



To: Urban Design Committee
From: Planning and Preservation Division
Date: January 8, 2015
RE: **Final Location, Character and Extent Review of traffic calming improvements to Floyd Avenue, from N. Thompson Street to N. Laurel Street; UDC No. 2015-01**

I. APPLICANT

Tom Flynn, Department of Public Works, Traffic Engineering Division

II. LOCATION

Along Floyd Avenue, from N. Thompson Street to N. Laurel Street

Property Owner:

City of Richmond

III. PURPOSE

The application is for final location, character and extent review of traffic calming improvements to Floyd Avenue, from N. Thompson Street to N. Laurel Street.

IV. SUMMARY & RECOMMENDATION

This project involves the installation of residential traffic circles and curb extension islands along Floyd Avenue from N. Thompson Street to N. Laurel Street. The goal of the project, commonly referred to as a bike/walk street, is to redesign Floyd Avenue in a way that promotes walking and biking while accommodating low-speed motor vehicle traffic. Of the 28 intersections along the subject corridor, all have or will receive marked pedestrian crosswalks, 10 will receive a landscaped traffic circle only, one will receive a landscaped traffic circle and landscaped curb extension islands, and three will receive landscaped curb extension islands only. Two existing traffic signals, one at N. Belmont Avenue and the other at N. Linden Street, will be removed, while eight others (at N. Thompson Street, N. Nansmond Street, N. Boulevard, N. Robinson Street, N. Meadow Street, N. Lombardy Street, N. Harrison Street and N. Laurel Street) will remain. The proposed improvements will not require the removal of any legal on-street parking spaces.

Staff continues to be supportive of the proposed improvements, however, it is of concern to Staff that the project does not seem to be presented comprehensively. After the conceptual review, it has been presented that street tree planting is outside the scope of this project but that vacant tree wells may be planted depending on budget and priority as part of the City's normal tree planting. Likewise, Floyd Avenue west of Boulevard has recently been repaved, and there is a note on the plans that states that all ramps west of Boulevard are currently in the process of being updated to comply with ADA standards as part of the repaving of the street. However, the plans do not indicate that any new ramps will be provided, or that there will be any attempt to provide ramps that are similar in appearance. Having information regarding the street trees and accessible ramps would paint a more complete picture of the character of this important project.

It is still Staff's assessment that the efficacy of the improvements can be strengthened by increased and more prominent signage and reduced vehicular speed limit. The applicant has not proposed any additional signage or branding for the corridor other than a third sharrows symbol per block, though Staff concedes that it may be preferable to wait until the City's Bicycle Master Plan is implemented before considering unique signage. The applicant has completed a traffic engineering study and has found that the speed limit on Floyd Avenue should remain at 25 mph. The recommendation from the UDC and Planning Commission to lower the speed limit to 20 mph to increase safety for bicyclists and pedestrians was popularly supported, and absent an initiative from the Department of Public Works to lower the speed limit, an ordinance can be considered by City Council to do so.

These concerns notwithstanding, Staff finds the proposal to be directly supportive of the Master Plan strategy of "promoting bicycle commuting and pedestrian walkways as alternatives to the single passenger automobile". Staff further finds that the proposed improvements are consistent with the recommendations of the Urban Design Guidelines, and will have a positive impact on pedestrian and bicycle activity along the corridor. It would be Staff's preference that full curb extensions are provided to shorten the distance for pedestrians crossing the roadway, however, the proposed curb extension islands, which act as more of a refuge, do provide an additional level of safety over the current situation. Though minor in scale, the plans would result in a slight reduction in impervious area along the corridor while contributing to the aesthetics of the neighborhood. Therefore, it is Staff's position that the Urban Design Committee should recommend that the Planning Commission grant final approval with the following conditions:

- That City Council considers sponsoring an ordinance to lower the speed limit along the subject corridor to 20 mph.
- That the Department of Public Works makes a written commitment, prior to final consideration by the Planning Commission, to provide the street trees identified for replacement by the Urban Forestry division and to plant the trees in the spring of 2015.
- That the Department of Public Works provides accessible ramps at every intersection, and that the truncated domes are red to match the predominant compliant design along the corridor.

