

*The*  
**FUTURE OF PARKING**  
**with Sound Transit**

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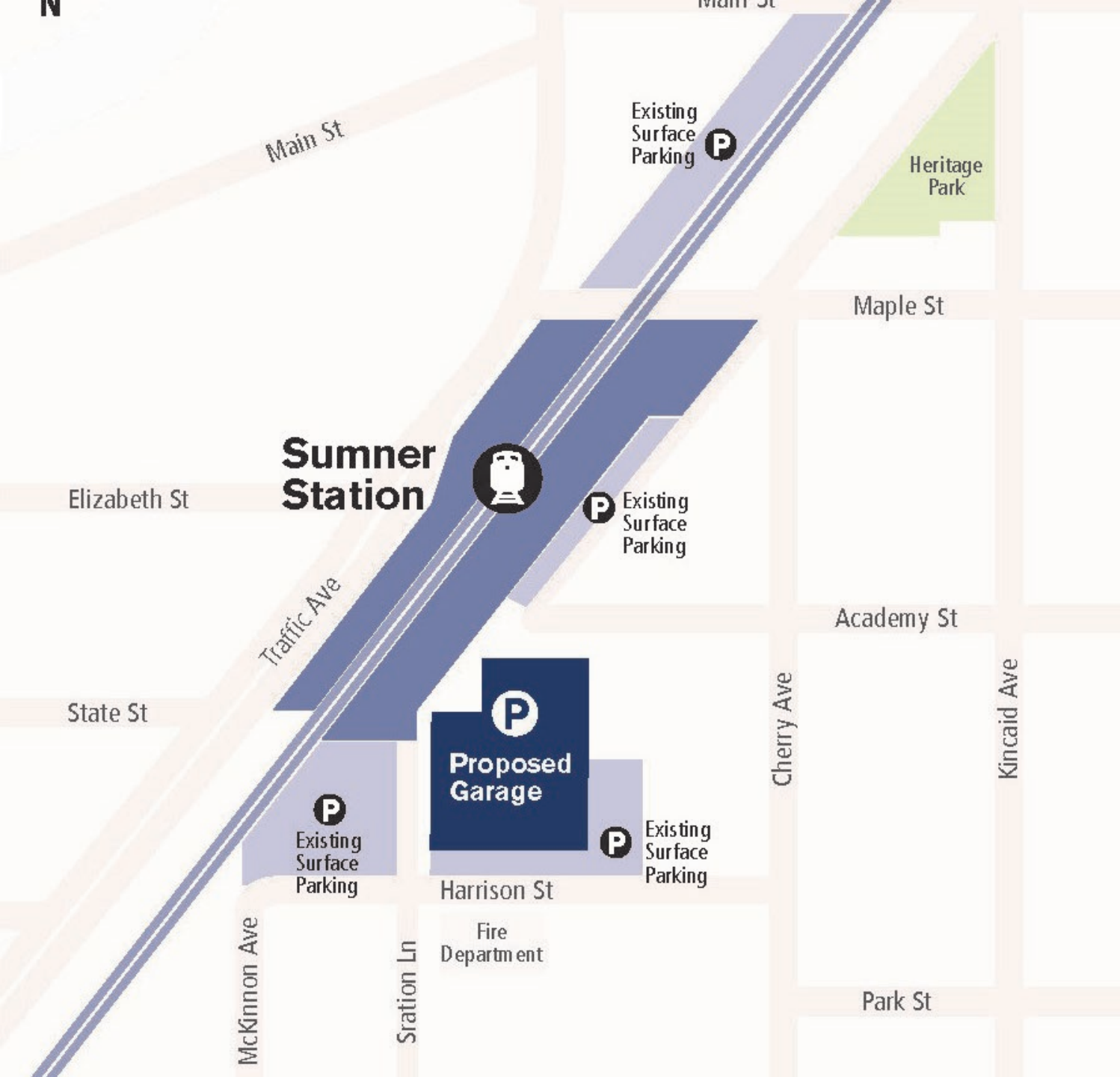
**Sounder South  
Parking &  
Access  
Improvement  
Project**





# Puyallup Station Garage

- 503 parking stalls
- 5 levels
- 176,402 square feet
- Anticipated completion end of 2022



# Sumner Station Parking Garage

- New parking structure adding up to 500 spaces
- Sidewalk & lighting improvements
- Anticipating completion in 2025

