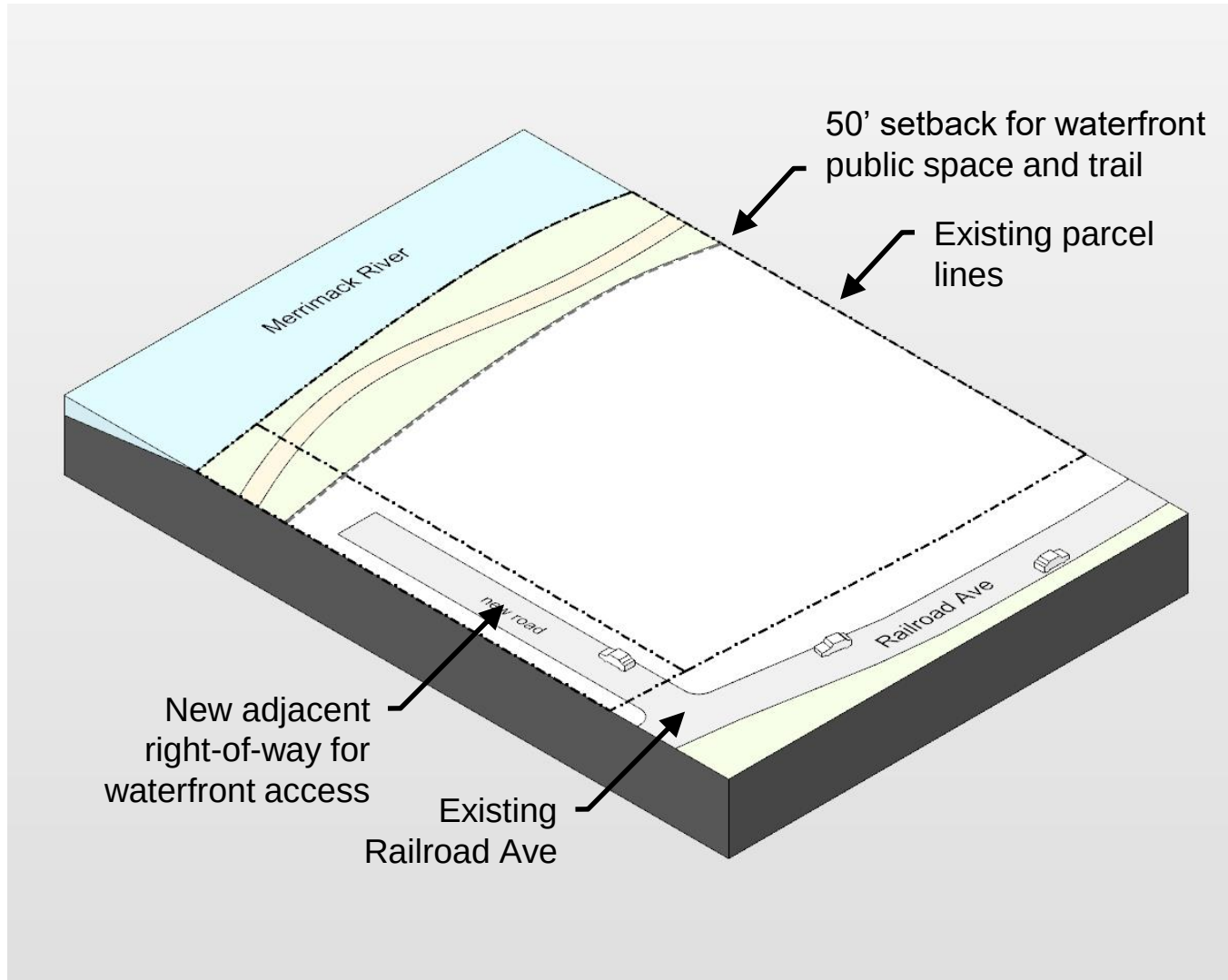
North Side of Railroad Ave Test Fits

Test-fit Site: Transect Site

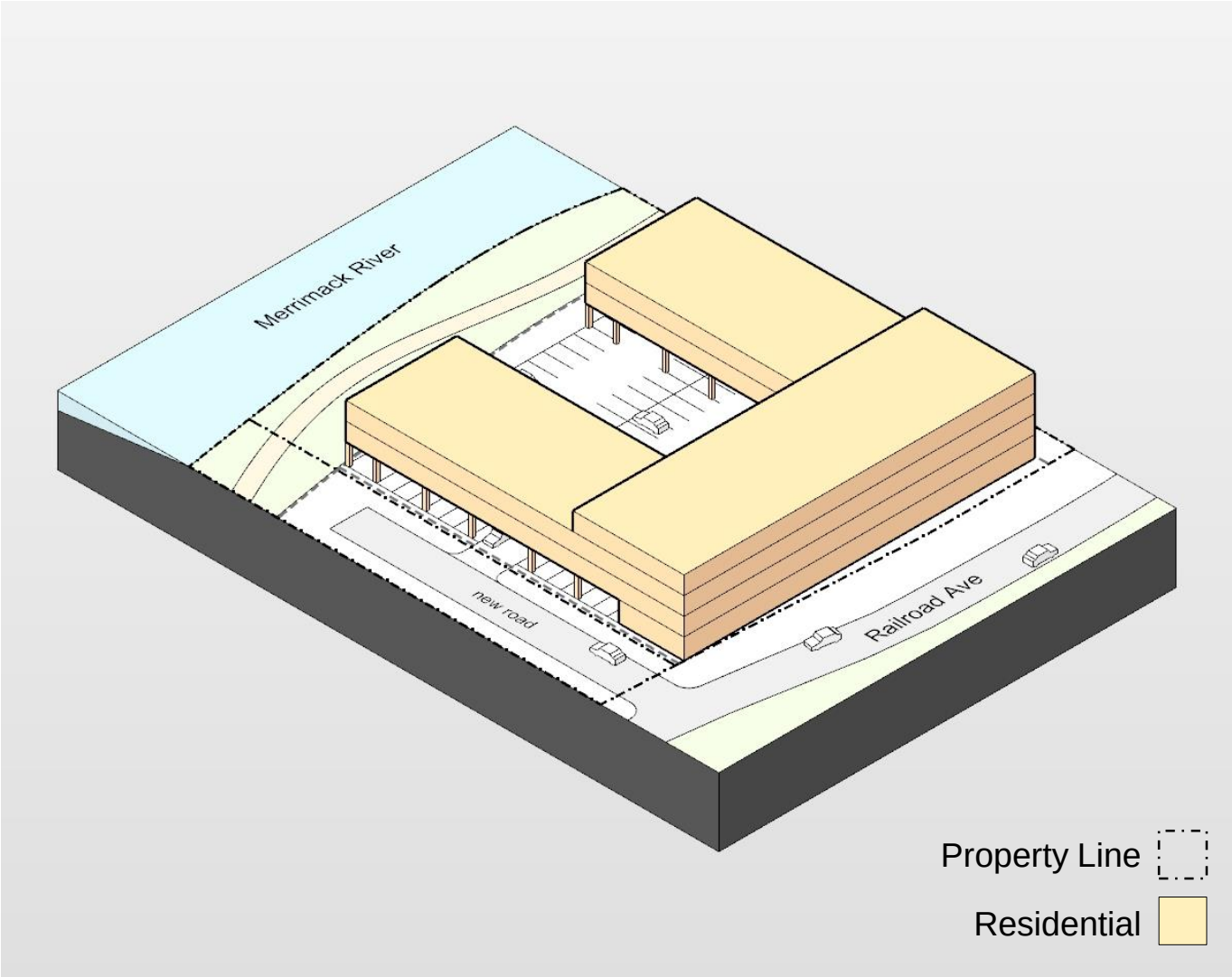
Zoning Regulations	Existing Zoning	Test Fits
Residential Parking Ratio	1.5 Spaces / Unit	1.5 Spaces / Unit
Retail Parking Ratio	1 / 200 gsf	1 / 200 gsf
Max Height	74'	74'
Easement setback from Merrimack	15' min	50' shown
No other dimensional regulations (§ 255-166: B)		



