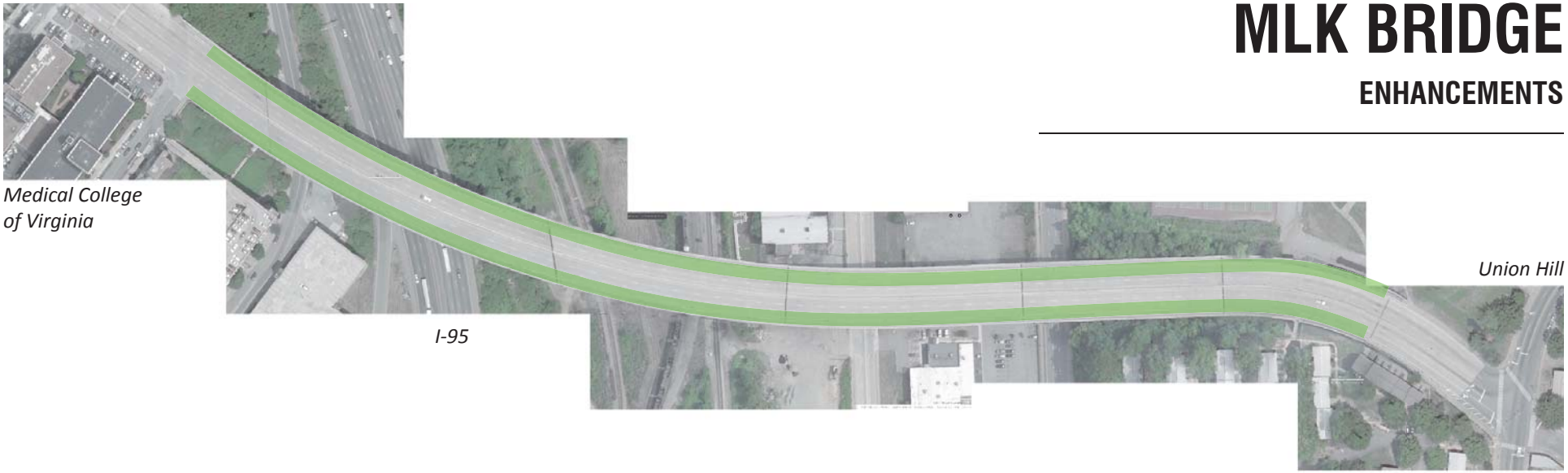
MLK BRIDGE

ENHANCEMENTS



View of existing bridge, looking west - green overlay marks the zones for improvements

The Martin Luther King, Jr. Bridge, built as the Leigh Street Viaduct in 1976, provides six vehicular lanes as it spans 2,151 feet long over the Shockoe Valley between the Medical College of Virginia campus to the west and the residential neighborhoods of Union Hill and Church Hill to the east. The bridge's capacity for vehicular traffic is beyond the current needs of both the campus and the neighborhoods, yet it serves as a vital and well used pedestrian path over the interstate highway and railways on the valley floor below.

In recognition of the bridge's current and projected loads and modes of use, the proposed enhancements will reduce the vehicular lanes to four allowing for an increase of surface area devoted to pedestrians and bicycles. The harshness of the currently dominating concrete surfaces will be softened by the introduction of landscaping and the 'highway' scale of the bridge will be mitigated with the addition of human-scaled light fixtures and paving. Although these enhancements focus on the pedestrian's experience - an average journey of 8 minutes to walk 2,151 feet - a narrowing of the surface devoted to motor vehicles will have a calming affect on traffic speed, encouraging adherence to the current posted speed limit of 35 mph.