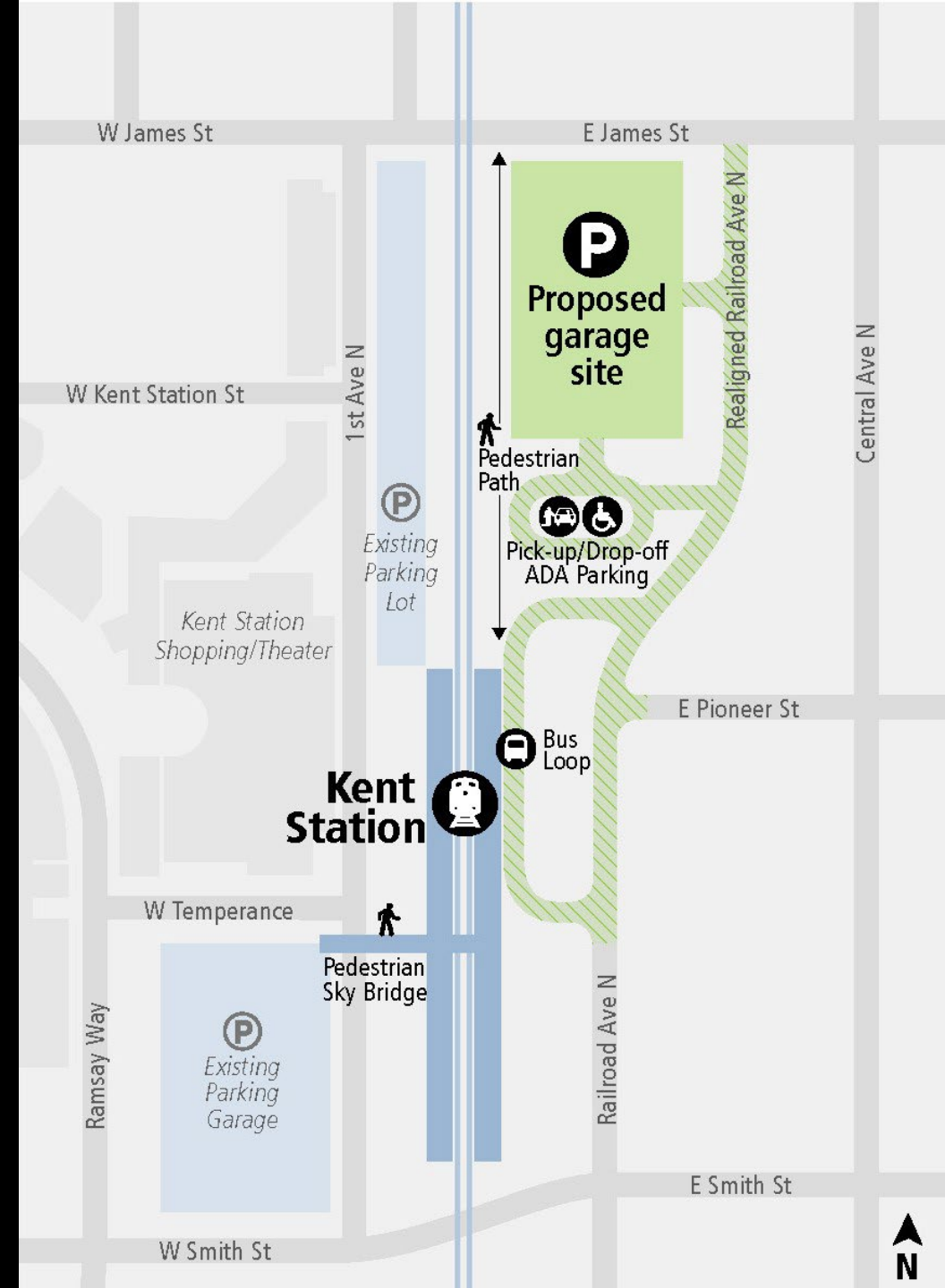


# Auburn Station Parking Garage

- New parking structure
- Pedestrian and bicycle improvements
- Anticipating completion in 2026

# Kent Station Parking Garage

- New parking structure
- Improved pedestrian connections
- Bus layover space for King County Metro
- Anticipating completion in 2026



# Opportunities and Challenges of Building Flexibility into Sound Transit Parking Facilities for Future Adoptive Use





# **Future of Parking Study Goals**

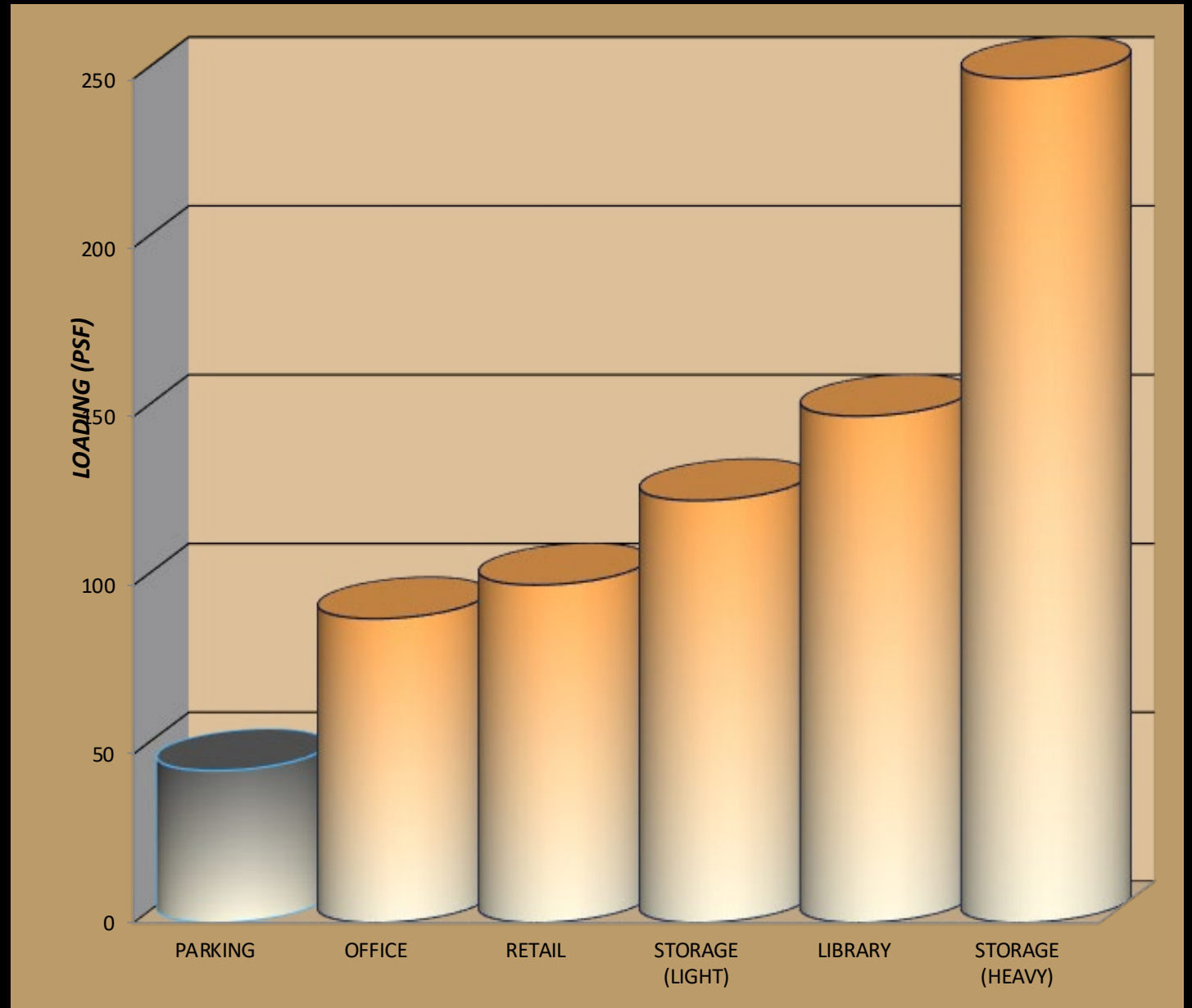
- Envision a project site that can serve the parking needs of today and be able to be easily converted to an alternate use in the future when parking demand has subsided
- Understand the needs of the project for future conversion
- Evaluate and report on the pros and cons and flexibility of some of the findings



