

Safety & Capacity Improvement Study for 5-Point Intersection

OR, the Maryland/Monroe/MLK Study
WILMAPCO PAC, December 14, 2020



WILMAPCO PAC Meeting

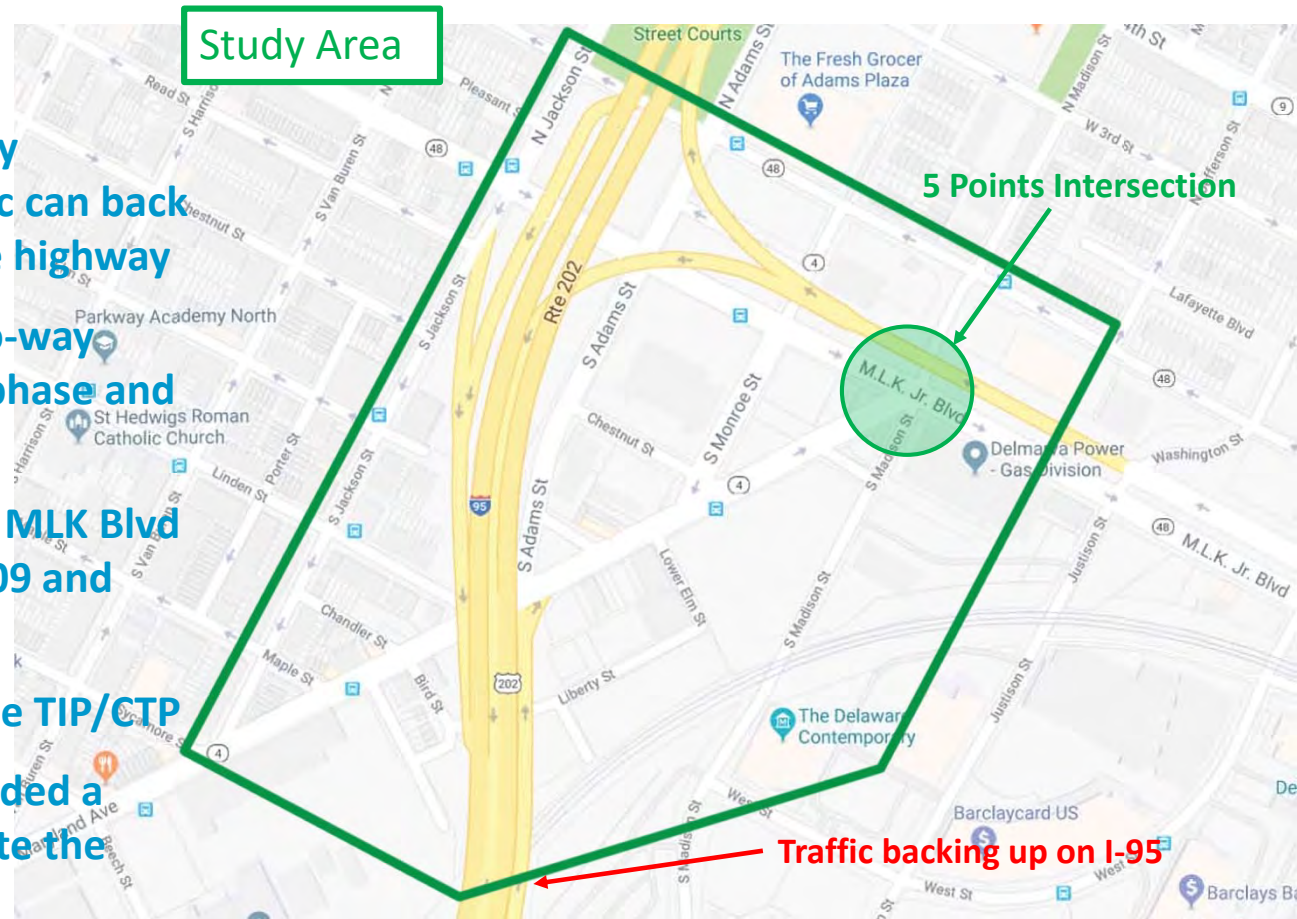
December 14, 2020

AGENDA
















- ❖ **Project Background**
- ❖ **Review of Transportation Alternatives (A,B,C,D)**
- ❖ **DTC Monroe Street Feasibility Study/Master Plan**
- ❖ **Public & Stakeholder Outreach**
- ❖ **Next Steps**

Project Background

- ❖ The intersection experiences heavy congestion in the AM peak – traffic can back up onto the I-95 exit ramp and the highway
- ❖ In 2008, Madison St became a two-way street, which added a new signal phase and created more congestion
- ❖ The intersection of Maryland Ave, MLK Blvd and Madison St was studied in 2009 and 2011
- ❖ The project was never added to the TIP/CTP
- ❖ Wilmington Initiatives partners added a UPWP request for 2018 to complete the study



