Purpose

In 2001 the City of Charlottesville retained Wallace Roberts & Todd, LLC to prepare comprehensive urban open space recommendations for the City’s downtown, to include West Main Street from the Mall to the University of Virginia.

This report summarizes basic urban design and streetscape recommendations for the long-term use of West Main as the primary connector from UVA to the Downtown, and as a key potential development and transit corridor.

The recommendations contain herein followed a long period of analysis, assessment of transit alternatives, the positing of likely development scenarios, and the substantial engagement of stakeholders. However, they do not constitute a final design direction, as further study and evaluation of development and transit feasibilities remain an on-going activity.
The Challenge

Of the three East-West corridors that link the Downtown to the University of Virginia and Route 29—Preston, Cherry and West Main Streets—the latter is the only one that provides direct connectivity, and as a result it is heavily used and often congested.

As a historic road with a narrow, 60-foot right-of-way and with quaint buildings pressed right to it, West Main Street offers little room for either vehicular or pedestrian expansion. On the plus side, the very conditions that limit circulation create a desirable scale and ambience for restaurants, cafes, retail establishments and their attendant pedestrian activity.

The objective of the open space concept and streetscape design is to preserve and enhance the Street’s positive urban qualities while setting forth recommendations that can improve vehicular and pedestrian circulation.
To properly address the preceding objective, the City expanded the scope of the initial open space study to include overall urban form, mass and land use on the West Main corridor, especially in the area between JPA and 10th Street where UVA anticipates and expansion to their Medical Campus.

The following pages advance basic urban design concepts that have inform the streetscape design.

The key recommendation is to secure an easement from new developments to expand the sidewalk area on the south side of the Street.

The South side was chosen owing to the larger development parcels that could, through coordinated design, more readily accept—and benefit from—a wider sidewalk.

Varying from 14 to 18 feet, the proposed easement would create a tree-lined promenade connecting UVA to the Downtown and also add space for outdoor dining and other sidewalk amenities.

More detailed illustrations of this recommendation are included in the Streetscape Schematics portion of this report.
Urban Design Scenario

Parking

Parking structures in larger development parcels can satisfy future parking demand created by redevelopment—and afford a potential reduction of on-street parking to the benefit of vehicular and pedestrian circulation. Access to new parking structures should occur from the cross streets to minimize congestion along West Main.

Urban Form

Greater development bulk is possible in the larger parcels to balance the expanded sidewalks and other necessary open areas. A larger “central park” is proposed at mid-point between UVA and the Downtown to bring views of the extended hillside landscape into the heart of the West Main corridor. The new urban form and mass could contain over 1.5 million square feet of new development, enhancing the viability of rail transit as a means of improving the linkage between UVA and the Downtown.
Urban Design Scenario

Scale

The cross sections at left establish the recommended maximum height at two key development areas.

At section “a” two taller structures are proposed just west of the bridge to maximize development that can take advantage of beautiful hillside views to the south. This section suggests that a taller structure on the north side of the Street, if kept close to R.O.W., would not unduly affect the scale of, or views from, the West Haven community.

The greatest potential for new development lies in the area between 10th Street and JPA, where UVA envisions an expansion of their medical campus. Section “b” suggests a massing gradient that increases bulk and height as structures recede from West Main Street. The intent is to preserve the existing, low-scale quality of the corridor at the sidewalk line.

It is the further intent that uses facing West Main Street, at the street level, be pedestrian oriented and serve primarily retail or service functions.

\textit{Within the redevelopment areas, the pattern of internal streets and/or access easements should emulate the Downtown block scale.}
Urban Design Scenario

Massing

A critical recommendation is to maintain the scale of West Main Street close to what it is today, emulating the scale of the Mall, which has the same right-of-way width.

**As a guideline, buildings abutting the proposed easement should be no more than four stories in height. Further height should be stepped back at a 1:1.5 ratio; that is, 1.5 horizontal feet for each added vertical foot.**

These diagrams illustrate the proposed massing three-dimensionally. Existing buildings are shown in white; new massing is shown in turquoise; pink represents parking structures; and yellow represents historic buildings.

The lower diagram shows a simulated view along the Rotunda-Monticello line of sight. It is estimated that along this line, buildings no taller than 130 feet from grade will preserve this critical sightline. New development proposal need to confirm this assumption based on more accurate survey information.
The configuration of West Main Street—specifically the curb-to-curb-width—is dependent on the kind of transit that rolls on it. Over the past year the City has studied several options for fixed-rail transit as a means to increase public ridership along West Main and reduce auto dependence and congestion. As the images at left show, rail transit was an integral part of the Street a century ago.

Many different fixed-rail systems and rolling stock, from trolleys to coupled cars, are in use today in different cities across the United States and abroad, each responding to particular physical and economic conditions.

As of this writing, no definitive system has been proposed for Charlottesville, nor a timetable for implementation.