**TRADITIONAL PARKING STRUCTURE**

# Engineering Consideration: Structural Loading

Gravity Loads (*Different  
Use is 2-6 times as much  
load*)



# CONSIDER ADAPTIVE REUSE



Residential floor-to-floor height

Retail floor-to-floor height

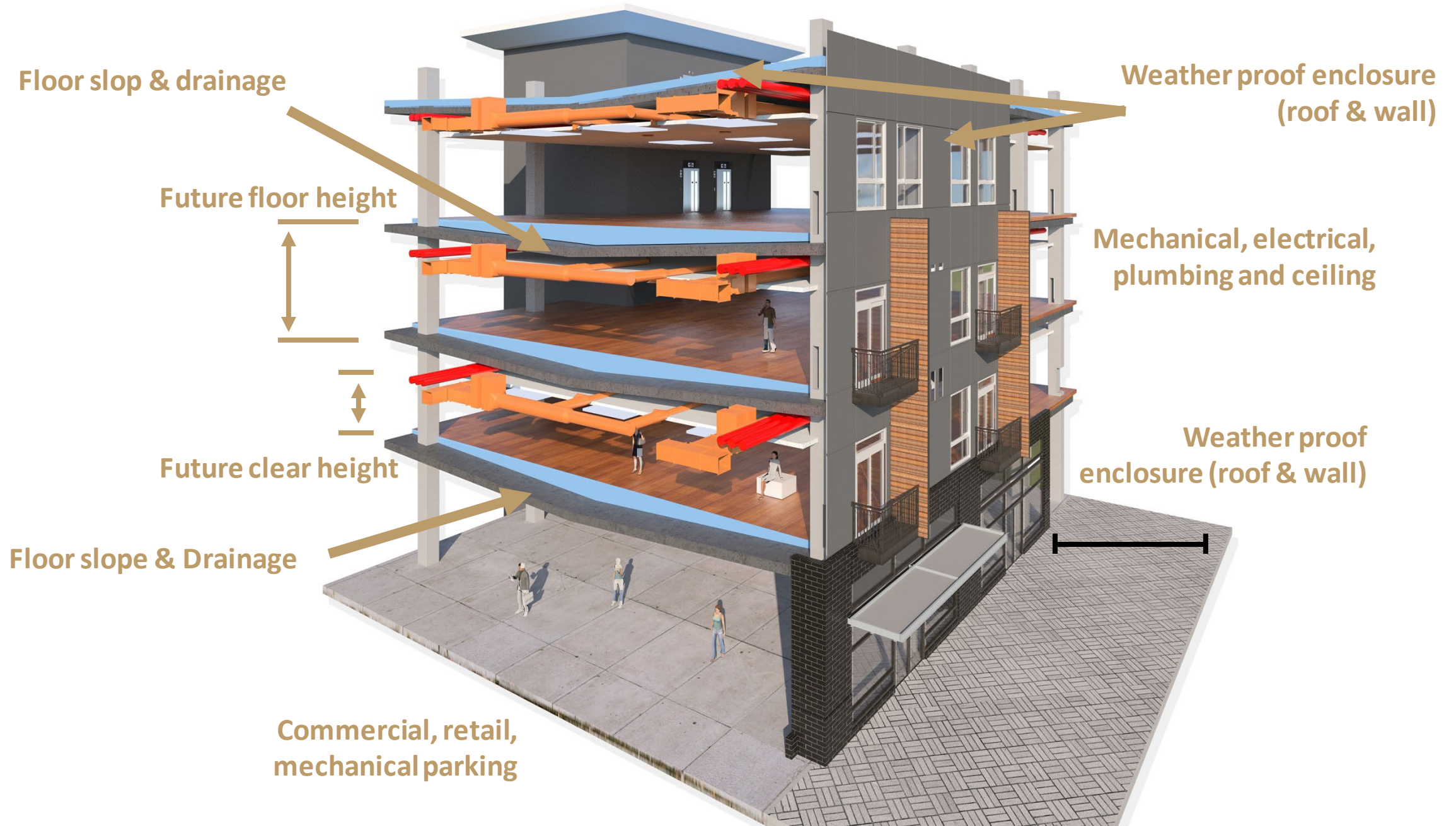


Residential floor-to-floor height

Retail floor-to-floor height

Structural system (loading, vibration, column grid & drainage)





Residential floor-to-floor height

Exterior speed ramp

Retail floor-to-floor height

Structural system (loading, vibration, column grid & drainage)



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Residential floor-to-floor height

Retail floor-to-floor height

Structural system (loading, vibration, column grid & drainage)

Exterior speed ramp

Footprint size & depth of future use



Residential floor-to-floor height

Retail floor-to-floor height

Structural system (loading, vibration, column grid & drainage)

Exterior speed ramp

Footprint size & depth of future use

Location of cores & pedestrian pathways



Residential floor-to-floor height

Retail floor-to-floor height

Structural system (loading, vibration, column grid & drainage)