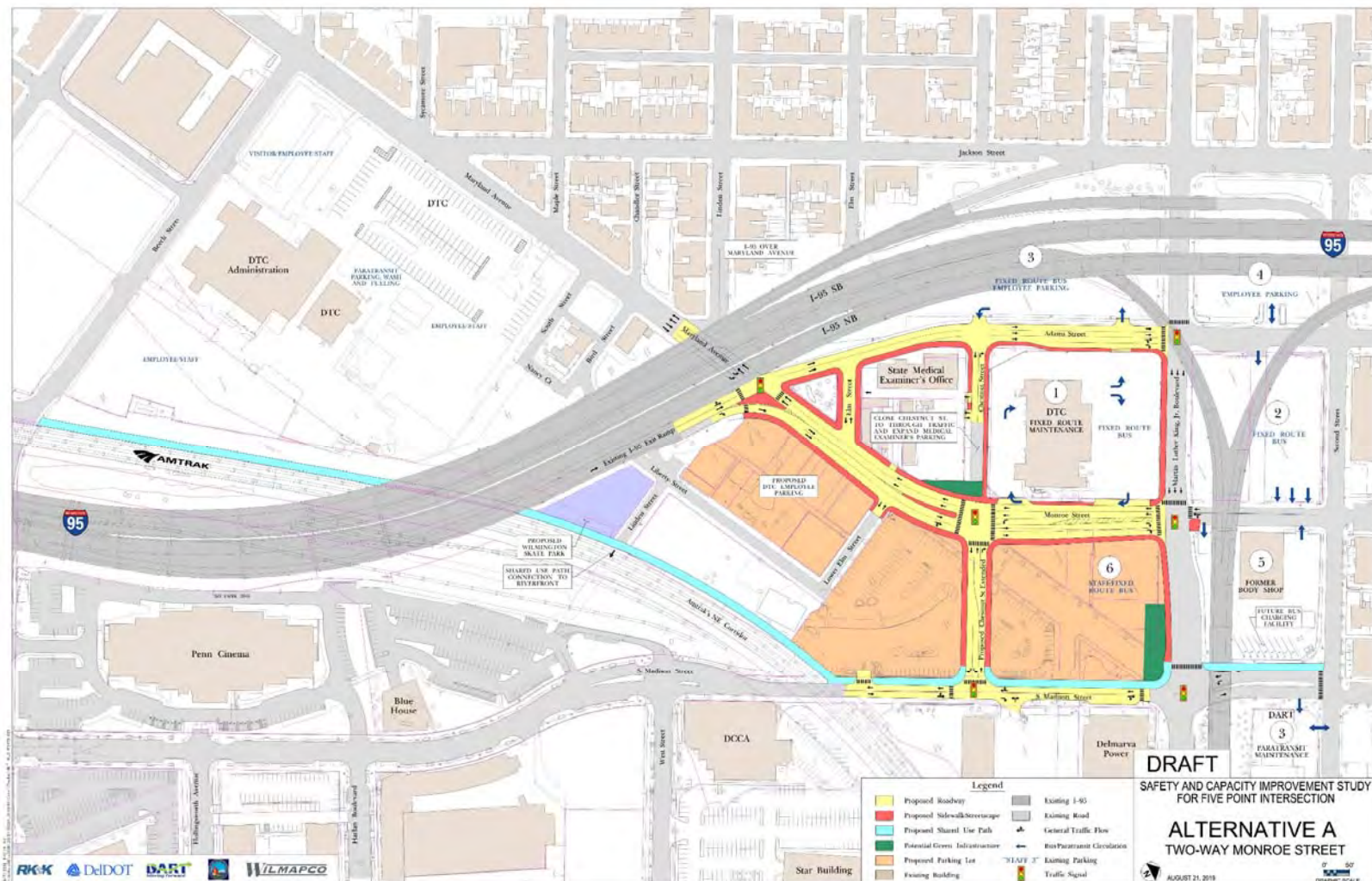
CRITERIA MATRIX

CRITERIA	TRANSPORTATION						LAND USE	STAKEHOLDER CONCERNS			GATEWAY ENHANCEMENT OPPORTUNITIES		ENVIRONMENTAL			COST
Measure	Vehicle Conflicts and Crash Potential	I-95 Ramp Congestion and Queues During Peak Hour(s)	City Streets Congestion and Queues During Peak Hour(s)	Efficient Transportation Grid	Pedestrian Network	Bicycle Network	Opportunities for Economic Development	DTC Operations and Parking	Delmarva Access, Circulation and Customer Parking	Medical Examiner Parking	Wayfinding/ Destination Signage	Aesthetics/ Lighting	Historic	Social/ Environmental Justice	Green Infrastructure Opportunities	Cost Estimate
No Improvements																
Alt. A Two-way Monroe St.							 ¹	  *	 ¹	 ¹						 \$7.6M
Alt. B One-way Monroe St. with Chestnut St. extended								  *								 \$8.4M
Alt. C Private Monroe St. / Two-way Maryland Ave.								  *								 \$7.8M
Alt. D I-95 Split Ramp								  *								 \$35.6M

