

CITY OF PETERSBURG
VIRGINIA

**I AM
PETERSBURG
VIRGINIA**

Park & Ride Facility
City Council
March 5, 2019

Who is GuernseyTingle?

- 35-year Architectural/Planning/Interiors firm based in Eastern Virginia
- Orchestrate larger teams of structural engineers, civil engineers, mechanical/electrical engineers
- Staff of 25 – average professional staff experience over 15 years
- Annual A/E contracts with:
 - Petersburg (since 2015), Chesterfield County, James City County, Newport News, Hampton, Virginia DCR, SeaWorld, Joint Base Langley Eustis and US Army Corps of Engineers
- Thomas G. Tingle, AIA, President
 - 40 years of experience
 - Focus on pre-planning, group engagement and community consensus building



Parking & Urban Context

- GuernseyTingle and Speight Marshall Francis (structural engineer) combined experience on over 20 parking structures over last two decades.
- Designs for municipal, state, federal and private clients
- Currently working together on 450-space deck for federal government client in Charlottesville
- Understand the special needs of design within urban and historic context



Petersburg Park & Ride Committee

- Lionel Lyons, Deputy City Manager, Operations
- Charles Koonce, Jr., Transit General Manager
- Tangela Innis, Director of Public Works & Utilities
- Michelle Peters, Director of Planning & Community Development
- Reginald Tabor, Economic Development Manager
- Stephanie Harris, Deputy Director of Mass Transit
- J. Howard Hines, Building Official
- Bill Riggleman, Engineer Construction Mgr.
- Temidire Okeowo, CIP Manager





VDOT Smart Scale (formerly HB₂)

- City of Petersburg won competitive grant in 2016
- Need identified by VDOT in 2013's *Park & Ride Lot Inventory Study*
- Conditions include 200 parking spaces minimum
- Must be located near Transit Station
- VDOT will cover 100% of \$8 million budget
- No City Match is required





In 2017, the General Assembly adopted HB2241/SB1331 (as defined in § 33.2-214.2) updating several items related to SMART SCALE.

SMART SCALE legislation requires that the measures be quantifiable and objective, that the analysis of a project's benefits is relative to its cost (essentially a benefit-cost analysis using the SMART SCALE factors), and that the Commonwealth Transportation Board (CTB) consider all modes of transportation.



The SMART SCALE law requires that measures fall into 6 factor areas:

- Safety
- Congestion Mitigation
- Accessibility
- Environmental Quality
- Economic Development
- Land Use Coordination (for areas over 200,000 populations)





Petersburg Park & Ride Scorecard

Project Located in Typology													
Category C	Congestion Mitigation		Safety		Accessibility			Environment		Economic Development			Land Use
	Increase in Daily Person Throughput	Decrease in Person Hours Delay	Reduction in Fatal and Severe Injury	Reduction in Fatal and Severe Injury Rate	Increase in Access to Jobs	Increase in Access to Jobs for Disadvantaged Populations	Improved Access to Multimodal Choices (Users Benefit Value)	Air Quality (Total Benefit Value)	Acres of Natural/Cultural Resources Potentially Impacted	Economic Development Support (Sq. ft.)	Intermodal Access Improvements (Tons Benefit Value)	Travel Time Reliability Improvement	Transportation Efficient Land Use
Measure Score	0.4	1.9	2.2	0.0	3.6	5.6	0.8	0.4	0.1	0.0	28.6	0.0	
Measure Weight	50%	50%	100%	0%	60%	20%	20%	50%	50%	60%	20%	20%	0%
Weighted Measure Score	0.2	0.9	2.2	0.0	2.1	1.1	0.2	0.2	0.0	0.0	5.7	0.0	
Raw Factor Score	1.1		2.2		3.4			0.2		5.6			
Factor Weighting	15%		25%		25%			10%		25%			0%
Weighted Factor Score	0.2		0.5		0.9			0.0		1.4			

Goals for Park & Ride Feasibility Study

- Study 2 Potential Sites
- High-level Site Evaluations
- Conceptual Parking Deck Design Options
- Budget Project Cost Estimates
- Project Schedule
- Recommended Design



38 and 42 South Union St.

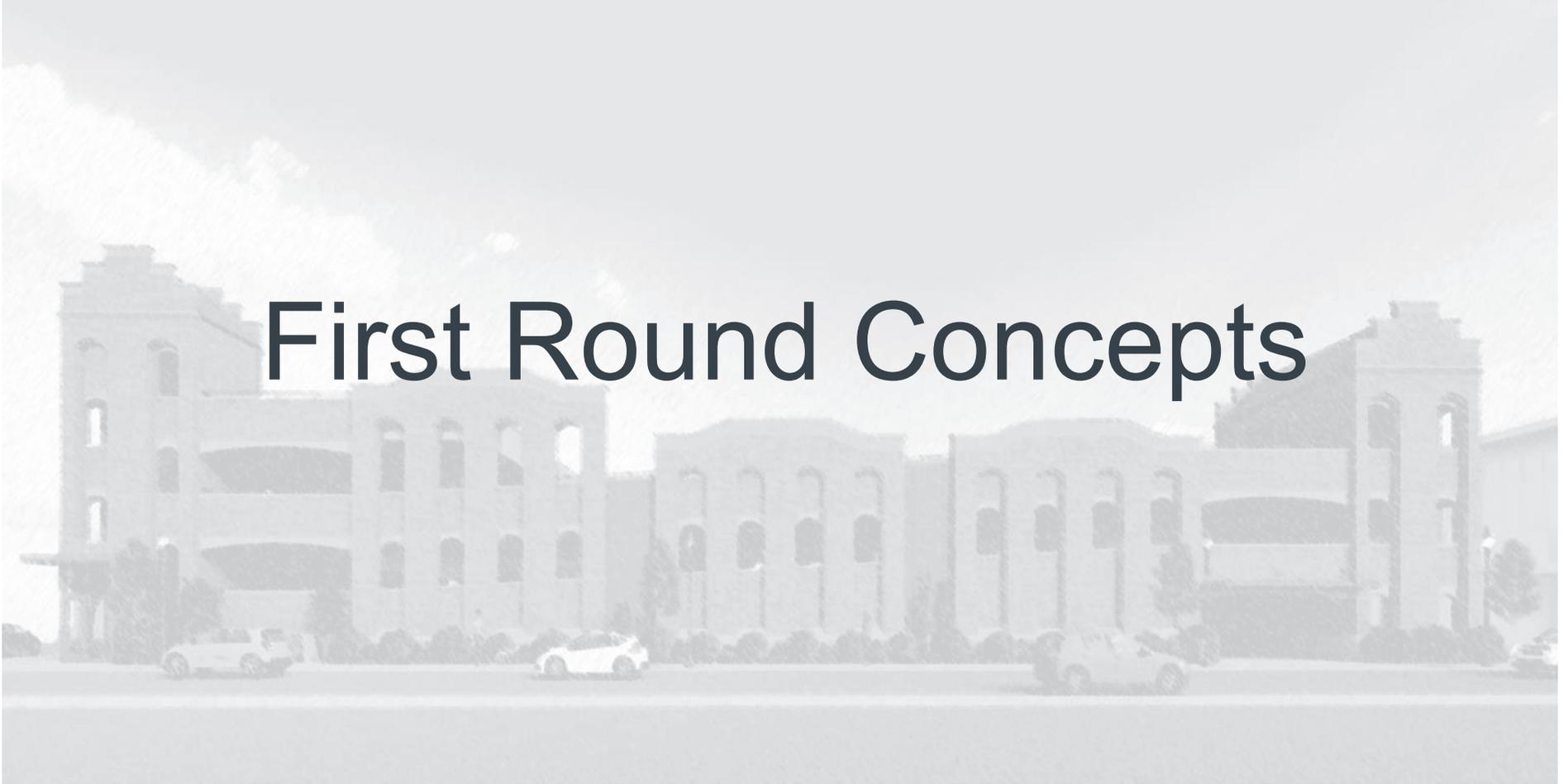


- Originally purchased by City for Transit Center Parking Garage
- Appraisal Report in 2015
- Built c1910 and 1912
- #42 not accessible due to 2nd floor collapse
- Approx. 7,800 SF and 11,760 SF
- Fair to Poor Condition
- Valued at \$120,000 and \$190,000
- Wood framed structures with brick bearing walls
- Both buildings open to the elements