Transect Site for FAR Test Fits

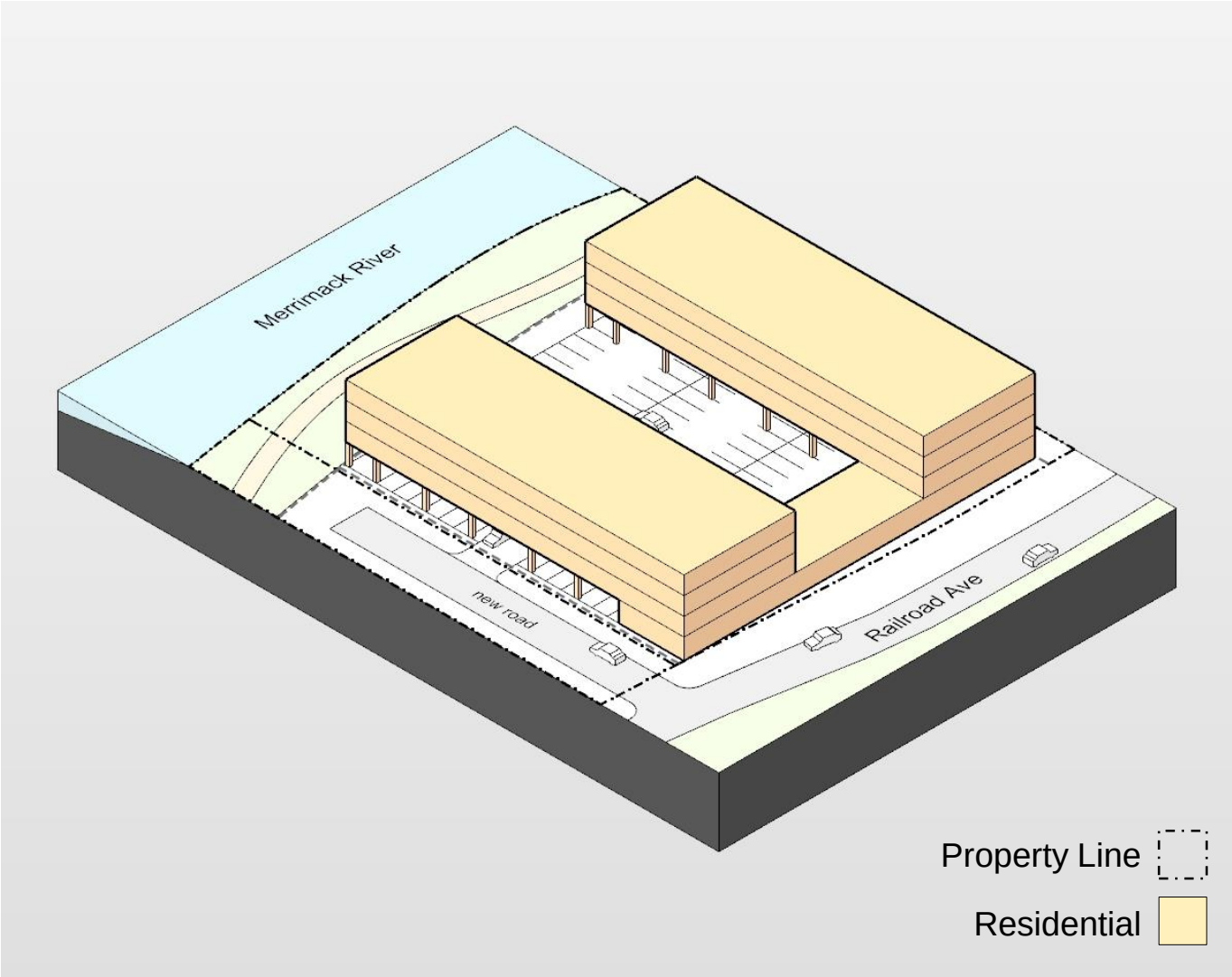


Transect Site - Scenario A



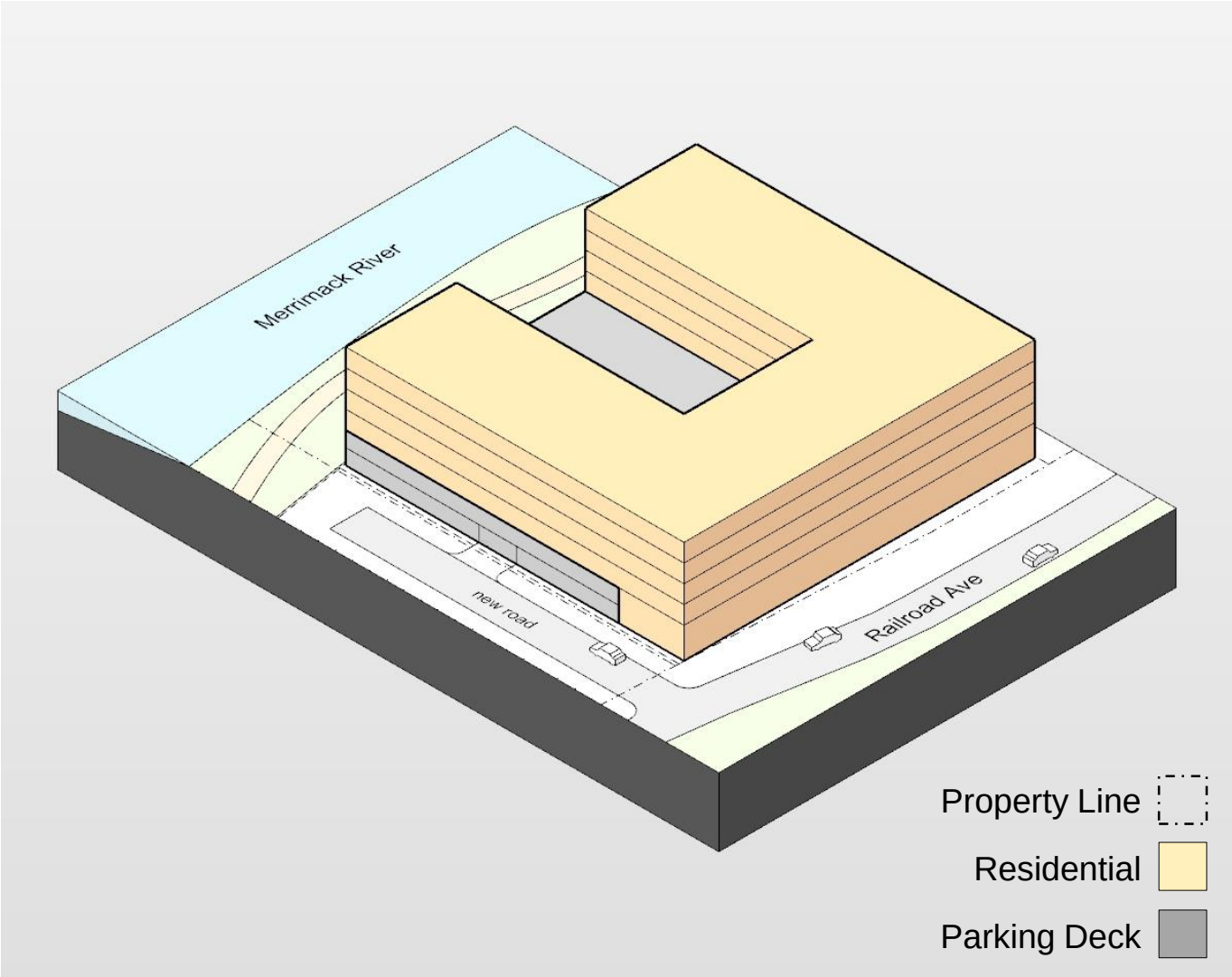
Transect Site – Scenario A	Count
Residential GFA	79,000 gsf
Total Units (based on 1100 gsf / unit)	72 Units
Parking Required	108 Spaces
Parking Ratio	1.5 Spaces / 1-2BR Units
Height	4 stories, ~46'
FAR (District)	1.13
FAR (Parcel)	1.63
Density (District)	44 Units / Acre