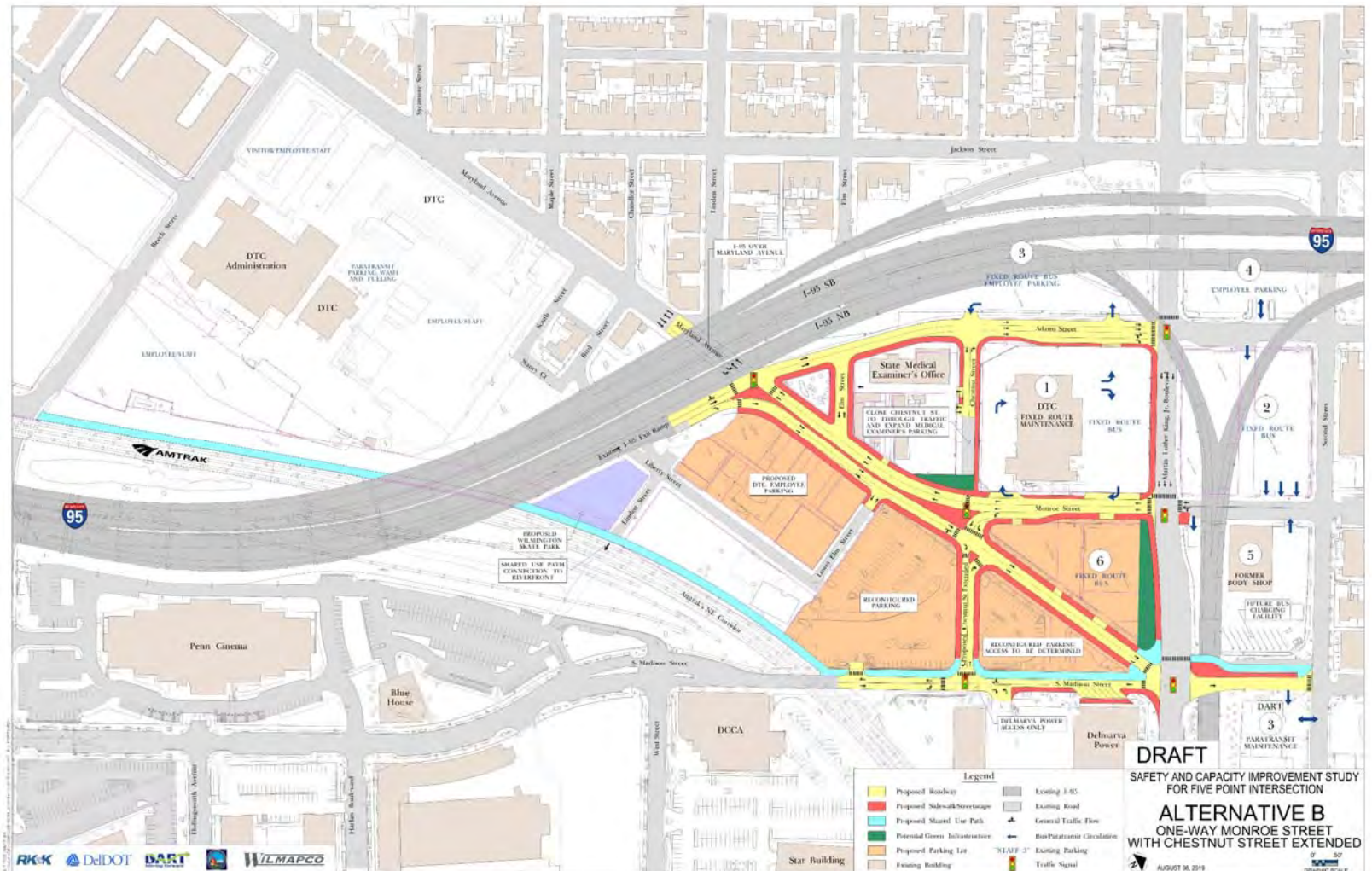
1 - Dependent on Concept from DTC Study

* with Structured Parking

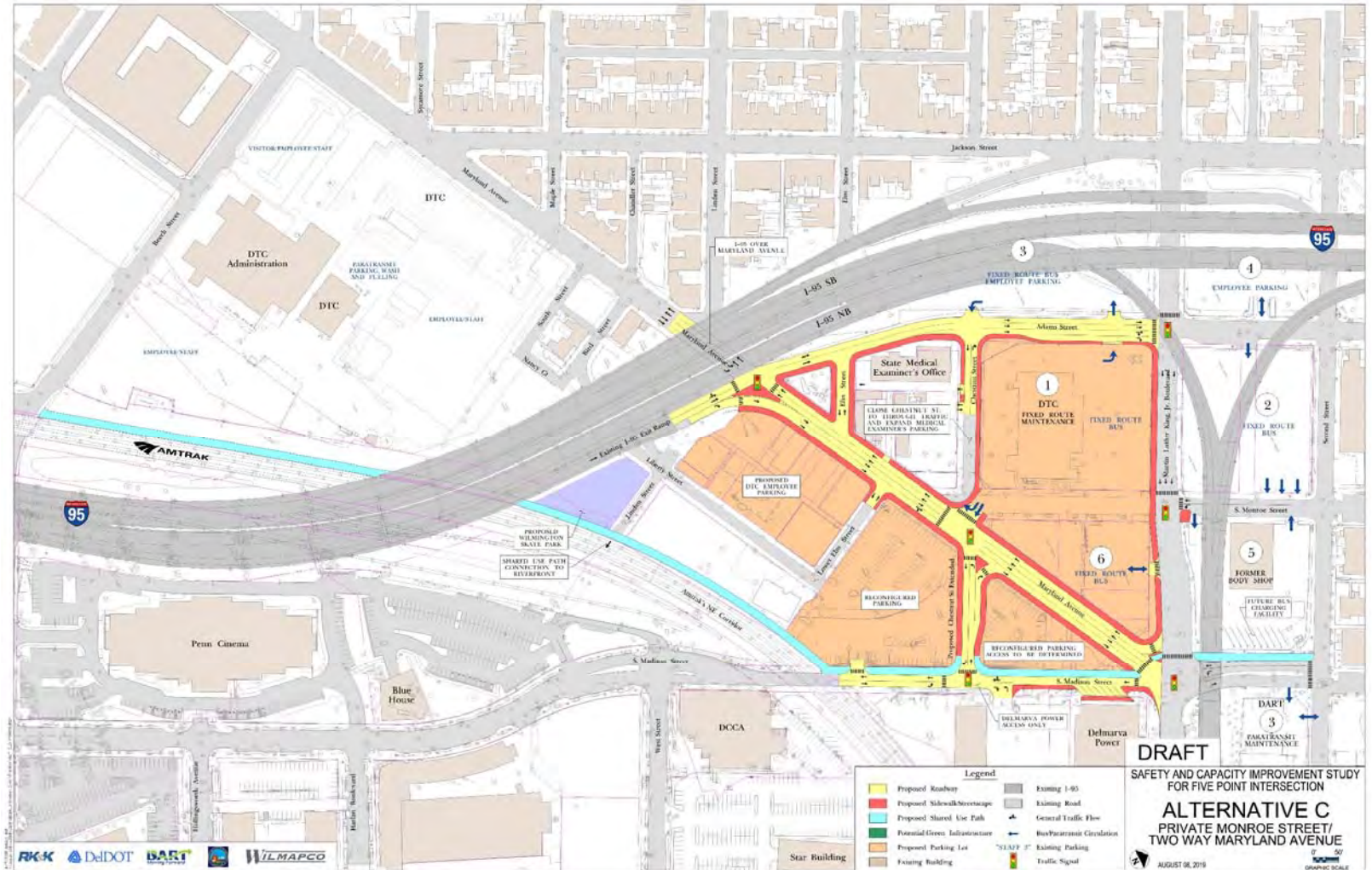