Exterior speed ramp

Footprint size & depth of future use

Location of cores & pedestrian pathways

Egress. Current & future occupant load

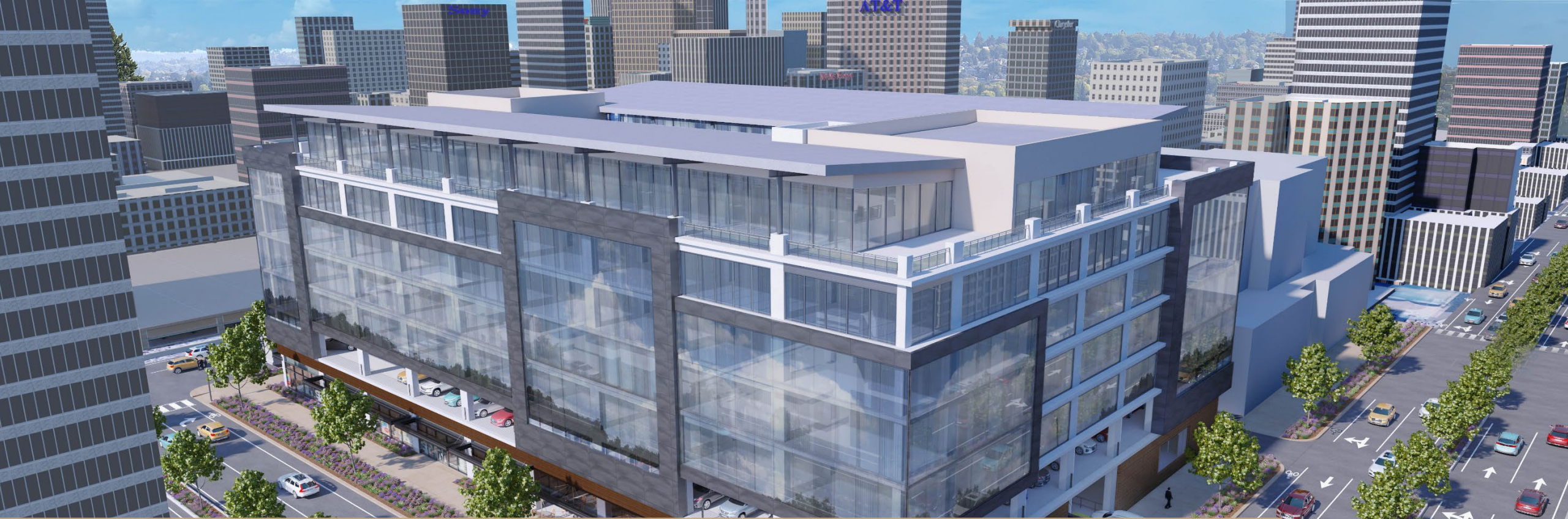


# Final Condition: Vehicle Storage Off-site



# Partial Adaptive Reuse Driven by Economics





# PARKING TO FUTURE OFFICE

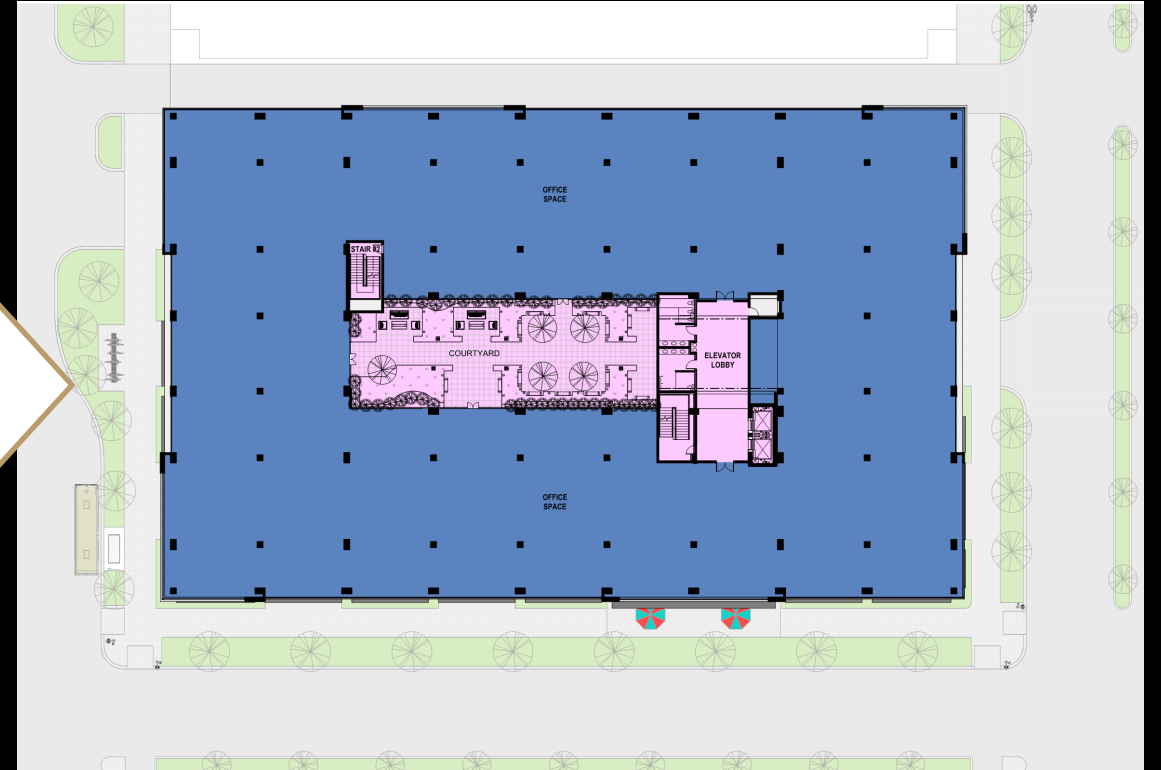
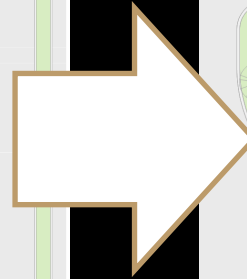
OPTION 1