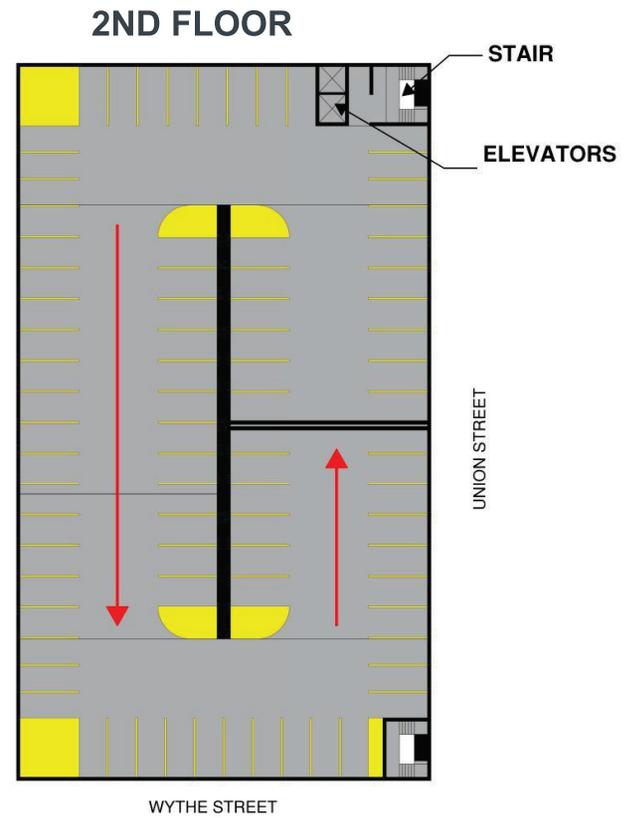
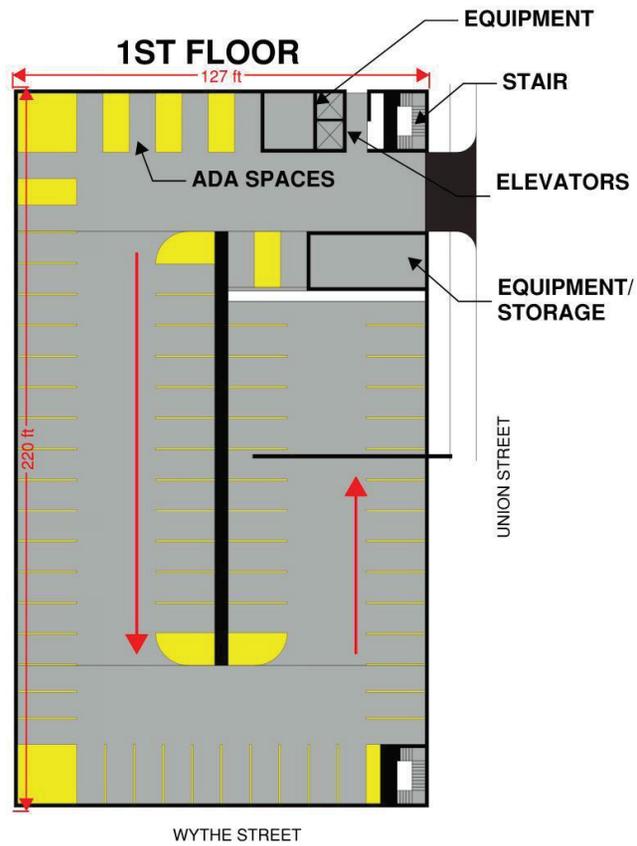
Site Evaluation Results



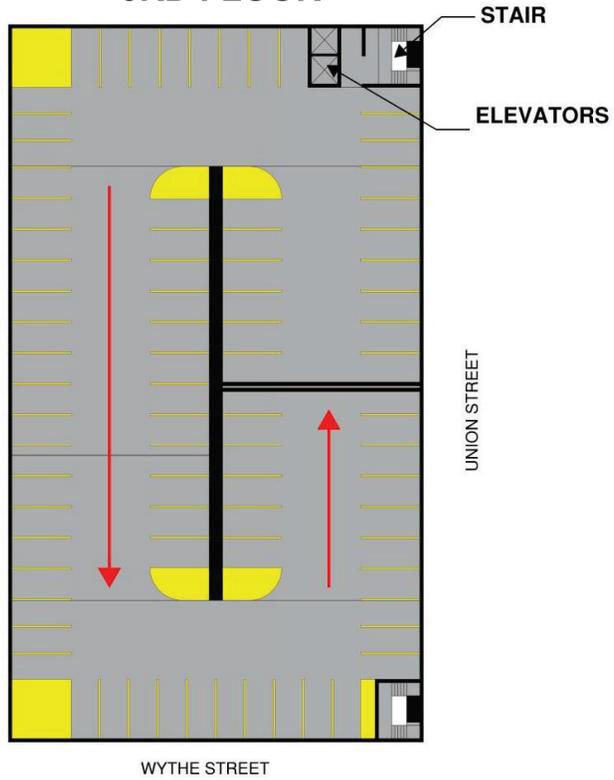
Petersburg Park & Ride		
Site Evaluation Risk Matrix		
Description	Risk Analysis	Comment
Topography, Flood Plain & Wetlands	Very Low	
Comprehensive Plan	Very Low	
Building Code	Very Low	
Zoning	Very Low	
Stormwater Management	Low	On-site Water Quality Needed
Soils & Geotechnical	Low	
Easements, Restrictions, Covenants	Low	
Property Line Adjustments	Medium	
Environmental & Hazardous Materials	Medium	
Utilities	Medium	Dominion Overhead Powerline
Historic District	Medium High	Section 106 Requirements



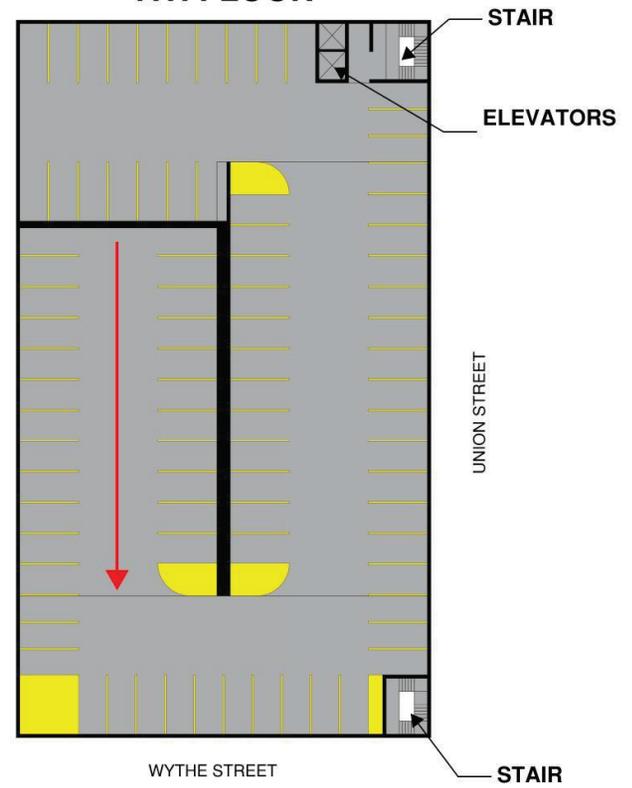
First Round Concepts



3RD FLOOR



4TH FLOOR





Advantages:

- Simple, Efficient Layout
- Access close to Transit Center
- 2nd Stair on Union Street