Transect Site - Scenario A (alt massing)



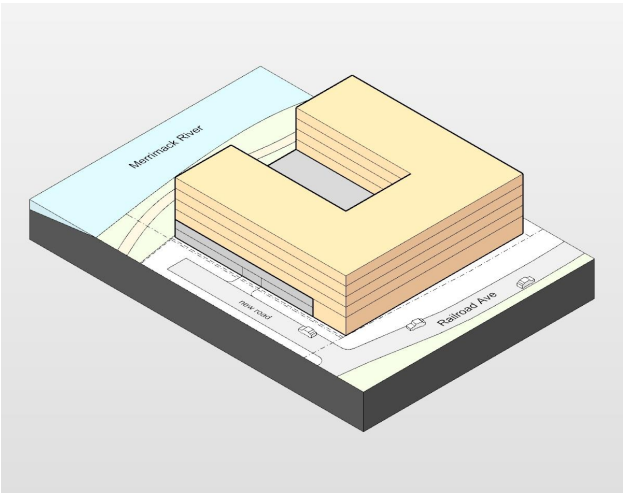
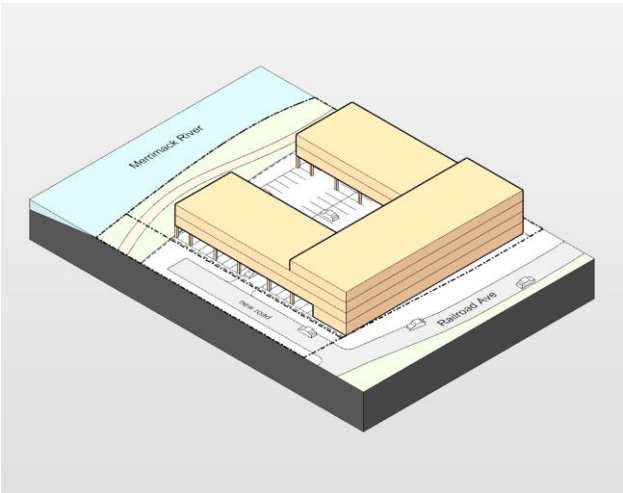
Transect Site – Scenario A (alt)	Count
Residential GFA	81,300 gsf
Total Units (based on 1100 gsf / unit)	74 Units
Parking Required	111 Spaces
Parking Ratio	1.5 Spaces / 1-2BR Units
Height	4 stories, ~46'
FAR (District)	1.16
FAR (Parcel)	1.67
Density (District)	46 Units / Acre

Transect Site - Scenario B (structured parking, 2 levels)



Transect Site – Scenario B	Count
Residential GFA	126,600 gsf
Total Units (based on 1100 gsf / unit)	115 Units
Parking Total	215 Spaces
Parking Ratio	1.85 Spaces / 1-2BR Units
Height	6 stories, 62'
FAR (District)	1.8
FAR (Parcel)	2.6
Density (District)	71 Units / Acre

Transect Site - Summary



Transect Site	Scenario A (w/ ground parking)	Scenario B (w/ 2 levels parking)
Height	4 stories, 46'	6 stories, 62'
Total Gross Floor Area	79,000 gsf	126,600 gsf
Total Units (1100 gsf / unit)	72 Units	115 Units
Total Parking Count	108 Spaces (1.5 / du)	215 Spaces (1.85 / du)
FAR (District)	1.13	1.80
FAR (Parcel)	1.63	2.60
Density (District)	44 Units / acre	71 Units / acre

Old Paperboard Site Area Test Fits

Baseline District: WD-E
(Waterfront District, Old Paperboard Site Area)