Alternative A: Two-Way Monroe Street



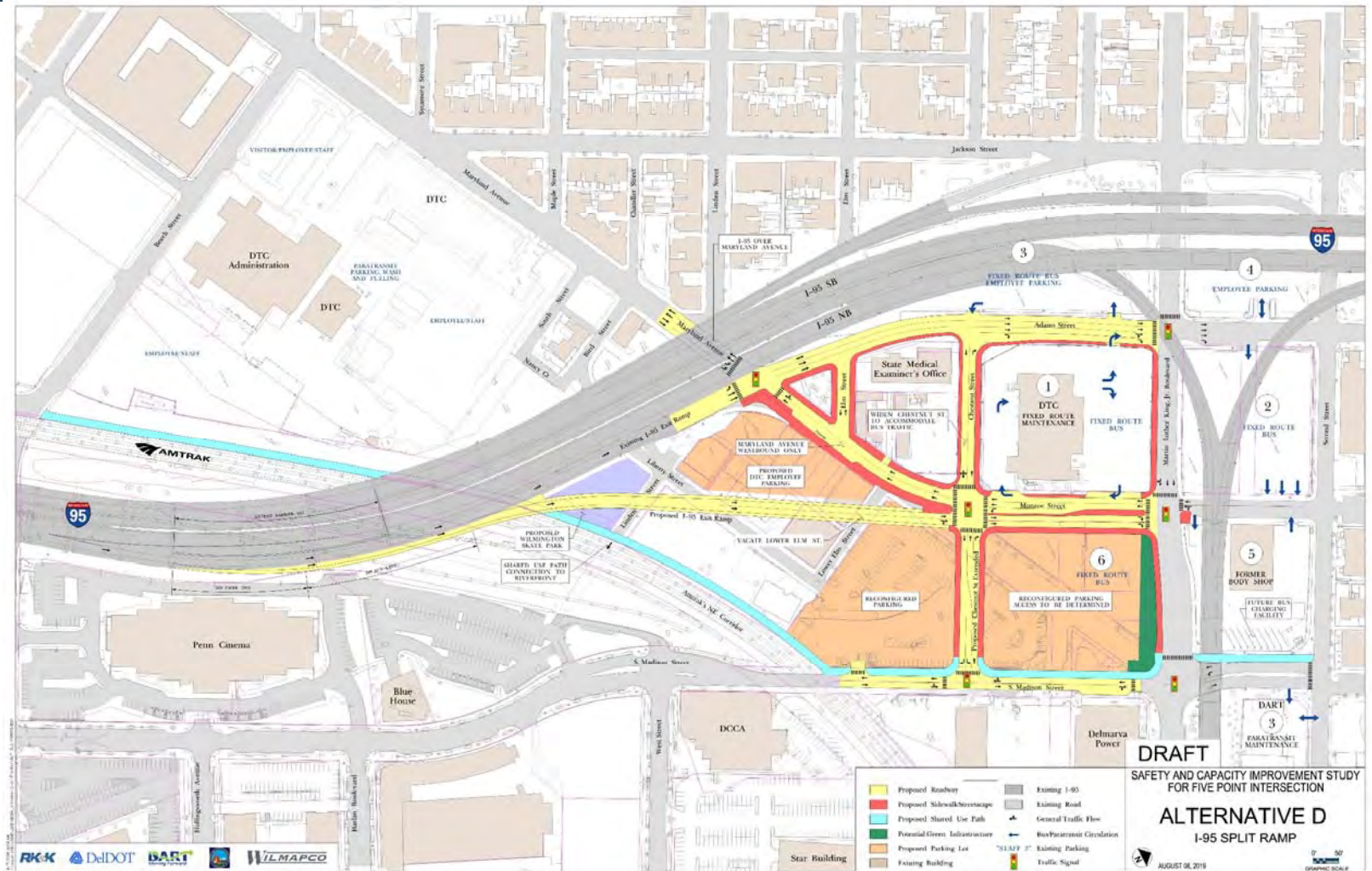
Alternative B: One-Way Monroe Street with Chestnut Street Extended


