Staff Contact:

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V. FINDINGS OF FACT

a. Site Description and Surrounding Context

The subject corridor runs along Floyd Avenue from N. Thompson Street to N. Laurel Street, a distance of approximately 2.15 miles. The corridor extends through the Fan and Museum District neighborhoods, primarily zoned R-6 (Single-family attached residential), but with small areas zoned R-48, R-53 and R-73 (all Multi-family residential) and RO-2 (Residential-Office). The area is primarily developed with residential uses, varying from single-family detached to multi-family in a dense development pattern. There are some larger scale commercial uses near N. Nansemond Street, with smaller, corner commercial uses scattered throughout the corridor. Retreat Hospital is located at the intersection with N. Robinson Street, and Binford Middle School is located on Floyd Avenue between N. Allen Avenue and N. Vine Street. Prominent portions of the Virginia Commonwealth University (VCU) Monroe Park campus are

situated between N. Harrison Street and N. Laurel Street, and Monroe Park sits at the eastern terminus of the corridor.

Traffic on Floyd Avenue is two-way with a posted speed limit of 25 mph, and there is on-street parking and continuous sidewalks on both sides of the street. East of N. Dooley Avenue, Floyd Avenue is designated as City Bike Route R2; along its length there are sharrow markings painted on the street and directional post signs in the sidewalk.

b. Scope of Review

The project involves the provision of curb extensions and residential traffic circles and is subject to location, character, and extent review under Section 17.07 of the Richmond City Charter as a “narrowing of streets”.

c. UDC Review History

In September 2014, the UDC reviewed and the Planning Commission approved the conceptual plans for the project, with the following conditions:

- That the applicant provides more research on automobiles, bike and pedestrian streets and how the combination of the modes of transportation effect speed limit and the applicant strongly consider lowering the posted speed limit along the subject corridor to 20mph.
- That the applicant reconsiders the locations and/or use of design elements, including curb extensions, speed bumps and traffic circles, east of N. Boulevard to Harrison Street.
- That the traffic circles are enlarged to the maximum possible dimensions.
- That the applicant considers providing curb extensions at N. Allen Avenue, N. Vine Avenue, and N. Robinson Street.
- That final plans include dimensions for the curb extensions.
- That the final plans include a signage plan, and that the applicant considers providing directional signs from adjacent streets to the bike/walk street on Floyd Avenue, and providing unique branding for the bike/walk street (e.g. “Floyd Avenue Bike/Walk Boulevard”).
- That there are a minimum of 3 sharrow markings per block (at each end and the mid-point), and that the street markings are consistent with other designated bikeways in the City.
- That crosswalks for each arm of the 28 intersections are denoted. For most crosswalks, parallel lines will suffice, however, ladder-style crosswalks should be provided at N. Boulevard.
- That the curb material on the curb extensions match the immediately adjacent existing curb material.
- That the sidewalk material in the curb extensions match the immediately adjacent existing sidewalk material.
- That the applicant considers providing a bike corral in a curb extension or no parking zone where there is nearby commercial activity.
- That the final plans include an inventory of tree wells along the subject corridor that are either vacant or contain a dead tree, and that a landscape plan is devised showing replacement tree species, quantity, and size at the time of installation.
- That the final plans include landscaping plans for the traffic circles and curb extensions.

- That the applicant provides evidence that the proposed landscaping plans have been reviewed and approved by the Department of Public Works Urban Forestry and Grounds Maintenance divisions.
- That the applicant considers the possibility of the traffic circles being used as locations for public art.
- That the final plans indicate the color of the tactile warning strips on all new accessible ramps, to match those existing in the project area.

d. Project Description

This project involves the installation of residential traffic circles and curb extension islands along the subject length of Floyd Avenue. The goal of the project is to redesign Floyd Avenue in a way that promotes walking and biking while accommodating low-speed motor vehicle traffic. The proposed improvements will not require the removal of any legal on-street parking spaces.

With the exception of the one at N. Morris Street, the traffic circles are all 14' in diameter (a central landscaped portion 12'6" in diameter plus a 9" concrete curb on each edge) with an additional 2' apron on each side of concrete stamped to look like cobblestones. The circle at N. Morris Street is actually an oval, 20' long by 14' wide in diameter, also with an additional 2' apron on each side of concrete stamped to look like cobblestones. In both circle designs, the apron will sit flush with the roadway. Generally, landscaping in the circles will consist of a centrally located tree underplanted with a variety of shrubs, annuals/perennials, grasses and bulbs.