Scenario Analysis Methodology:
District FAR

Use:
Residential

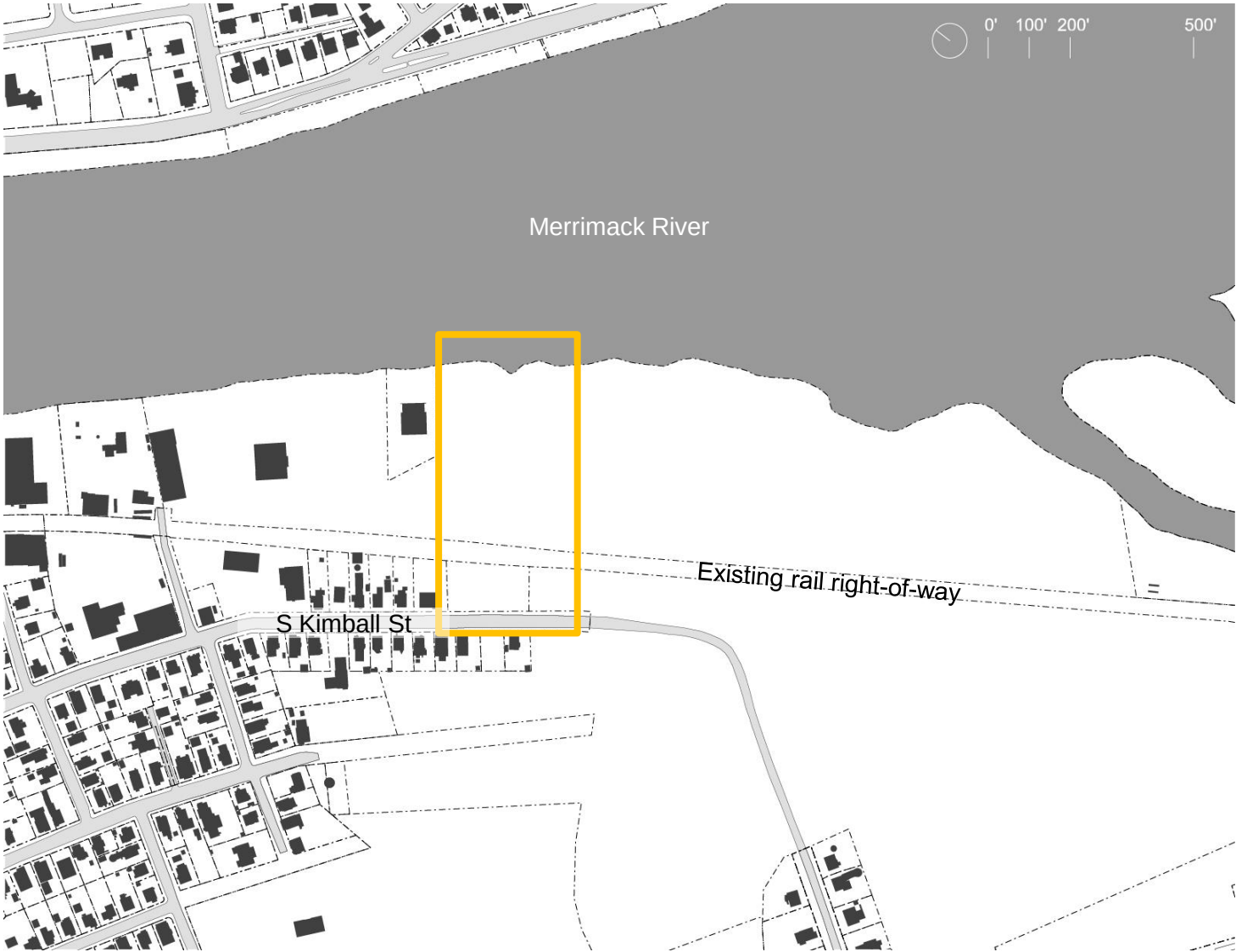


Old Paperboard Site Area Test Fits