**Alternative C:
Private
Monroe
Street/
Two-Way
Maryland
Avenue**



Alternative D: I-95 Split Ramp

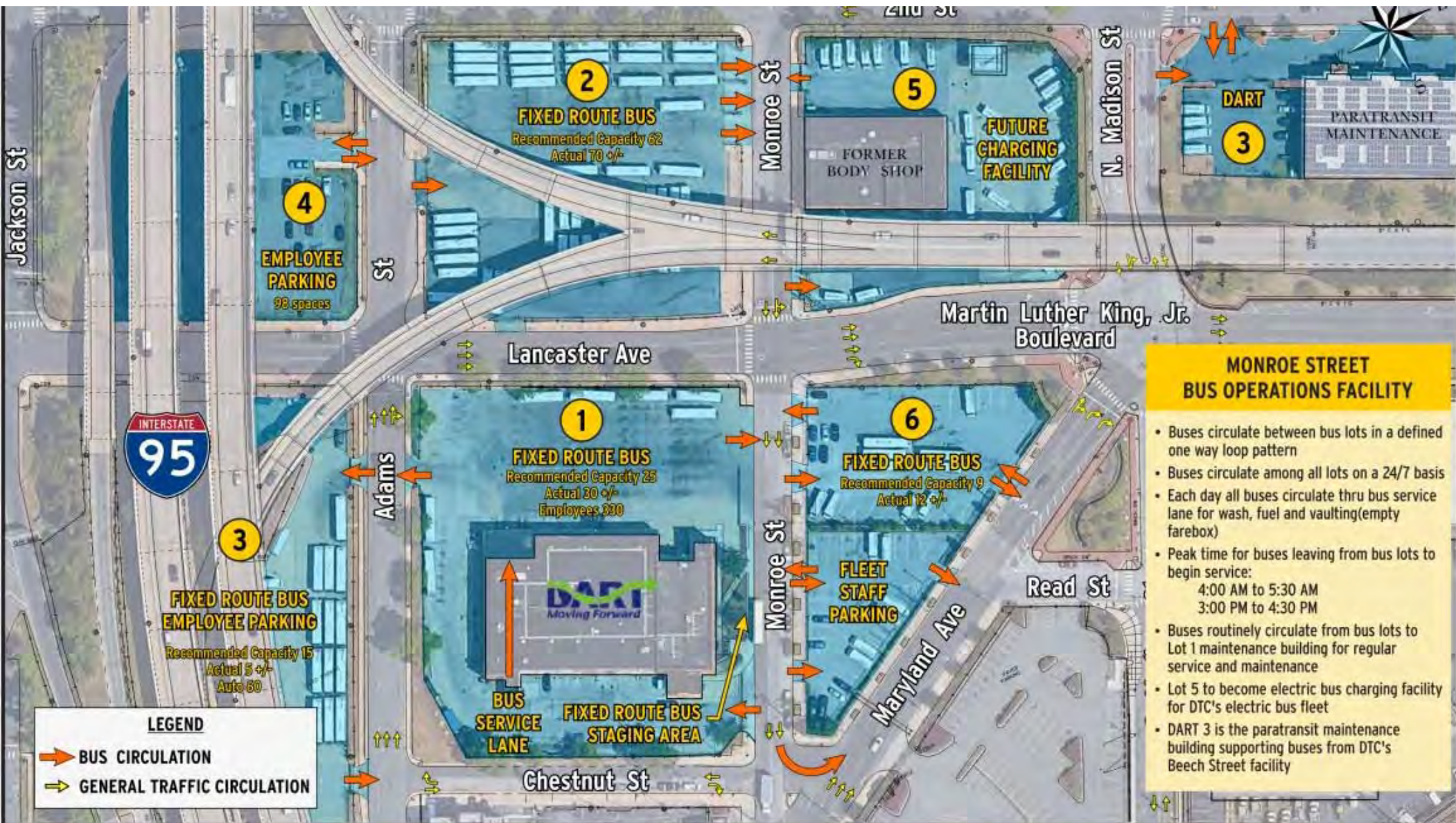


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DTC Monroe Street Feasibility Study/Master Plan

❖ Site Circulation / Parking

- Address site circulation once Monroe St. becomes 2 way divided
- Separate bus park, vault, fuel/wash from maintenance traffic
- Provide parking for 125 +/- buses (preferably in one area)
- Provide covered parking for buses
- Provide parking for DTC employees and support vehicles
- Provide parking for Delmarva employees
- Consider decked structure

❖ Building Program

- Consider phasing
- Increase Maintenance bay widths
- Provide more tire storage (interior) next to work area
- Provide additional Break Room and Locker Room area
- Provide additional support space for offices (copy, training,)