# Ground Level Plan Remains in Both Phases

- Retail at ground level
- Location of vertical core circulation (office or residential)
- Seismic design solution (for MF or SW system)



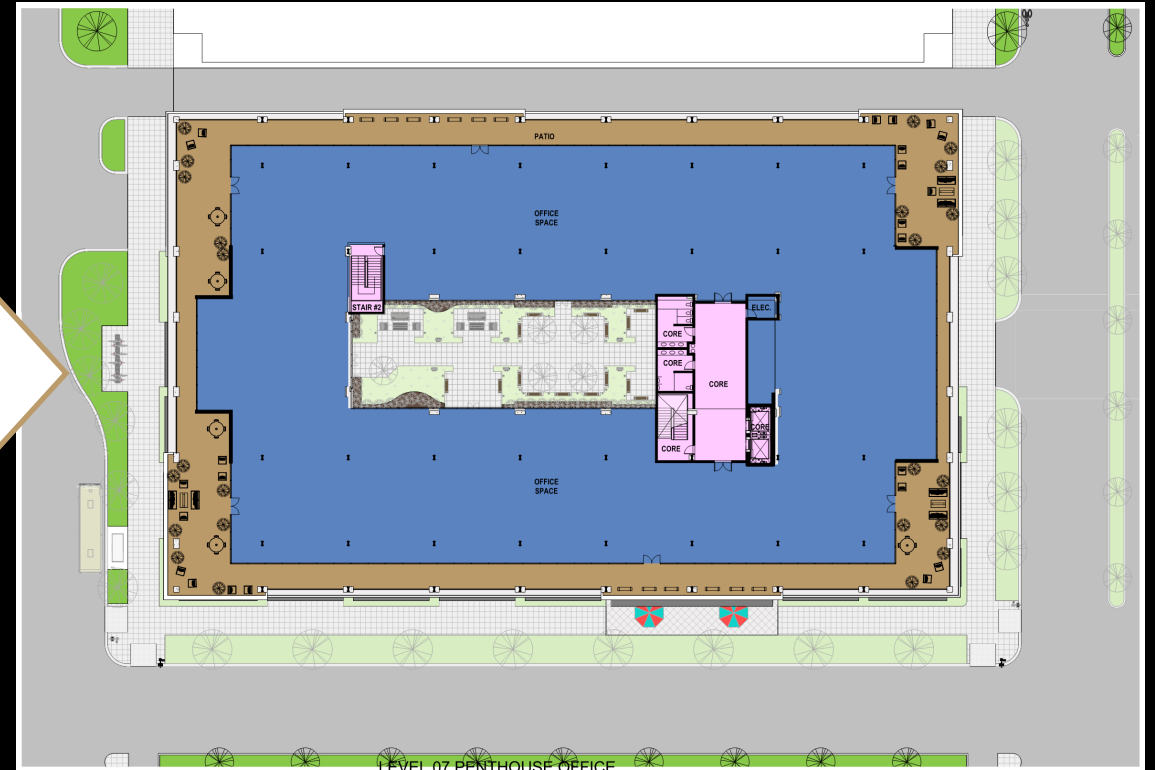
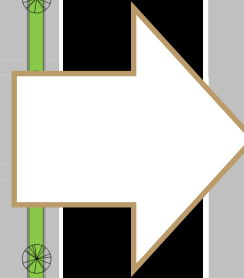
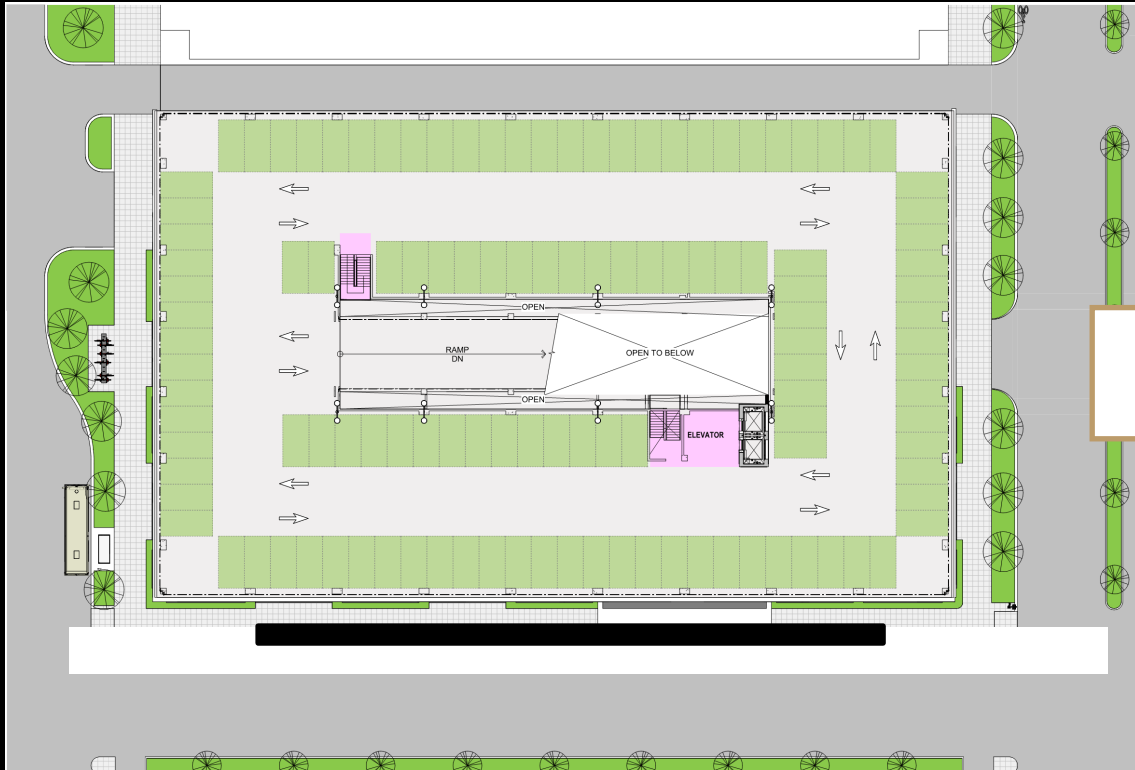
# Typical Parking Plan to Future Office