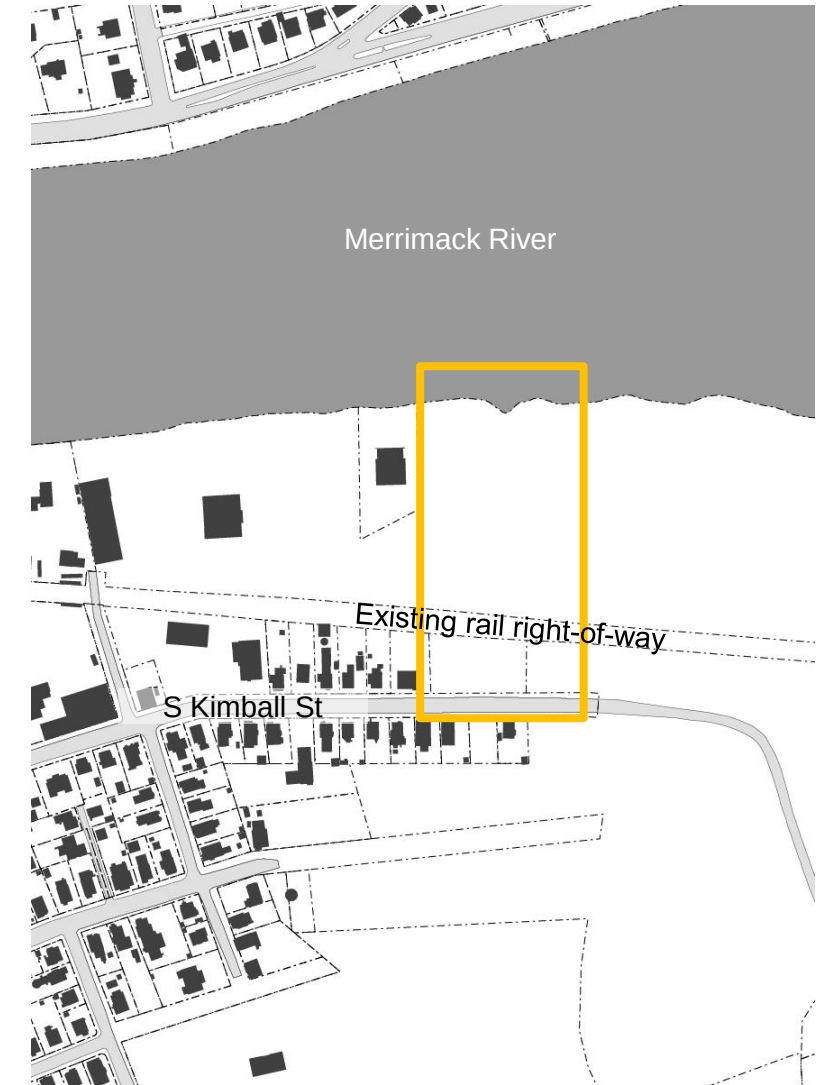
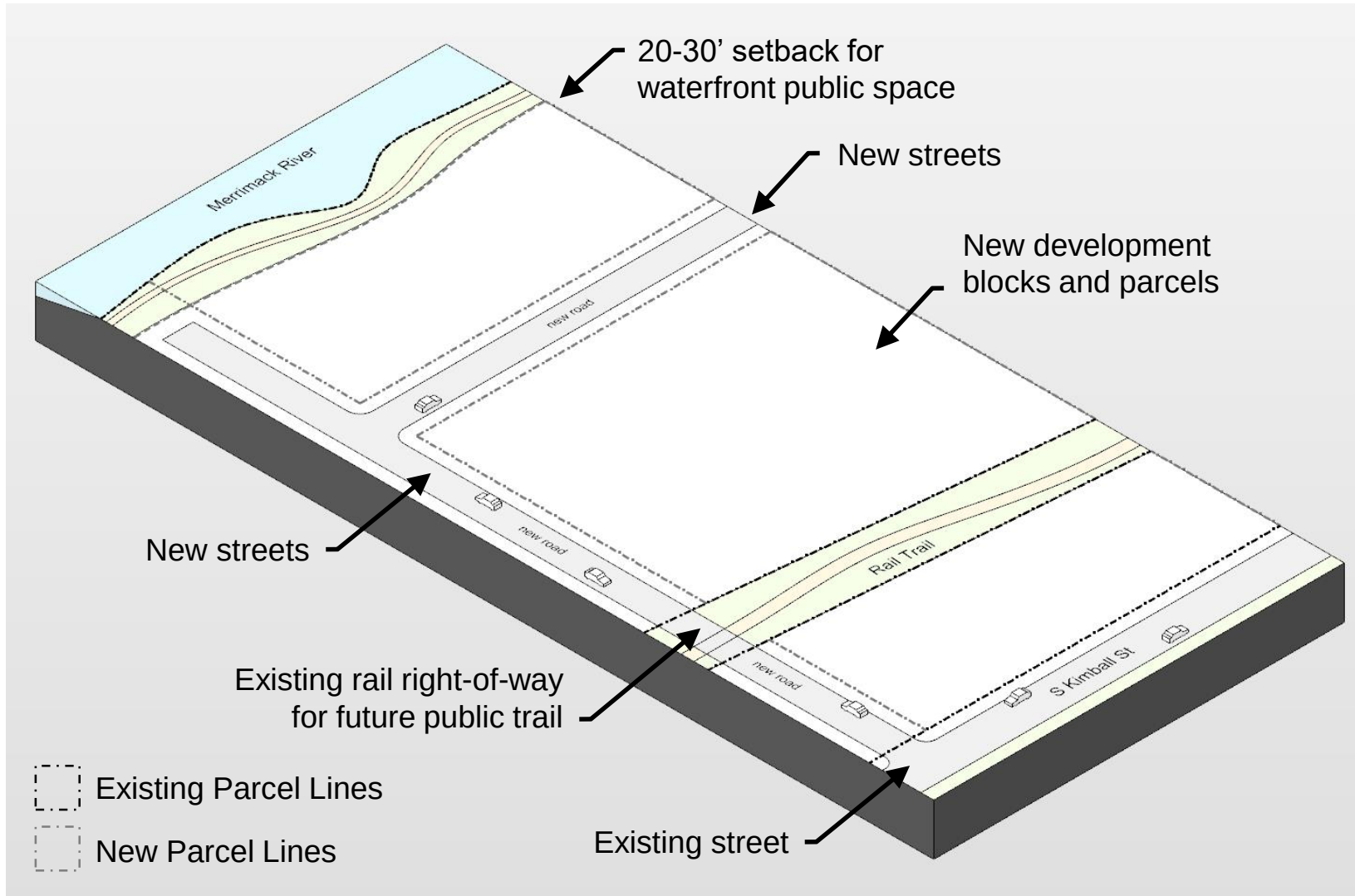
Test-fit Site: Transect Site