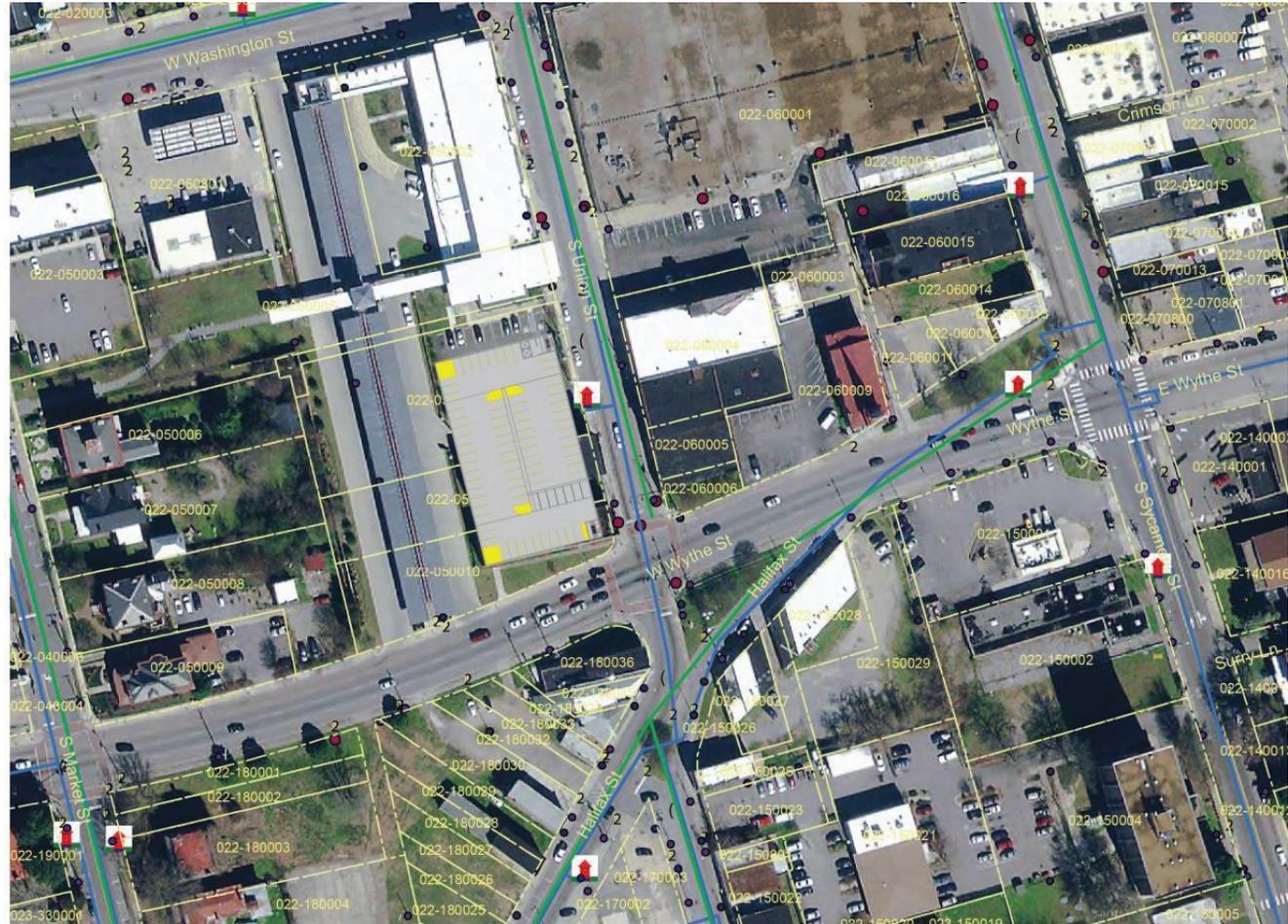
Disadvantages:

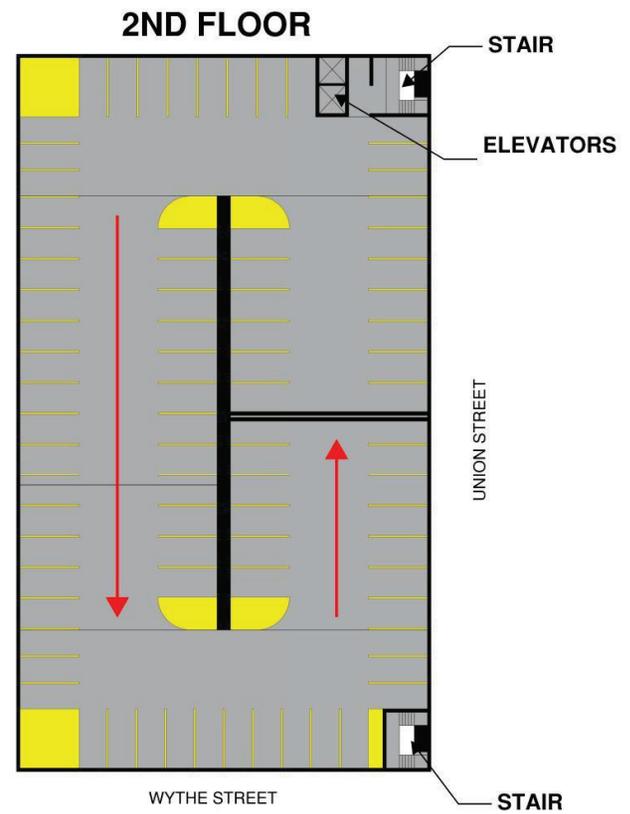
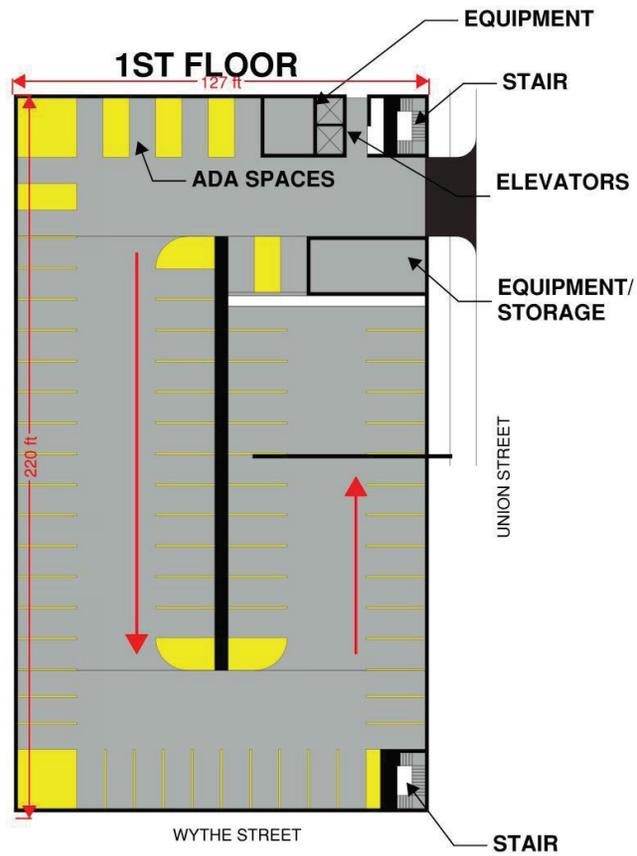
- Sloping decks challenging for traditional architecture
- Footprint encroaches on historic structures