This study assumes that a fixed-rail system would use existing vehicular lanes, thereby maintaining the Street’s existing curb-to-curb configuration.
The cross-section at left shows typical proposed vehicular, bicycle and pedestrian clearances where a center, turning lane is needed (such as the section from 10th Street to JPA). As the plan on the next page shows, on-street parallel parking at both curbs is introduced on two-lane segments.

The sketch below depicts the proposal for a wider sidewalk on the south side of the street, obtained by means of a 14- to 18-foot development easement.  

*The wider sidewalk intends to provide enhanced pedestrian circulation, gathering and retail opportunities similar in character to the Downtown Mall.*

In doing so, West Main and the Mall will once again function, and be seen as, the City’s central civic spine.
This plan represents a prototypical streetscape segment with an idealized compilation of improvements.

Trees in the south sidewalk are proposed in groupings or “clumps” to allow for intermittent parking, service and bus stop bays. The gaps in the canopy will also allow more direct sunlight to penetrate the shadier side of the street.

Trees in the north sidewalk should be planted in comparatively continuous rows, with interruptions as necessary for driveways, parking and service bays.
A key recommendation is to pave the south sidewalk with pavers similar in quality to those on the Mall (although in a smaller size) so as to establish aesthetic continuity with it within the expanded sidewalk area. The north side would be enhanced with scored concrete paving.

*It is recommended that on-street parking bays (excepting spaces for people with disabilities) double as service bays, using time management for deliveries.*

Other streetscape improvements include:
- Undergrounding of overhead utilities
- Street milling and repaving
- New street and sidewalk lighting
- Granite curbing
- New sidewalk paving
- Sidewalk furnishings
The streetscape furnishings should directly relate in style to that in the Downtown Mall.

In the interest of maintenance and management efficiency, some of it—benches, lighting, and news rack enclosures—should be equal to those in the Mall; the rest should be related in terms of color and form but not be exact duplicates. This will create a unified palette of elements while preserving a subtle difference between the West Main and Mall environments.
The proposed street and sidewalk lights match those specified for the Downtown Mall (and which will be installed as part of the Mall Extension and Transit Center project).

The chosen standards preserve the "rounded" signature of the existing Mall lights while reducing the bulk of the fixtures themselves.

- Street lights should be spaced about 80-feet on center depending on driveways and other impediments.
- Sidewalk lights should be placed next to sidewalk trees, much as occurs in the Mall today.

Street Light by Cooper Lighting, Invue Series with modified arm & pole

Pedestrian Mall Light by Antique Street Lamps, Modified Pennsylvania Series
The proposed placement of street trees in West Main Street will help unify the corridor and provide needed shade and amenity for pedestrian circulation and outdoor activity.

As the north sidewalk will receive full sun, trees on it should have dense, spreading canopies and be spaced as regularly as possible to provide continuous shade. Japanese Pagoda Tree (*Sophora japonica*), and Red Maple ‘Autumn Blaze (*Acer x freemanii*) are recommended. This arrangement will provide a formal “frame” to the Street, end to end.

Owing to a higher degree of shade, the tree ‘clumps’ proposed on the south side should have a more open canopy that can shed filtered light onto the sidewalk. Also, several species should be used to create variety in form and color that can enliven the walking experience.

Thornless Honey Locust (*Gleditsia triacanthos var. inermis ‘Skyline’*), Magyar Ginko (*Ginko Biloba Magyar*), Golden Rain Tree (*Kolroeuteria*), American Hornbeam (*Carpinus Caroliniana*) and Little leaf Linden (*Tilia Cordata*) are recommended. While similar in spacing to the Willow Oaks in the Mall, this arrangement will serve to subtly differentiate both the Mall and West Main environments.
The streetscape schematics shown on the plan are based on preliminary and incomplete survey information. No modification to vehicular or bicycle lanes have been made.

The JPA-West Main is shown as a “T” design, as requested by the City. Further traffic engineering studies are necessary to determine the exact configuration of this intersection.

Potential plaza with focal art work or civic monument

Potential right-turn-only exit driveway

Potential Development Parcel

Potential Development Parcel

Streetscape Schematics

The following plans show the recommended streetscape design along the entirety of West Main Street
The streetscape schematics shown on the this plan are based on preliminary and incomplete survey information. No modification to vehicular or bicycle lanes have been made.
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Recommended shift of the expanded sidewalk to the north side of West Main to facilitate pedestrian crossing at McIntire Street and access to the Downtown Mall.

Conceptual terminus at South Street following its abandonment to turn Ridge/McIntire into a four-point intersection.
The following spreadsheets show a breakdown of costs for both the north and south sides of The Street on a typical block basis (345 feet).
## Streetscape Schematics

### Costs

These costs translate to approximately $3,270 per lineal foot of streetscape improvements, or to about **$12.3 million** total for the entirety of West Main Street from Ridge/McIntire to JPA.

### South Side Costs (per block)

<table>
<thead>
<tr>
<th>Description</th>
<th>Takeoff</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Subtotal</th>
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<tr>
<td>South Side (based on a 345' typical block length)</td>
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<td>Temporary site control and security</td>
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<td>sqft</td>
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$707,851
Acknowledgements

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