Regulations	Existing Zoning	Test Fits
Residential Parking Ratio	1.5 Spaces / Unit	1.5 Spaces / Unit
Max Height	74'	74'
Max Stories	6 stories	6 stories
Max FAR	3.0	3.0
Min Lot Frontage	100'	100'
Min Open Space	20%	15%
Setbacks		
Easement from Merrimack	15' min	20' - 30' shown
Min Side Yard	20'	10'
Min Front Yard	25'	10' & max 15'
Min Rear Yard	N/A	N/A

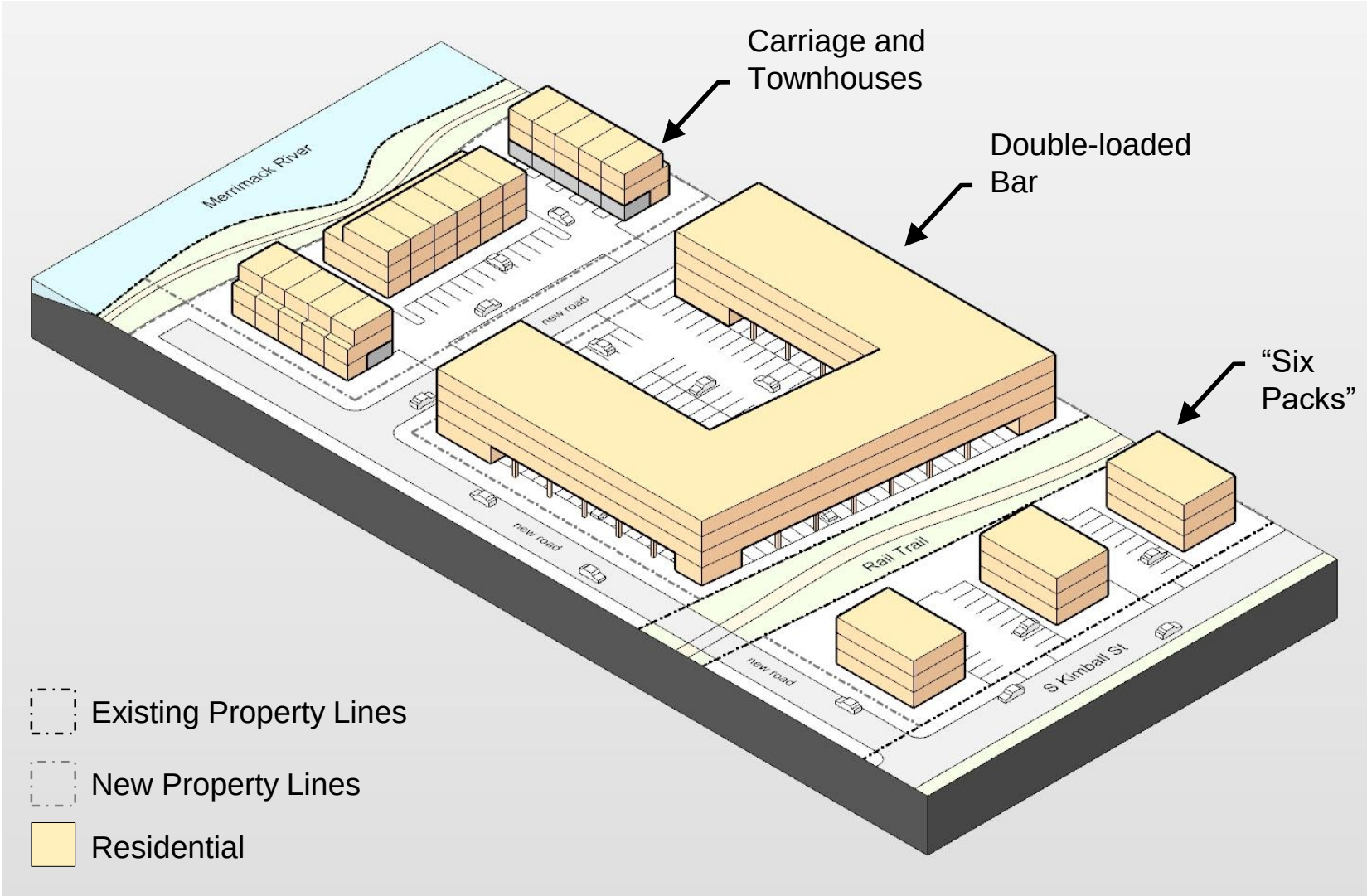
Note: Red indicates existing dimensional regulations that are exceeded in test fits