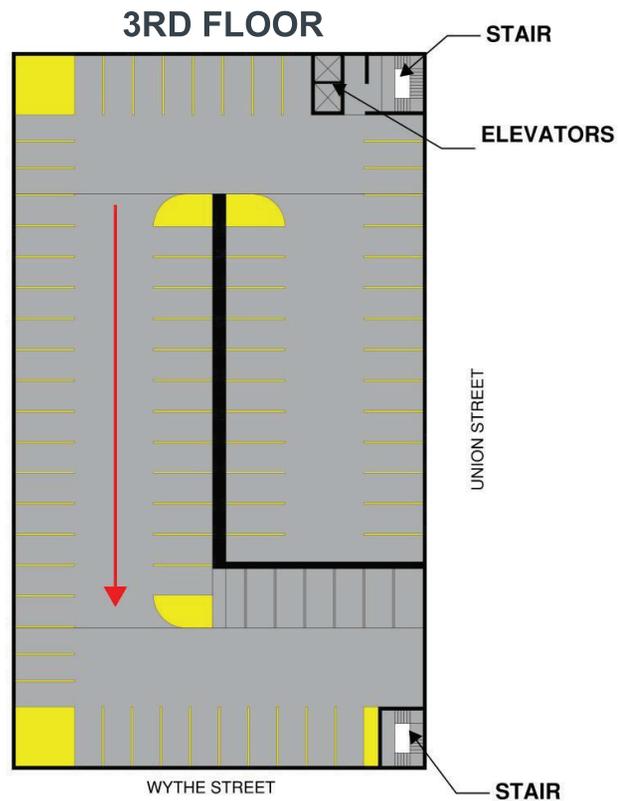
257 spaces + 90,030 SF



Design Option B

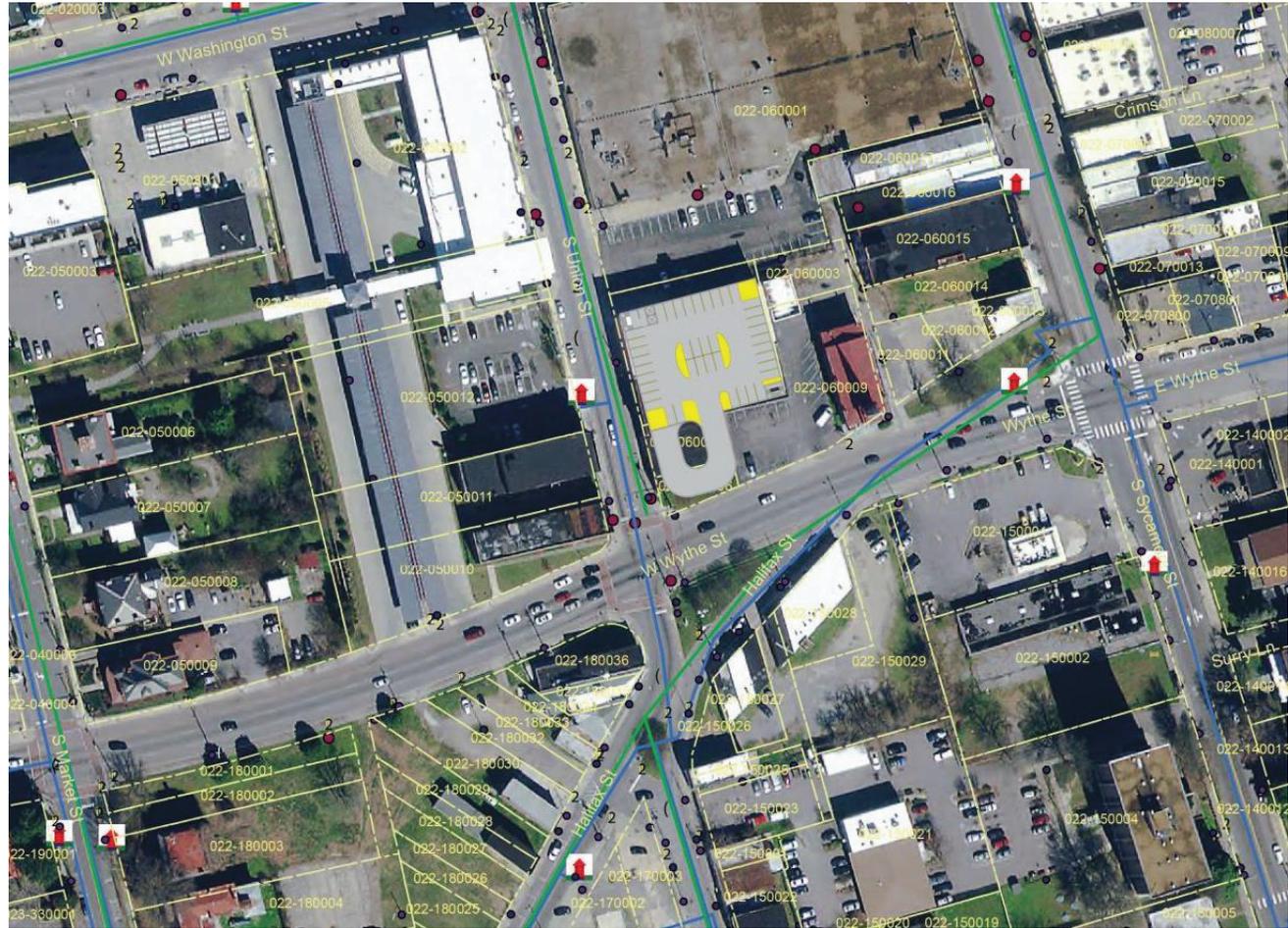


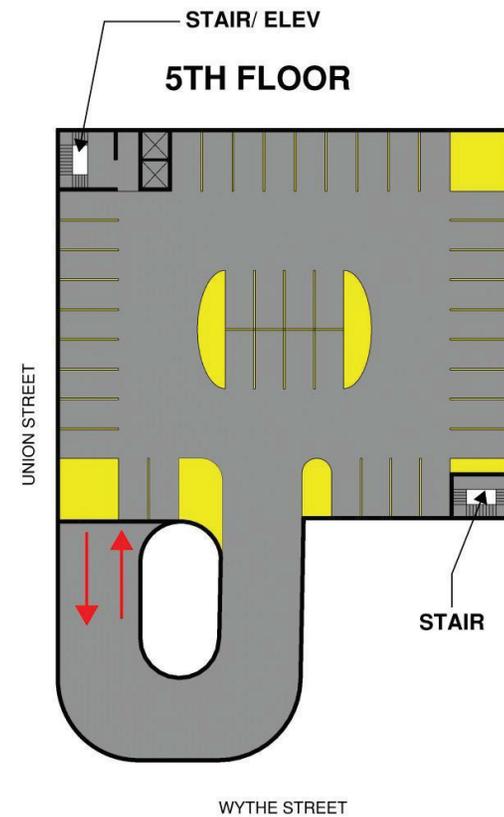
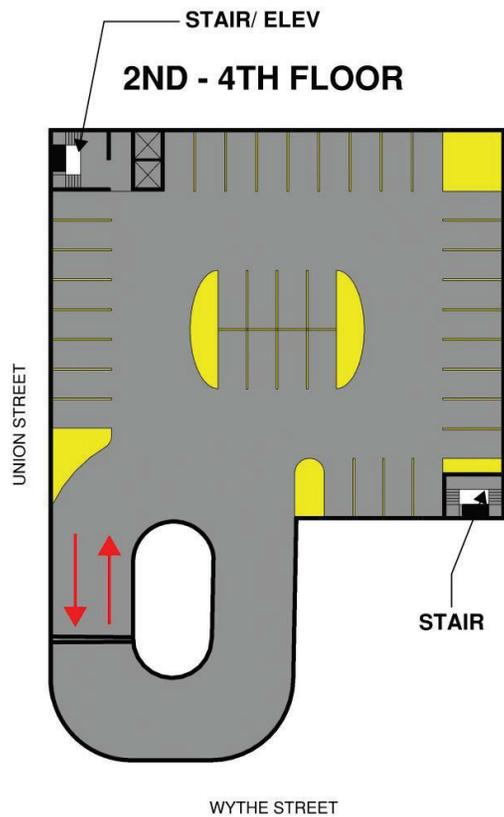
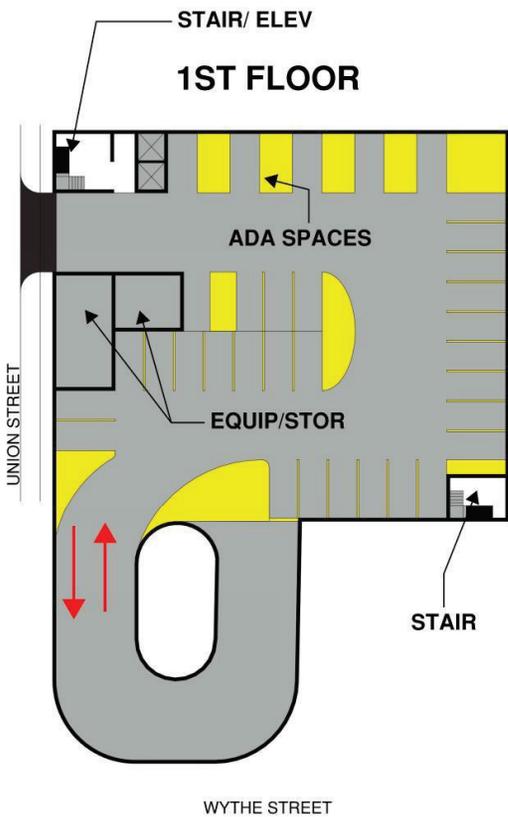