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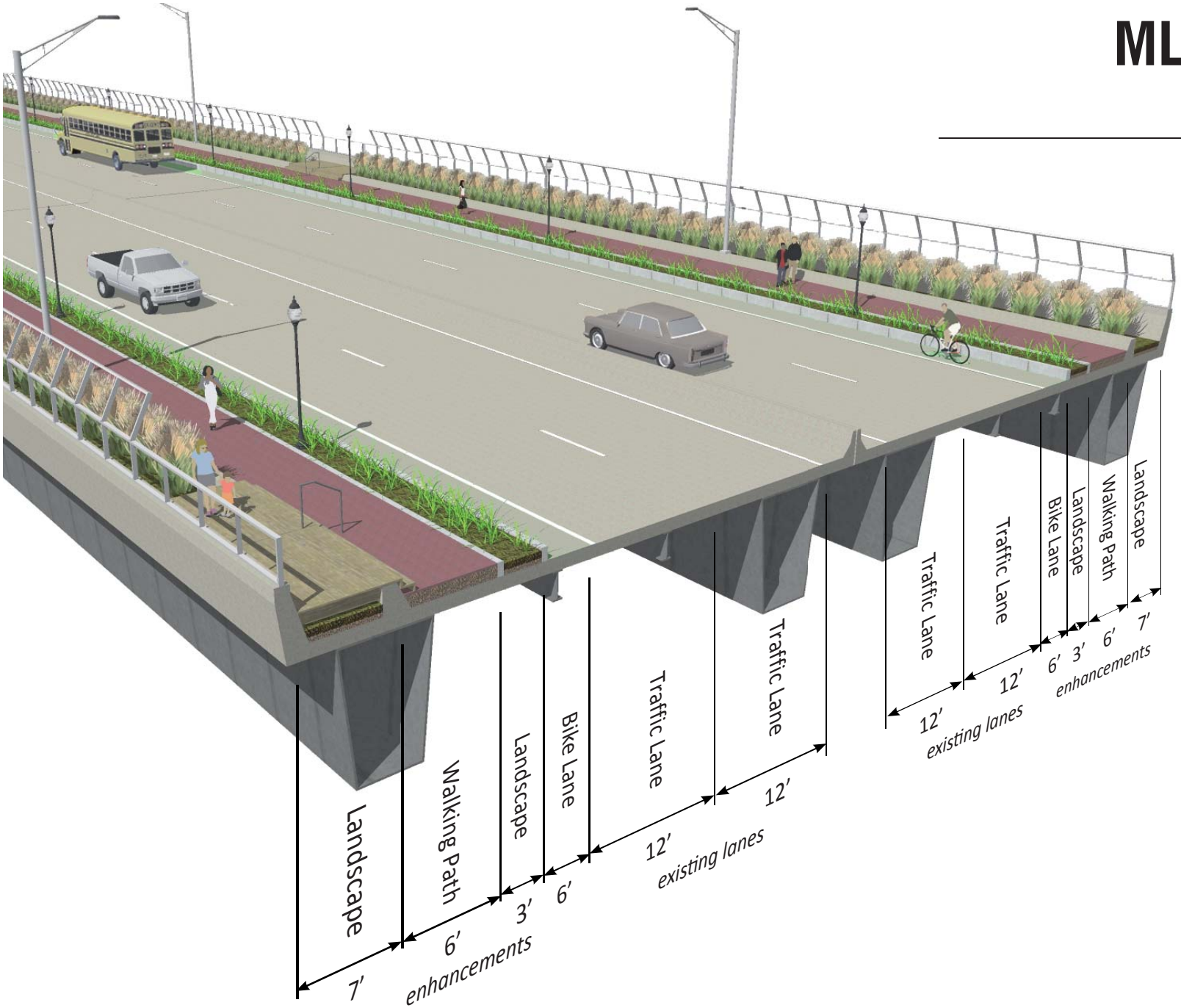

Cross Section of Bridge

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Lighting:
Pedestrian scale, 12’ high lamp posts at 60’ intervals (approximately 72 total fixtures).

Viewing Platform:
Wood surface spans over original barrier and landscape bed to provide seating and vantage points for views from bridge. Platforms are 7’ x 20” and occur at intervals of 300’ (approximately 12 total platforms). At platforms, the top panels of the original fencing is lowered to reduce feeling of ‘enclosure’ (Note: Fencing height will be no lower than what is required for safety. Fencing will not be lowered at any locations over the interstate).

Landscaping Bed:
7’ wide bed with ‘intensive’ green roof system consisting of: 6” soil on filtration fabric on 4” granular drainage fill on protection mat over existing concrete deck (total saturated weight of system shall be approximately 70 lbs/sf). Plantings will be low-maintenance native grasses and shrubs. Primary irrigation will be supplied by natural rainwater runoff from adjacent walking surface.

Modified Barrier:
Steel top rail and brackets are removed and salvaged for installation on other projects. The remaining concrete barrier wall is cored at 10’ intervals to allow rainwater run-off from sidewalk to pass through to wide landscaping bed.

Pedestrian Path:
6’ wide path of 2” thick concrete brick pavers on 4” sand bed on 6” crushed drainage gravel (total saturated weight is approximately 130 lbs/sf).

Landscaping Bed:
3’ wide bed between new concrete curbs. Plantings will be low-maintenance native ground cover. (Note: See landscaping bed above for soil system).

Bike Lane: 6’ wide

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View with bridge enhancements, looking west