- Removable interior Ramp system and conversion to central courtyard (or vehicle lift system)
- Short span system to maximize space layout or additional MEP pipe penetrations

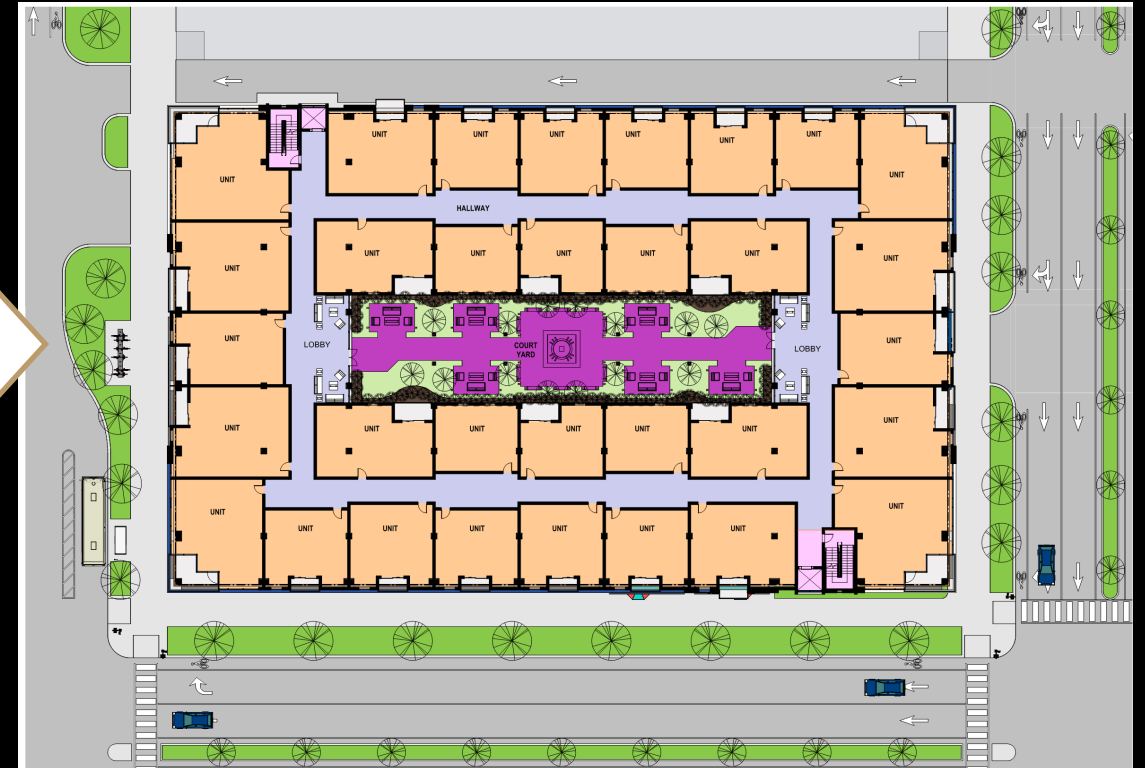
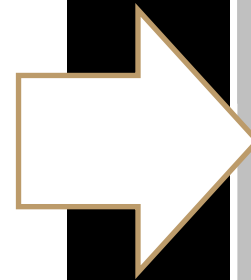
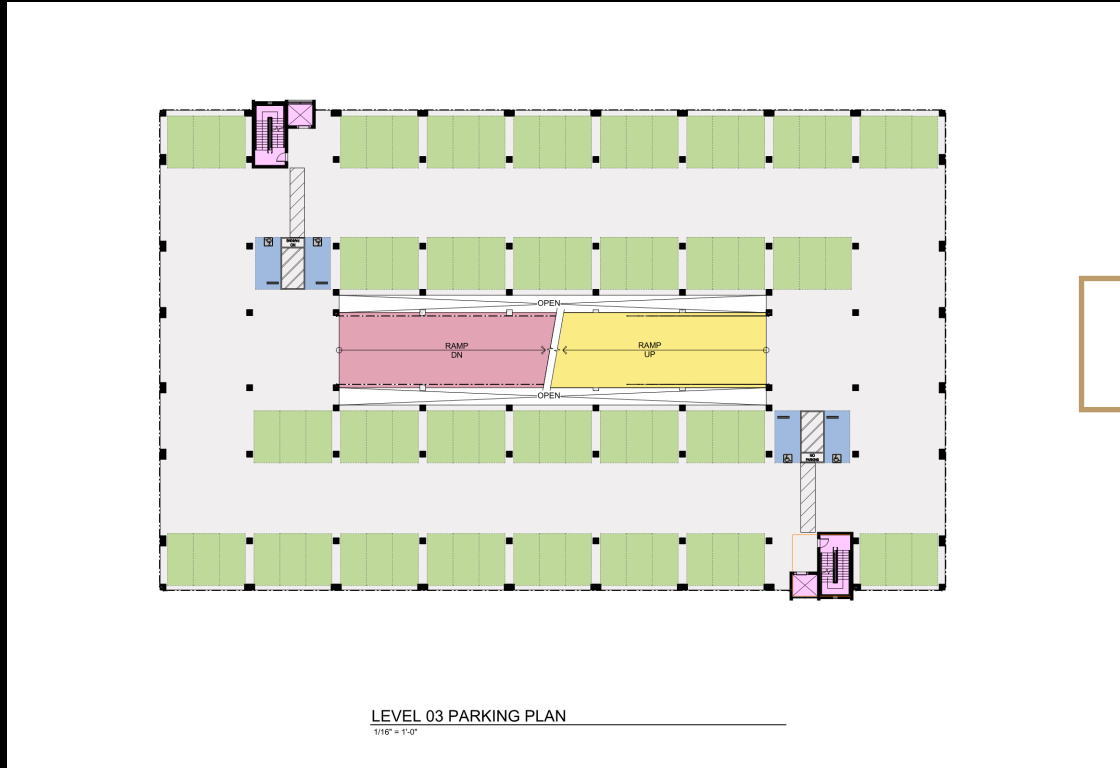