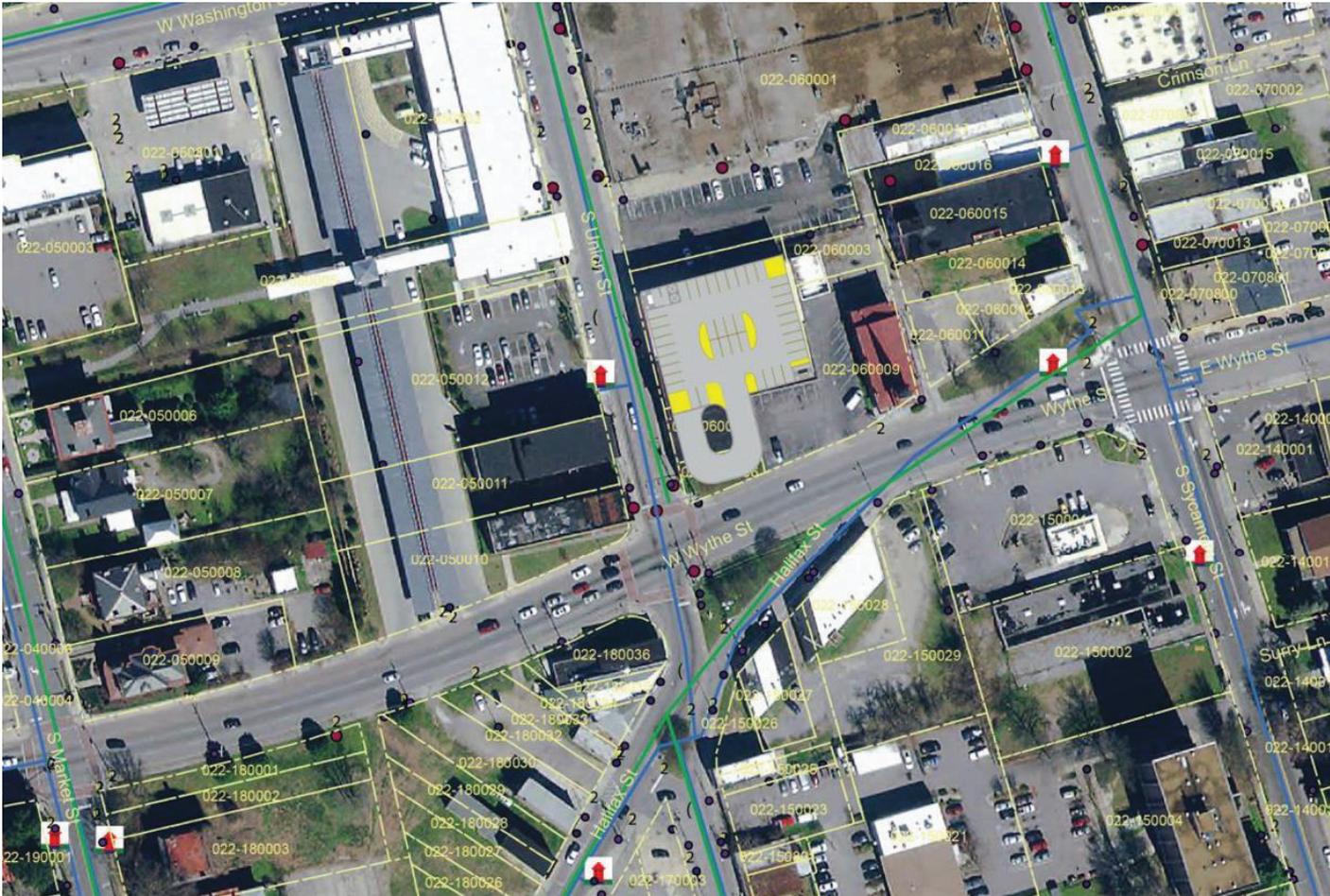




Design Option C







Advantages:



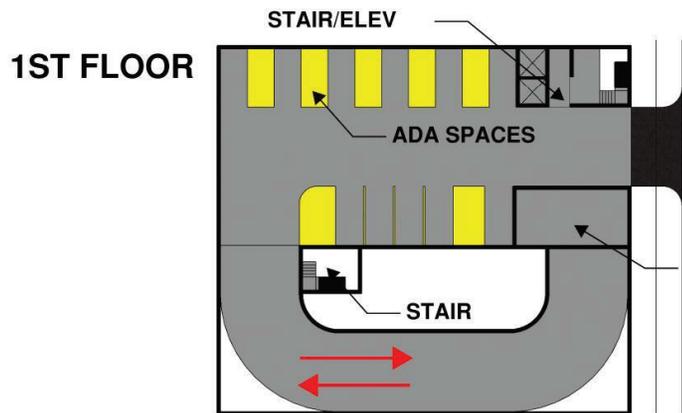
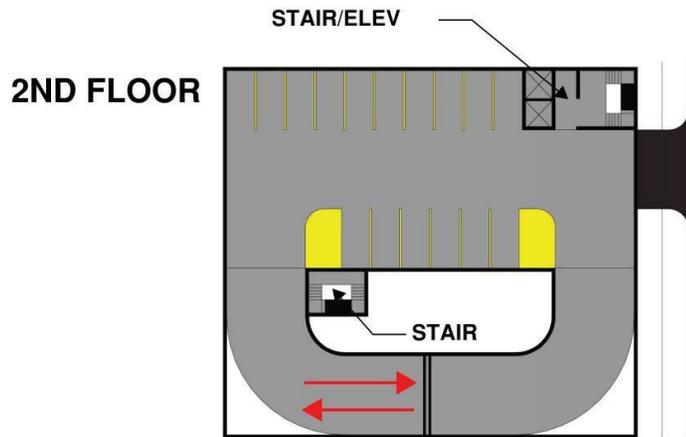
- All construction on east side of Union Street
- Allows existing 35-space commuter lot to remain

Disadvantages:

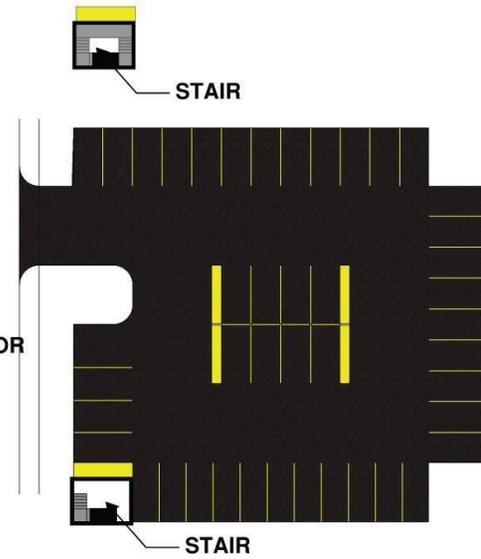
- Inefficient layout – only 37 spaces per floor
- 2-way spiral ramp
- Pedestrian easements needed on private properties