DTC Monroe Street Feasibility Study/Master Plan

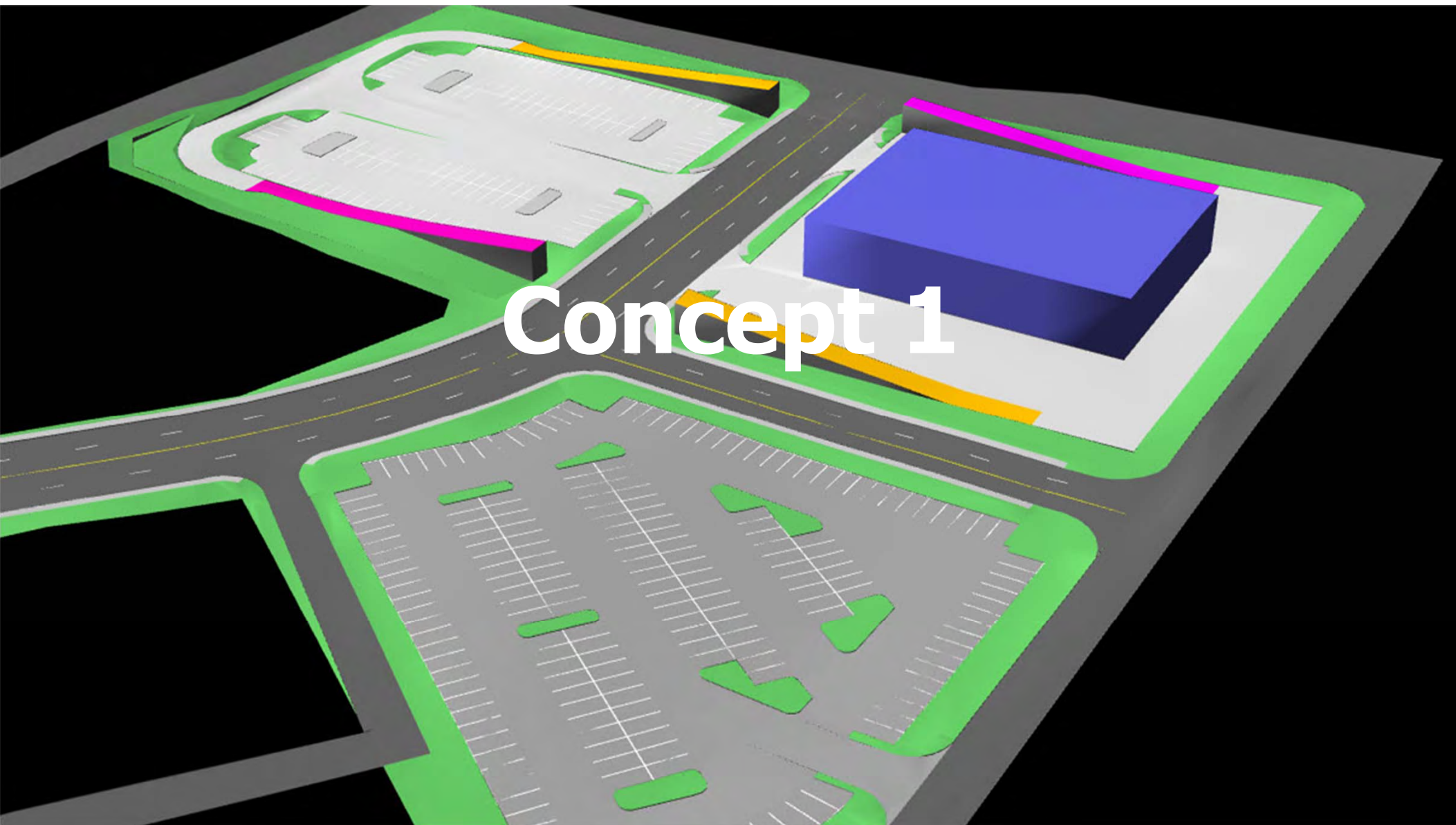
❖ Developed Parking/Garage/Access Concepts (Used Alternative A as base alternative)

- Concept 1: Decking over Lot 1 and Lot 6; Surface Parking on lot west of Chestnut Extended
- Concept 2: Decking over Lot 6 and lot west of Chestnut Extended; Surface Parking on Lot 1 (Not developed in more detail)
- Concept 3: Decking over Delmarva and Reybold lots west of Chestnut St; Surface parking Lots 2 and 6
- Concept 4: Surface Bus Parking on Lot 1; New Maintenance Building on Lot 6. Concept included with or without employee garage

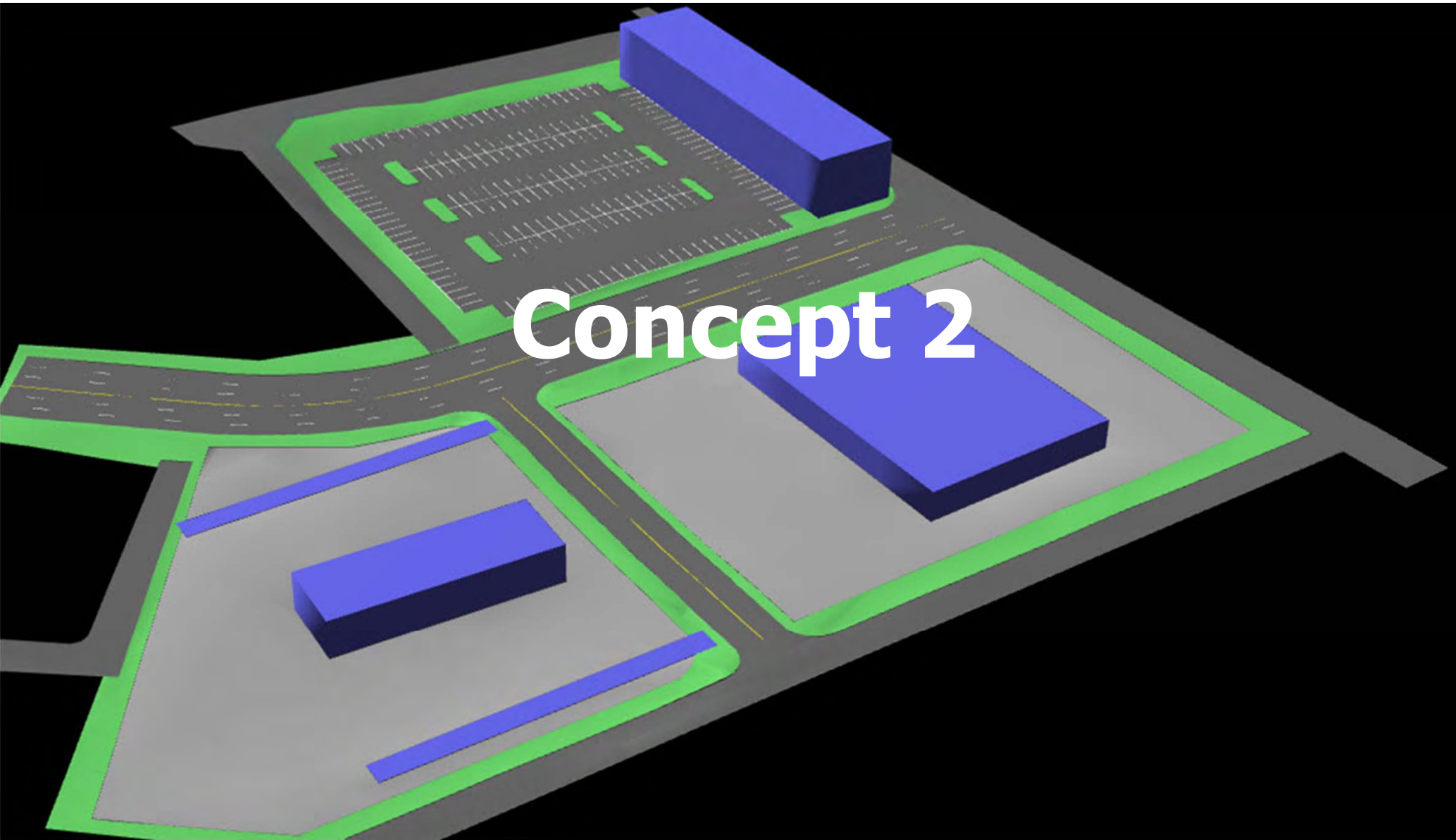
❖ Developed Proposed Building Program - 47,900 SF (on 2 floors) vs. 29,200 SF Existing