# Top Level Parking Plan to Future Office



- Open top level to penthouse office with exterior balconies

# Typical Level Parking Plan to Future Residential



- Vertical circulation location should be considered for each use

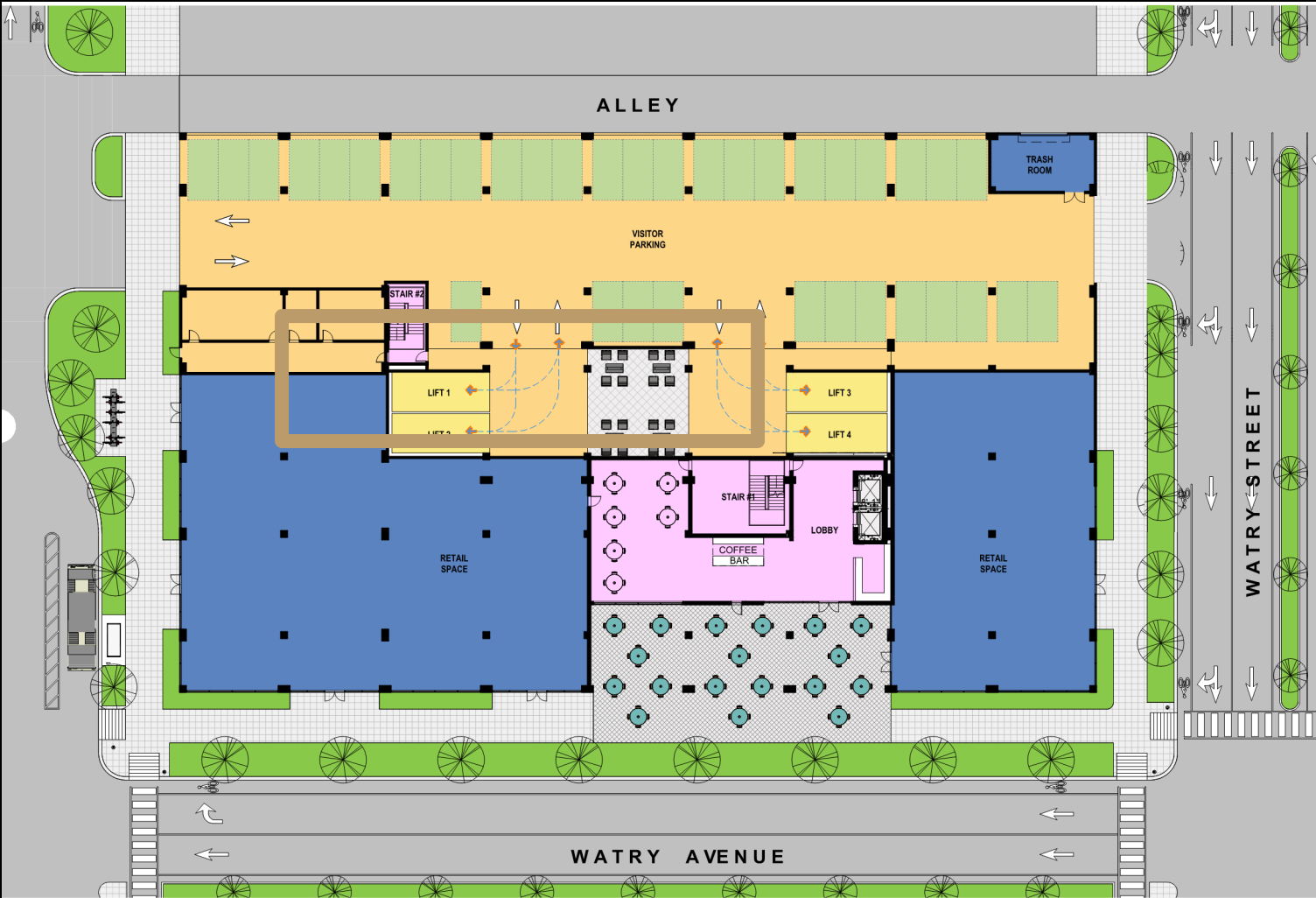
# Top Level Parking Plan to Future Office

- Exterior Façade cladding (from Vehicle Barrier to wall or curtain wall system)