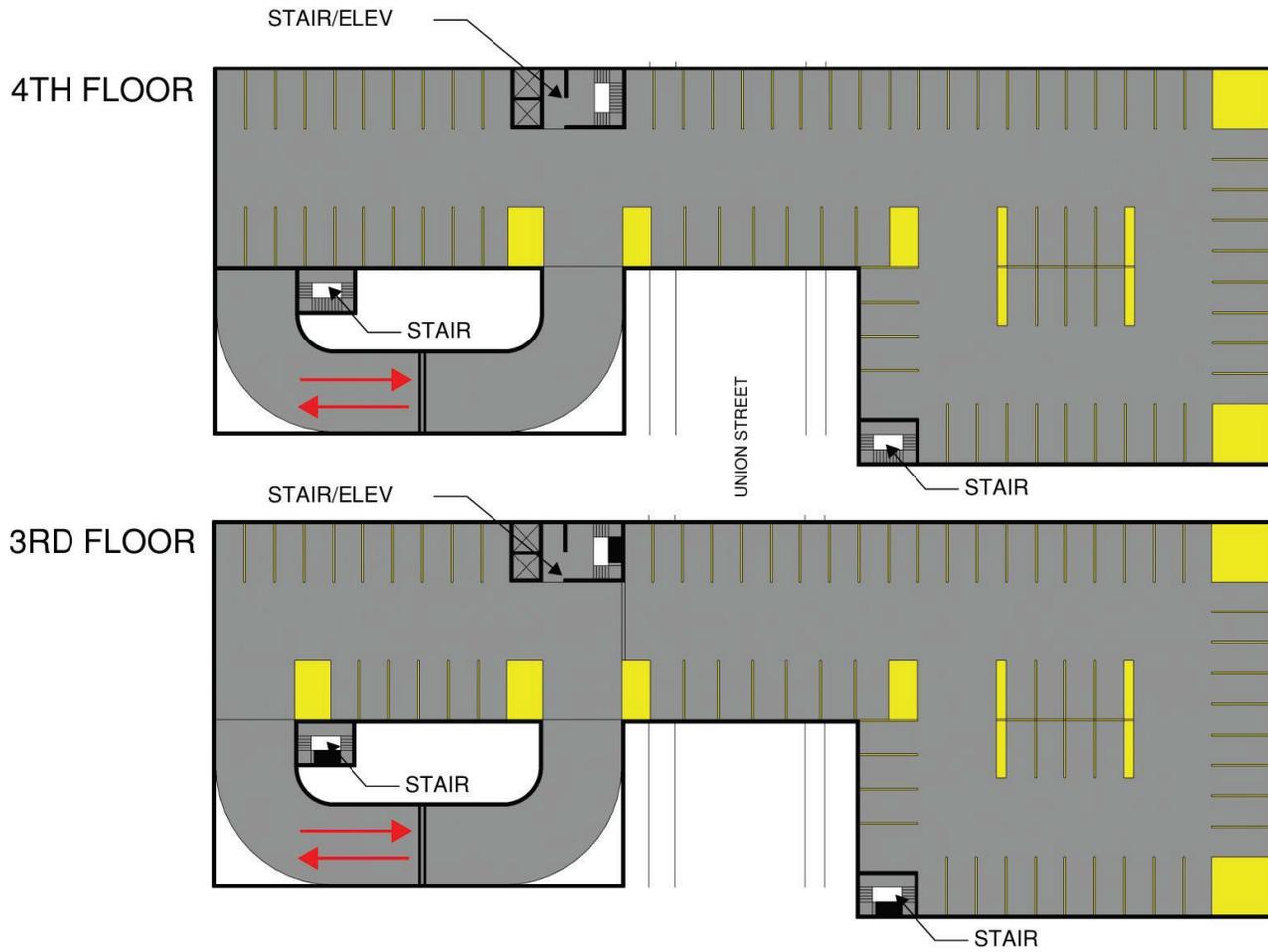
187 spaces + 104,000 SF

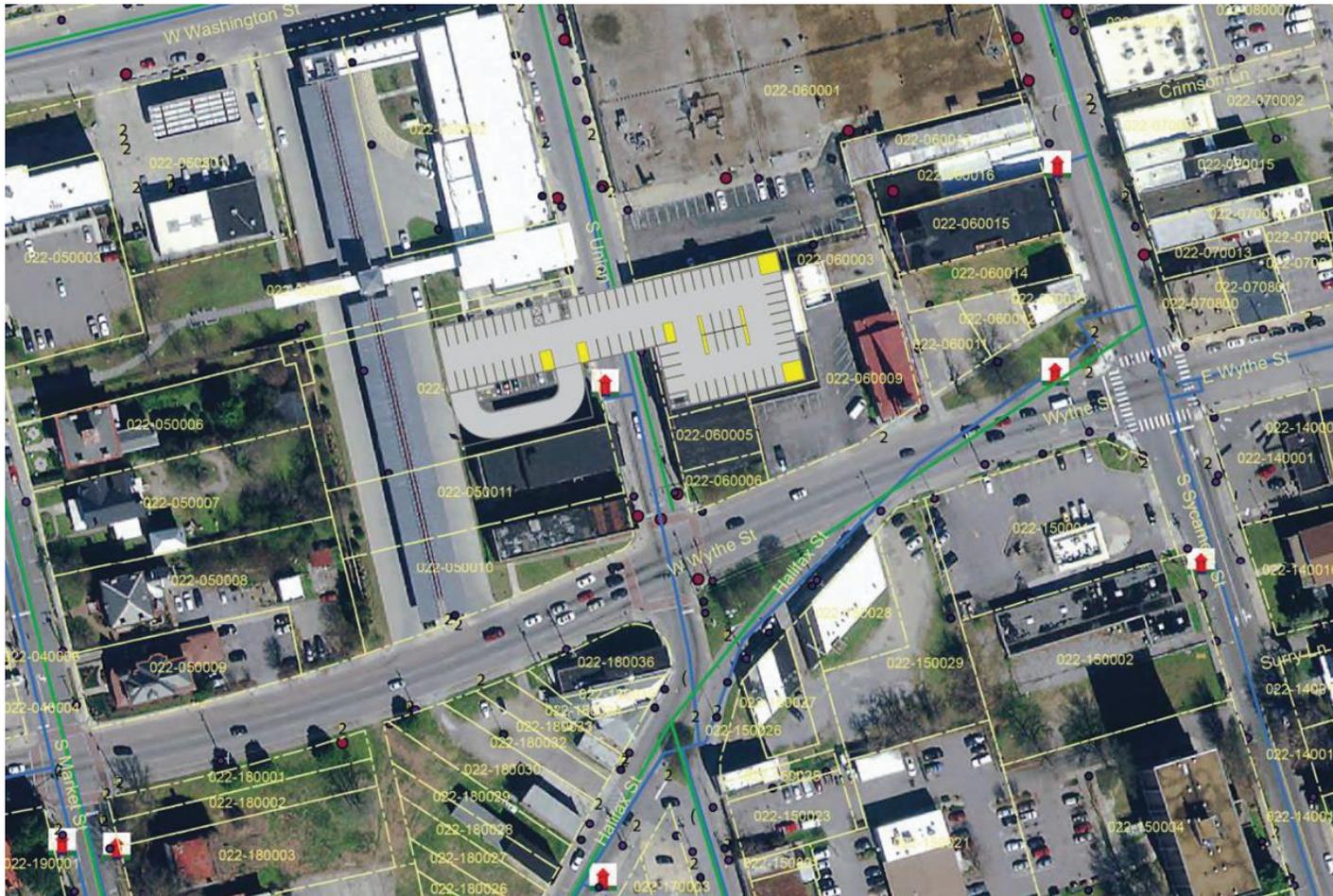
35 existing spaces(222 total)



UNION STREET







Advantages:

- Building Footprint avoids historic buildings
- No parking on sloped ramps
- Access close to Transit Center

Disadvantages:

- Expensive 2-way elliptical ramp
- Long distance from entry to bulk of parking on 3rd and 4th floors

223 spaces + 106,600 SF

Parking Deck Security

Discourage/Deterrence

- Bright LED lighting
- Sense of openness
- Cleanliness
- Natural Surveillance (users, street visibility)

Active Security

- Access control (pedestrian/vehicular)
- Surveillance (Conspicuous CCTV)
- Security patrols
- Emergency stations