Transect Site for FAR Test Fits

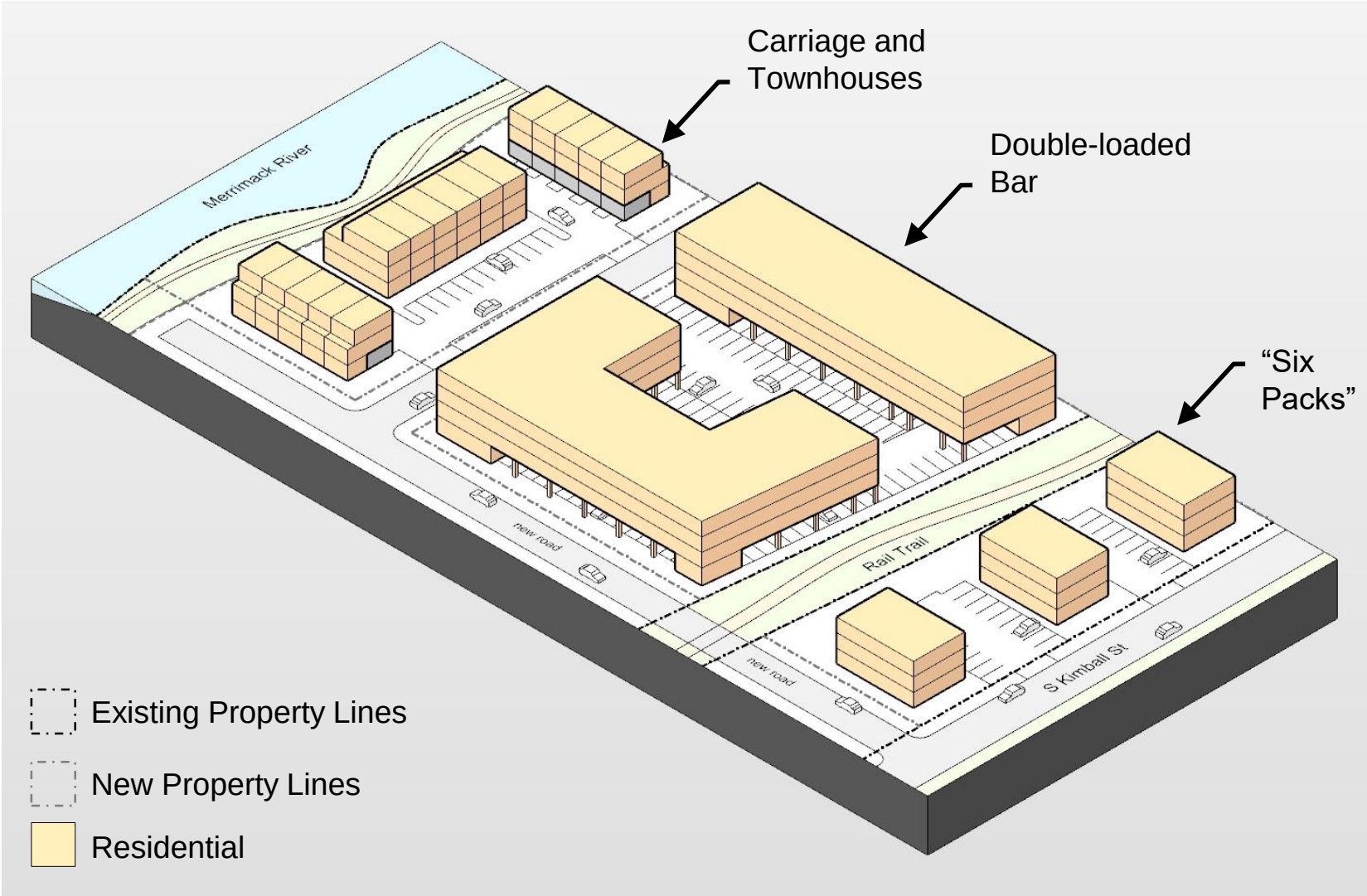


Transect Site - Scenario A



Scenario A	Count
<u>Carriage and Townhouses</u>	29,250 gsf
Units	22 Units
<u>Double-Loaded Bar</u>	114,500 gsf
Units	104 Units
<u>Six Packs</u>	21,600 gsf
Units	18 Units
Parking Ratio	1.5 / Unit
Total GSF	165,350 gsf
Total Units	138 Units
FAR (District)	0.86
FAR (Parcel)	1.25
Density (District)	31 Units / Acre

Transect Site - Scenario A (alt massing)



Scenario A (alt massing)	Count
<u>Carriage and Townhouses</u>	29,250 gsf
Units	22 Units
<u>Double-Loaded Bar</u>	114,500 gsf
Units	104 Units
<u>Six Packs</u>	21,600 gsf
Units	18 Units
Parking Ratio	1.5 / Unit
Total GSF	165,350 gsf
Total Units	138 Units
FAR (District)	0.86
FAR (Parcel)	1.25
Density (District)	31 Units / Acre