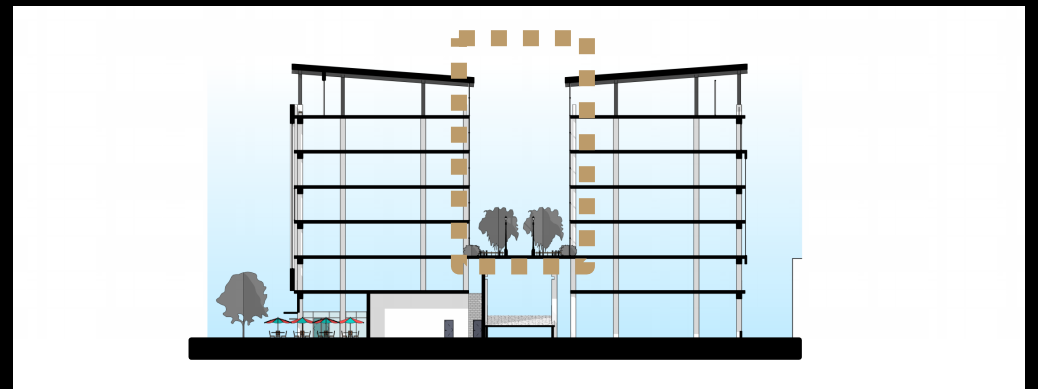
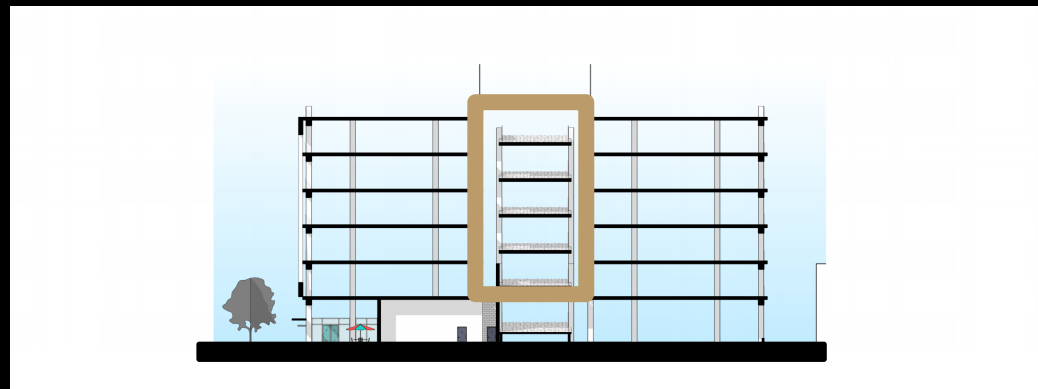
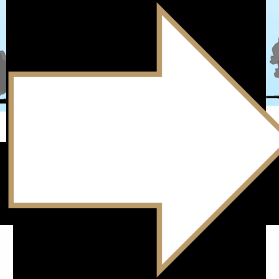
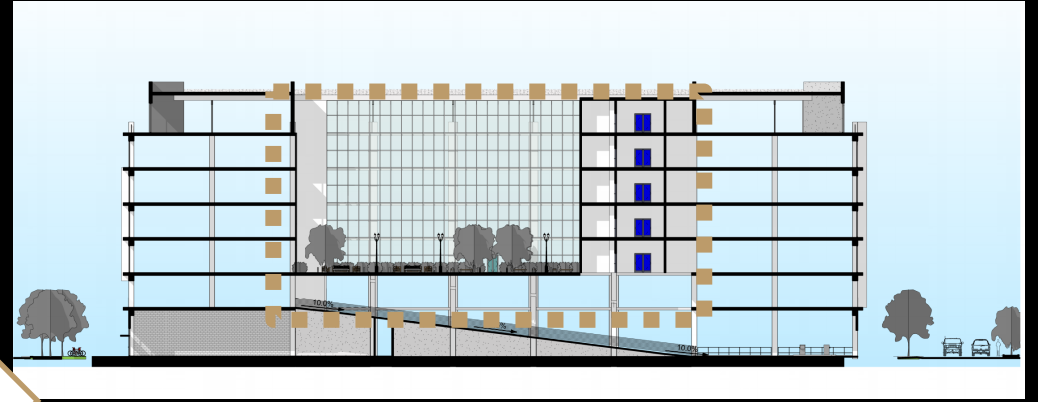
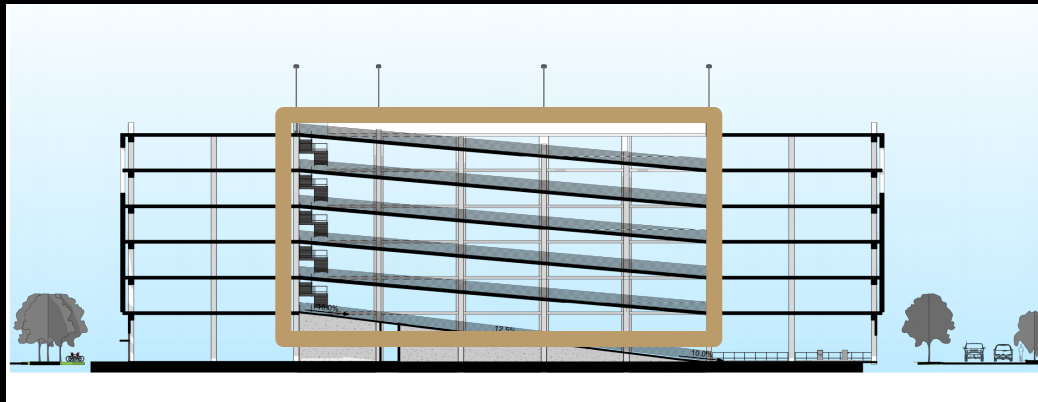


# Alternate Solutions

- Car Mechanical Lift in lieu of express ramp
- Valet lobby



# Building Section from Parking to Office



- Added floor to floor height (13 foot)
- Ramp removal converted to courtyard



**Garage with Ground Level Retail**



**Garage Cut-Away View**



**Office Cut-Away View**





Office



# PARKING TO FUTURE RESIDENTIAL

OPTION 2



# Residential With Ground Level Retail



**Residential courtyard cut-away view**



# Residential Courtyard

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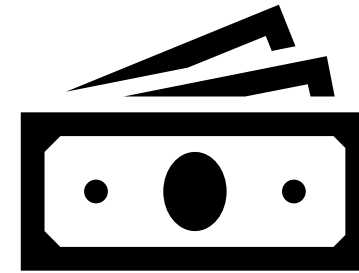




**Residential**

# Cost

- Designing the ground level for future conversion can offer minimal cost impacts while still providing flexibility.
- Designing flexibility into upper levels requires greater upfront investment.
- Fully designing an entire structure for adaptive reuse can increase cost by 40% or more.



# Adaptive Re-Use Summary

- Upfront cost premium to provide flexibility for future conversion – invest for the long term
- Ground floor occupancy has least cost impact
- Increased floor-to-floor heights based on future occupancy
- Design structural system for future occupancy
- Consider daylighting and egress requirements
- Adaptive re-use is the most sustainable and cost-effective redevelopment option





**INSPIRED,**

**Have Questions,**

**OR WANT TO KNOW MORE?**



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