Options for Additional Study



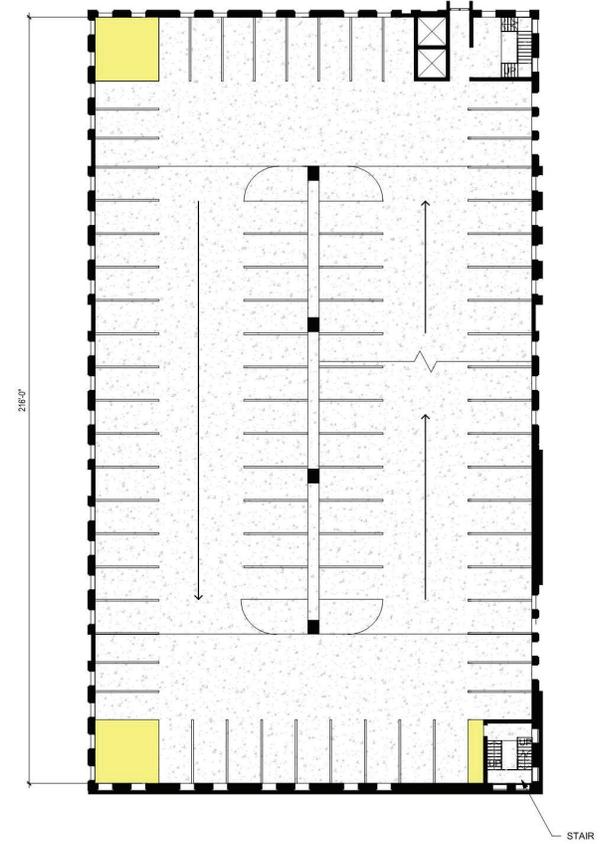
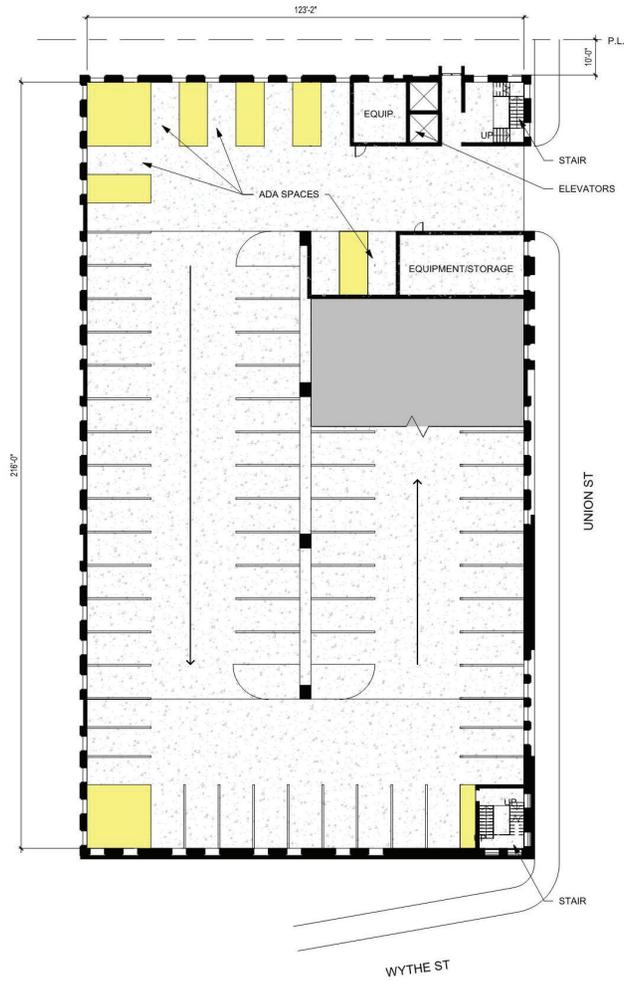


B

76,500 SF
3 1/2 Stories
215 Spaces

Ground Floor

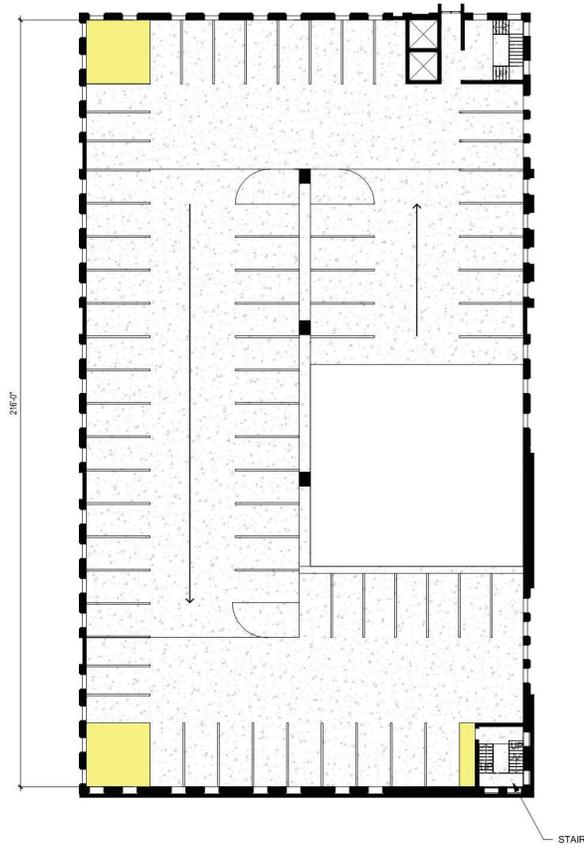
Second Floor





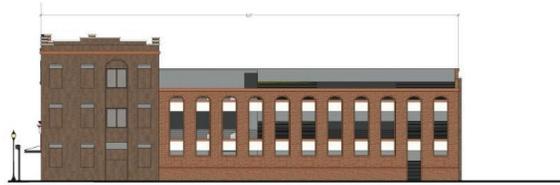
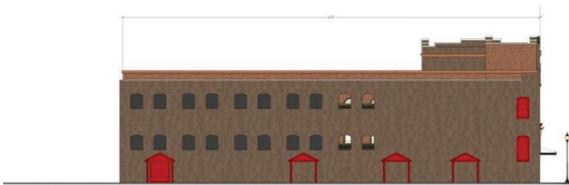
B