- Maintenance Building: 27,000 sf footprint
- Fuel/ Wash: 2 bays
- Operations Offices: Increased SF
- Breakroom/ Lockers : Increased SF and lockers

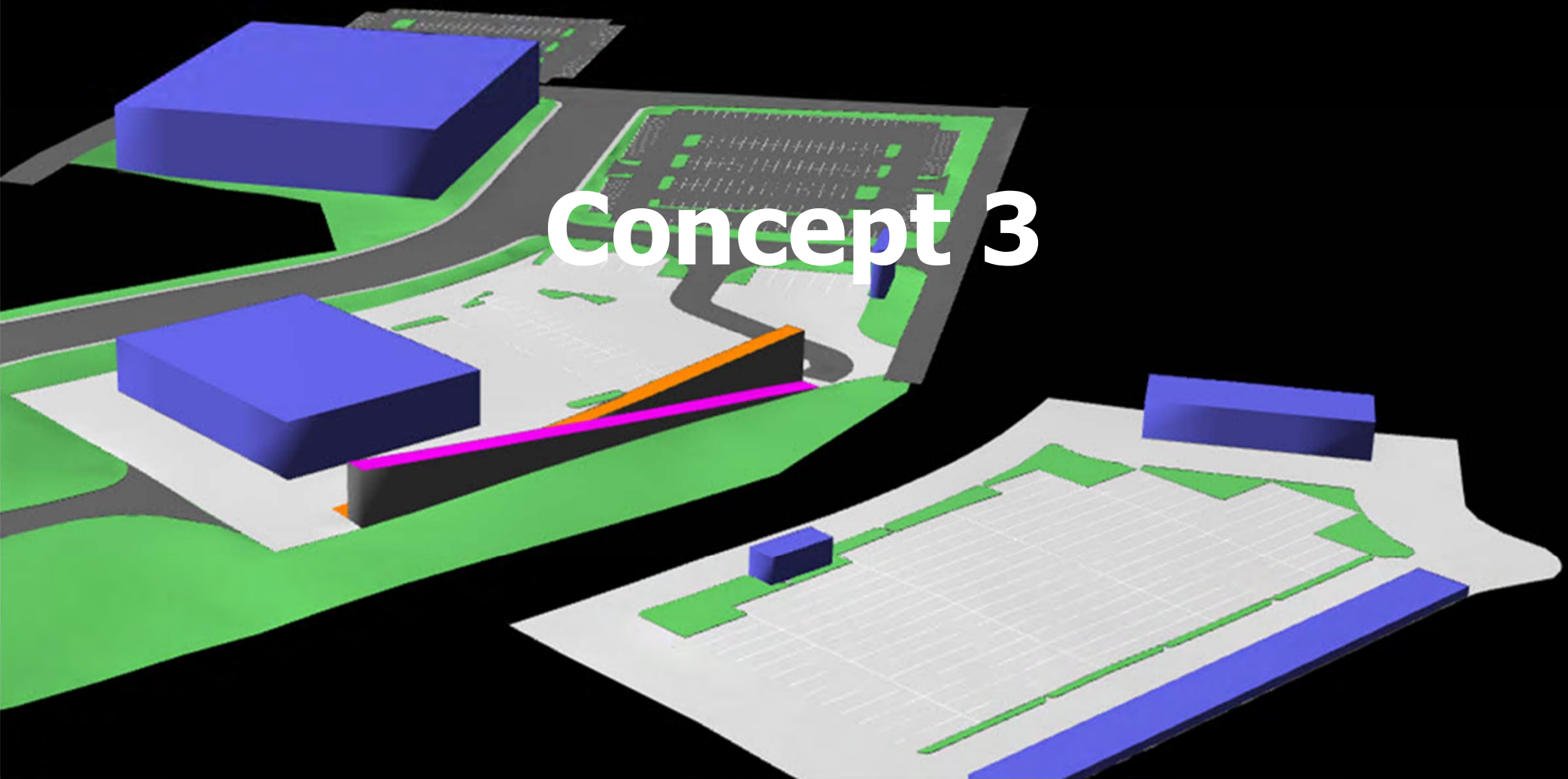
Concept 1



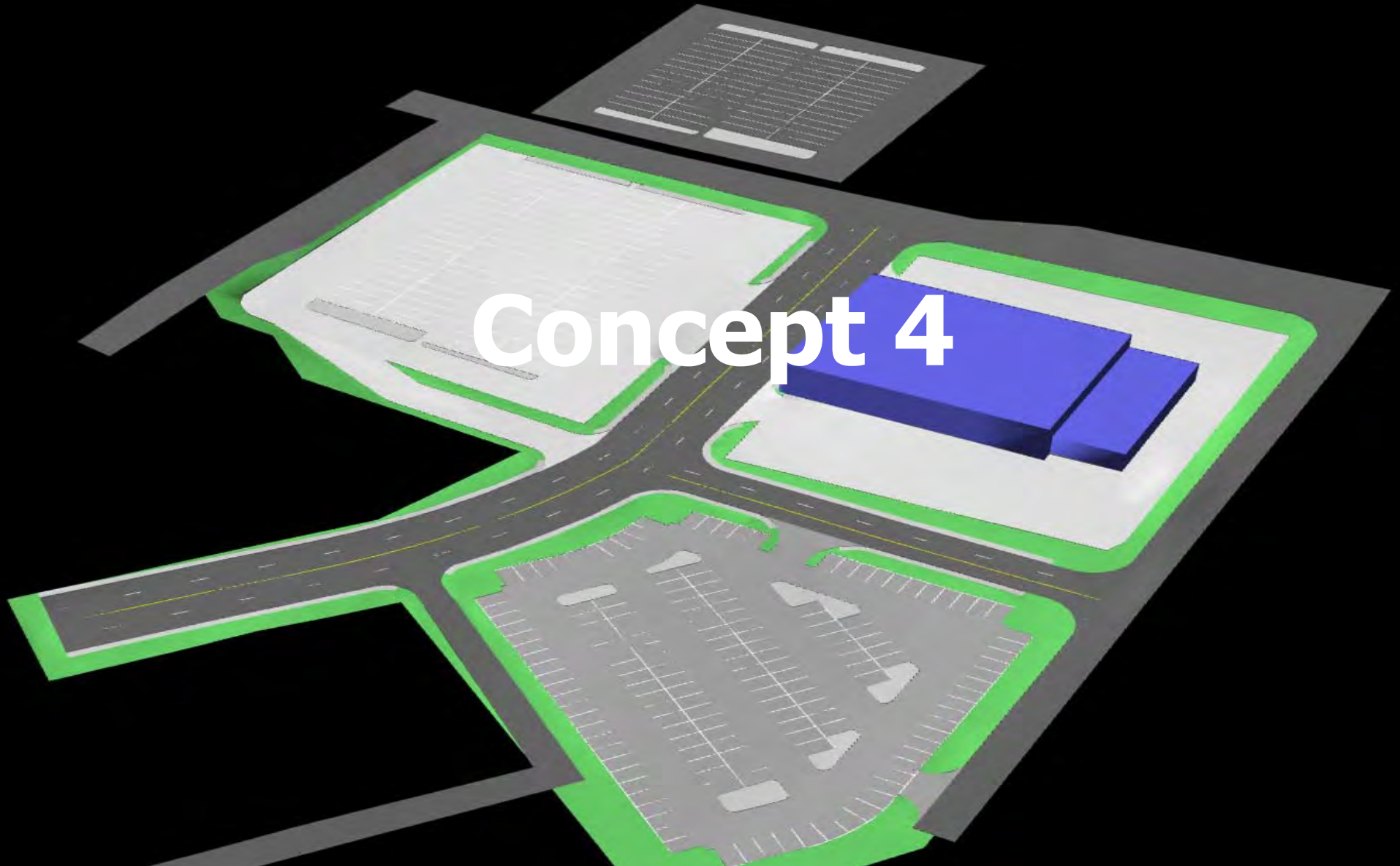
Concept 2

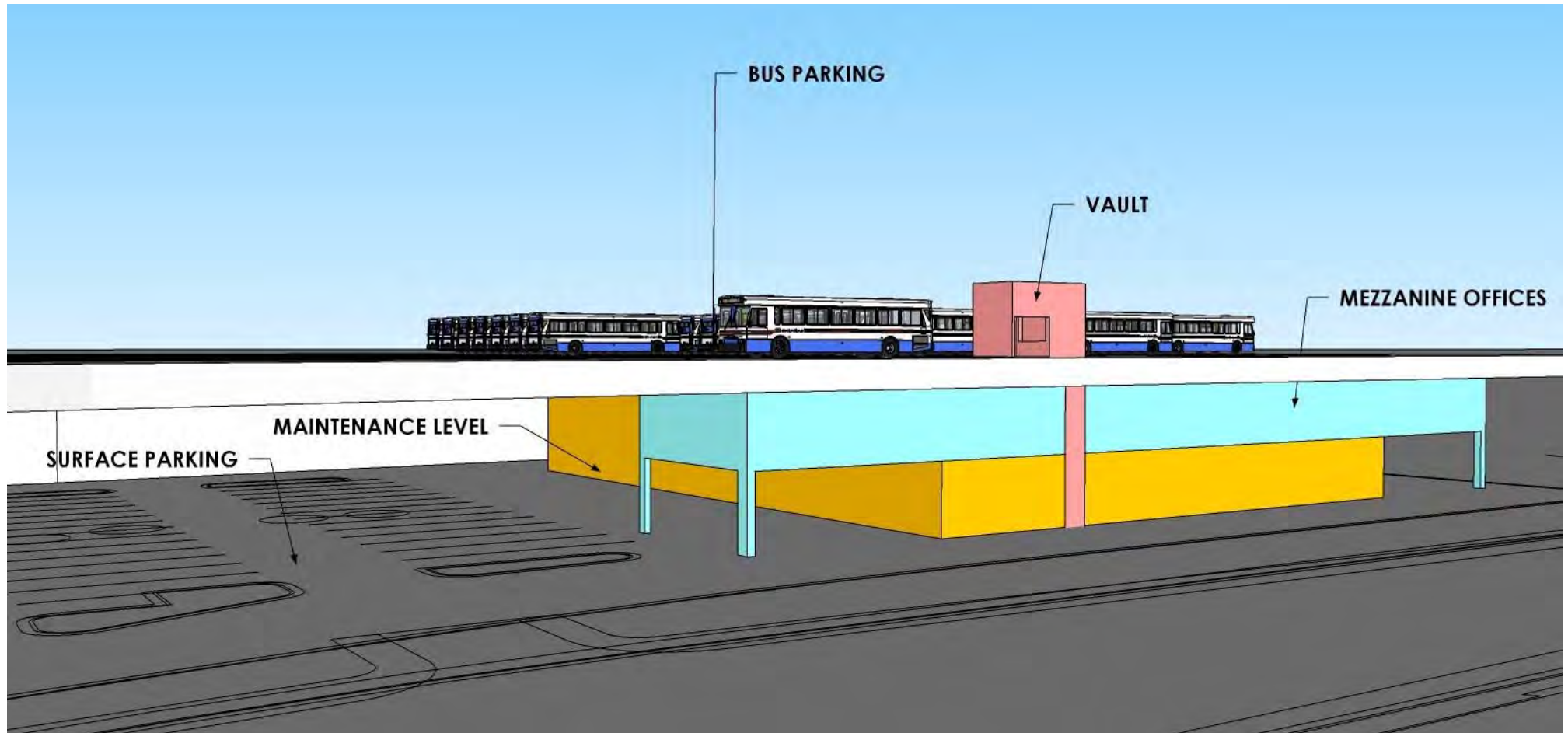


Concept 3



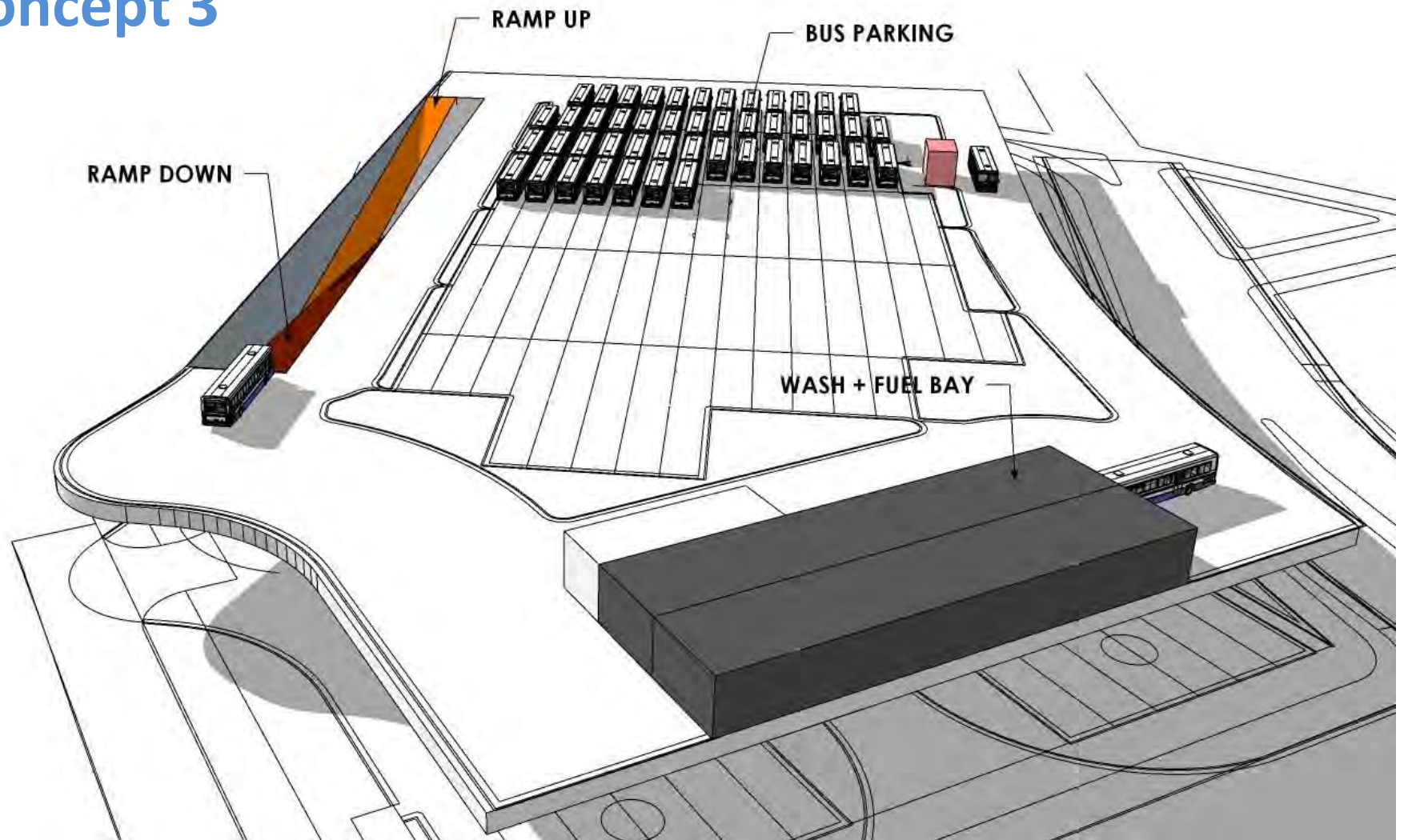
Concept 4





Concept 3

Concept 3



DTC Monroe Facility**Cost Estimates**

16-Jun-20

	Concept 1		Concept 3		Concept 4	Concept 4
	Bus Parking on Top	Bus Parking on Bottom	Bus Parking on Top	Bus Parking on Bottom		w/ Employee Garage
Buildings	\$36,130,890	\$36,130,890	\$36,130,890	\$36,130,890	\$36,130,890	\$36,130,890
Parking Structure	\$30,921,660	\$30,921,660	\$25,821,180	\$25,821,180	\$0	\$17,123,040
80% Solar Panel Cover	\$21,859,200	\$0	\$18,899,100	\$0	\$0	\$0
Other Site Costs	\$10,813,250	\$10,812,450	\$12,008,830	\$12,007,930	\$9,829,110	\$9,831,070
Total Cost Estimate	\$99,725,000	\$77,865,000	\$92,860,000	\$73,960,000	\$45,960,000	\$63,085,000
Bus Parking Spaces	110 +/-	120 +/-	146 +/-	127 +/-	140 +/-	140 +/-
Employee Parking Spaces	520 +/-	380 +/-	460 +/-	400 +/-	159 +/-	300 +/-