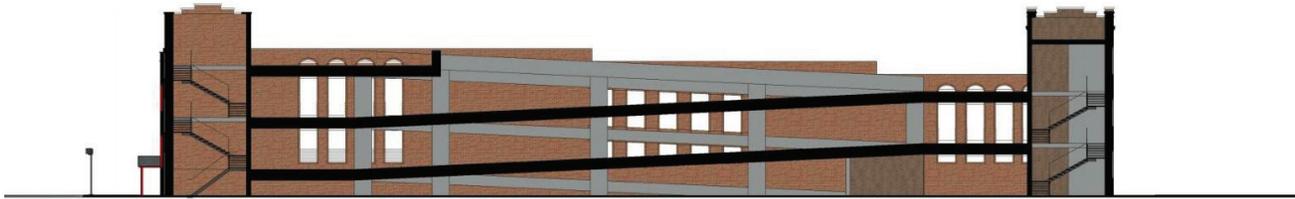
Third Floor



B

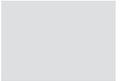
Building Elevations

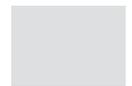




B

Building
Section







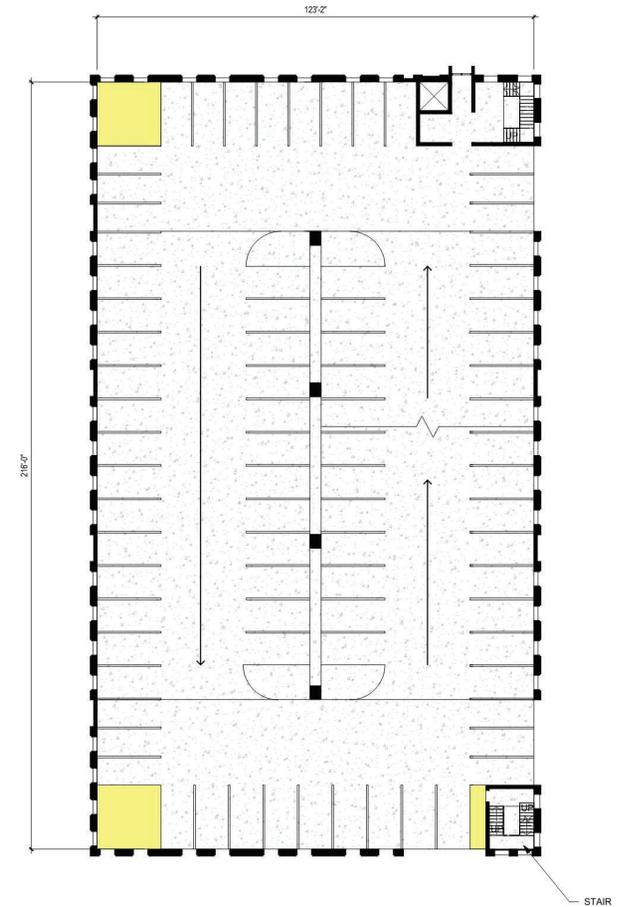
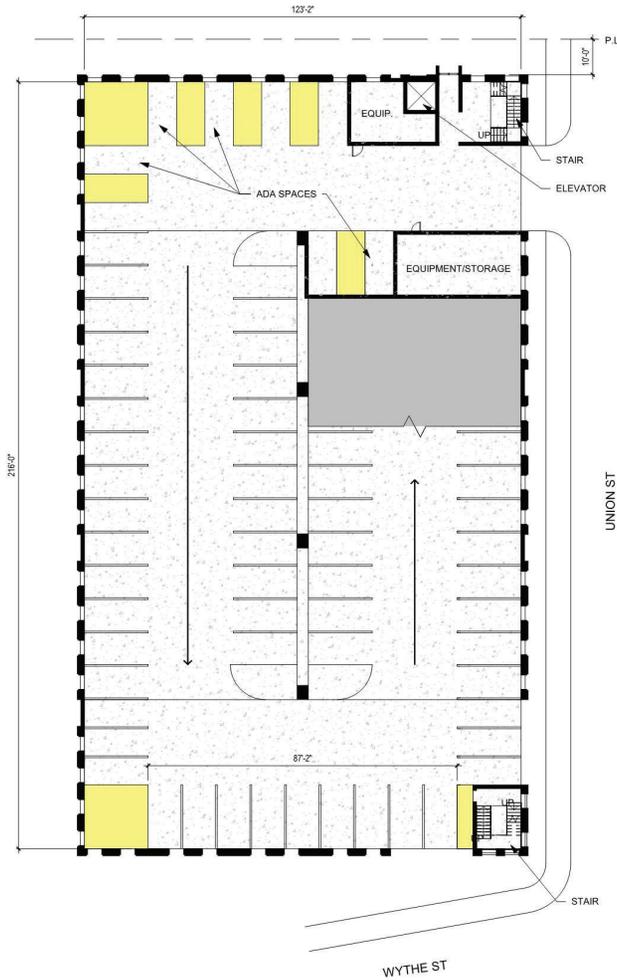


E

76,500 SF
3 1/2 Stories
215 Spaces

Ground Floor

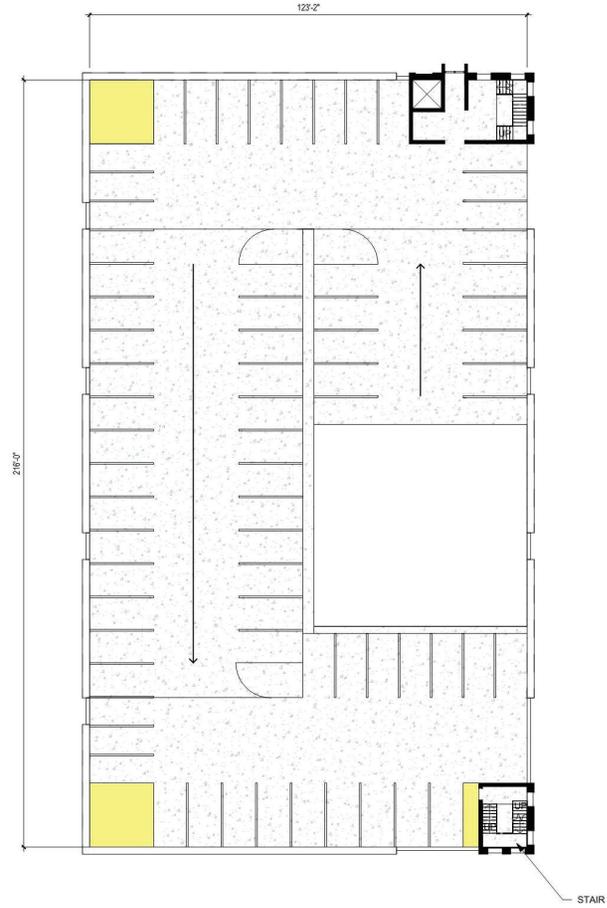
Second Floor

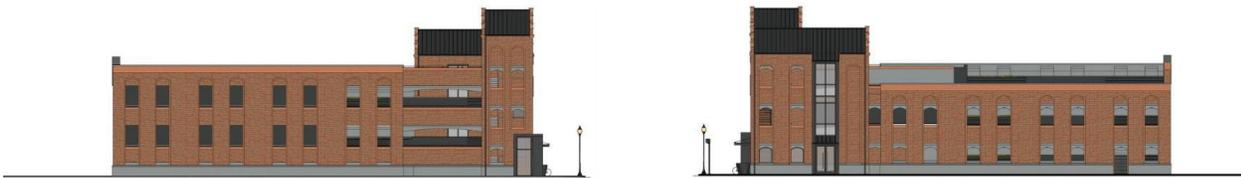




E

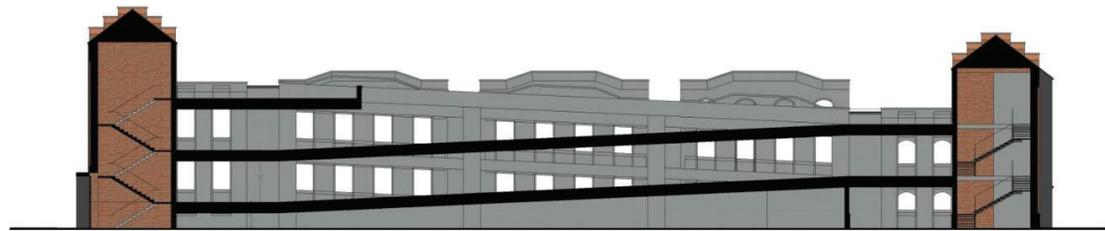
Third Floor





E

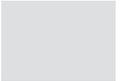
Building
Elevations

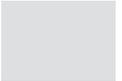


E

Building
Section









Budget & Schedule



Overall Project
Costs

Option	Project Budget
A	\$9,035,000
B	\$9,400,000
C	\$10,270,000
D	\$10,545,000
E	\$7,828,000

Petersburg Park & Ride

Budget Project Cost Summary

				Option B	Option E
Land & Site Analysis				\$ 86,500	\$ 86,500
Site Development				\$ 678,060	\$ 678,060
Building Construction				\$ 6,680,564	\$ 5,473,187
Furnishings & Equipment				\$ 30,000	\$ 30,000
Architectural Engineering Fees				\$ 662,639	\$ 503,123
Other Fees & Soft Costs				\$ 36,000	\$ 36,000
Subtotal Project Costs				\$ 8,173,763	\$ 6,806,870
Contingency				\$ 1,226,064	\$ 1,021,031
Total Project Budget				\$ 9,400,000	\$ 7,828,000
Parking Spaces				215	215
Cost per Parking Space				\$ 43,721	\$ 36,409

Petersburg Park & Ride

Preliminary Schedule

	VDOT HB2 Schedule	Proposed Schedule
Project City/State Agreement	January 2, 2018	April 1, 2019
Environmental Review Process	July 17, 2018	July 1, 2019
Design/Engineering	July 18, 2019	October 1, 2019
Plan Submission	July 29, 2020	July 29, 2020
Advertise for Bids	August 13, 2020	August 13, 2020
Award Construction Contract	September 11, 2020	September 11, 2020
Construction Completion	November 17, 2022	November 7, 2022

Other Considerations

- If funding is not used, the \$8 million will be reprogrammed and **reallocated to other approved Smart Scale projects outside of Petersburg**
- **The project is funded 100% by VDOT with no-match,** which is a special exception not afforded to other Smart Scale projects

Other Considerations

- A Performance Agreement will be developed and executed prior to project funding allocation, final design and construction activities
- The Performance Agreement will include the information from the feasibility study, including the Scope, Cost Estimate, and projected Construction Schedule
- The Performance Agreement will define administration of the project (Local or VDOT).

Next Steps

- Recommend **Option E** to City Council for Approval
215 spaces - 3 ½ Stories - \$7.83 Million
- City/VDOT Performance Agreement in April 2019
- Critical Path Analyses:
 - Utilities (Dominion)
 - Department of Historic Resources
 - Environmental
- Hire Architect/Engineer in October 2019
- Provide Monthly Budget Updates to Council starting January 2020



Discussion





GuernseyTingle

ARCHITECTURE | INTERIORS | PLANNING