*Assumes Solar Panels not needed for Bus Parking on Bottom since buses will be covered, but could be added later for energy reasons

*If Concept 4 is modified to allow two way access to Lot 1 from Chestnut Street, then Bus Parking Spaces are reduced 5-10 spaces

*Delmarva needs 225 +/- Employee Parking Spaces

*DTC needs 100+ Employee Parking Spaces

*Total Cost Estimate does not Include real estate costs

Public & Stakeholder Outreach

- ❖ Wilmington Initiatives Open House Workshop, June 20, 2018
- ❖ Kick-off Meeting with Stakeholders, May 20, 2019
- ❖ Wilmington Initiatives Open House Workshop, June 19, 2019
- ❖ **Wilmington Initiatives Open House Workshop – Cancelled due to COVID-19 Restrictions**
- ❖ Phase II Garage Feasibility Stakeholder Kick-off, February 26, 2020
- ❖ Stakeholder (DTC) Working Meetings, April 15 & June 16, 2020
- ❖ Stakeholder Update Meeting, November 5, 2020

Next Steps

- ❖ Finalize Study Recommendations & Develop draft Report
- ❖ Review report with Wilmington Initiatives (PMC)
- ❖ Action Item for WILMAPCO TAC on December 17
- ❖ Action Item for WILMAPCO Council on January 14

Questions?



<http://www.wilmapco.org/maryland-monroe-mlk/>