Curb extension islands are planned in several locations along the corridor, primarily towards the eastern end where there is increased pedestrian activity in proximity to the VCU campus. These islands act more as pedestrian refuges than typical curb extensions, as they do not extend all the way to the side streets and thus do not shorten the crossing distance. They are designed in this fashion to overcome issues with stormwater drainage and vehicular turning movements. With the exception of the ones at N. Auburn Avenue, the extensions will be rectangular, 20' in length and 8' in width (a central landscaped portion 18'8" in length by 6'8" in width plus an 8" granite curb on each edge). The extension islands at N. Auburn Avenue will have the same outside measurements, but the curbs will be composed of concrete and the corners exposed to vehicular traffic will be curved. All of the extension islands will be placed 18" from the curb to allow for continued stormwater flow. Generally, landscaping in the extension islands will consist of one or more trees underplanted with a variety of shrubs, annuals/perennials, grasses, groundcovers and bulbs.

In total, the landscaping plans for the circles and extension islands call for the installation of 16 larger trees, 6 evergreen trees, 15 flowering trees, 557 shrubs, 318 annuals/perennials, 110 grasses, 173 ground covers, and a total of 130 square feet of bulb plantings. The plans have gained the endorsement of the Department of Public Works Grounds Maintenance and Urban Forestry divisions.

The Urban Forestry division has also surveyed the corridor and found 147 vacant tree wells in the vicinity. While tree planting is not a part of the scope of this project, the Department of Public Works states that depending on budget and priority, these tree wells may be planted as part of normal operations. Replacement trees will be selected from the DPW approved street tree list.

A signage plan was submitted with the final package, showing that three standard sharrow markings will be provided per block. Identifying signage for the corridor will be the standard bike route identifying signs used on other designated bikeways in the City. The applicant's report notes that new wayfinding signs on nearby streets is not part of this project, but will be considered by City staff as the bicycle master plan continues to be implemented.

Along the corridor, the presence of accessible ramps at crosswalks is inconsistent, and where there are ramps, the presence of truncated domes and the color of the domes are also inconsistent. There are intersections, such as the one with N. Sheppard Street, where there are no accessible ramps. Where there are ramps, they have either aggregate concrete, red or yellow truncated domes. There is a note on the plans that states that all ramps west of Boulevard are currently in the process of being updated to comply with ADA standards as part of the repaving of the street, however, the plans do not indicate that any new ramps will be provided, or that there will be any attempt made to provide ramps that are similar in appearance.

The total budget (design and construction) for this project is \$571,773, of which \$417,500 will be provided through Transportation Alternatives Program funding from the Metropolitan Planning Organization. This funding requires a 20% match from the City in the amount of \$104,355, which is in the fiscal year 2013 Capital Improvement Program budget. Construction is scheduled to be complete in summer 2015.

There are a total of twenty-eight intersecting streets along the project corridor; to present a full understanding of the project, the existing condition and proposed alterations (if any) are listed for each intersection:

N. Thompson Street

This intersection currently contains a traffic signal. The crosswalks at each arm of the intersection are denoted with parallel lines. To the west of the intersection, the street is one-way eastbound, carrying traffic from the Downtown Expressway and Berrington Court. There are no proposed improvements at this intersection.

N. Nansemond Street

This intersection currently contains a traffic signal. The crosswalks at each arm of the intersection are denoted with parallel lines. There are no proposed improvements at this intersection.

N. Crenshaw Avenue

This intersection currently contains stop signs only on N. Crenshaw Avenue, which carries traffic one-way southbound. There are no denoted pedestrian crosswalks at this intersection. The proposal for this intersection is to denote the pedestrian crosswalks with parallel lines.

N. Dooley Avenue

This intersection currently contains a four-way stop. There are no denoted pedestrian crosswalks at this intersection. The proposal for this intersection includes removing the stop signs on Floyd Avenue, installing a traffic circle, and denoting pedestrian crosswalks with parallel lines.

N. Auburn Avenue

This intersection currently contains stops signs only on N. Auburn Avenue, which carries two-way traffic. There are no denoted pedestrian crosswalks at this intersection. The proposal for this intersection includes installing a traffic circle, installing concrete curb extension islands on Floyd Avenue at each arm of the intersection and denoting pedestrian crosswalks with parallel lines.

N. Belmont Avenue

This intersection currently contains a traffic signal. The crosswalks at each arm of the intersection are denoted with parallel lines. The sections of N. Belmont Avenue on either side of Floyd Avenue are slightly offset. The proposal for this intersection includes removing the traffic signal, providing stop signs on each section of N. Belmont Avenue, installing a traffic circle, and denoting pedestrian crosswalks with parallel lines.

N. Sheppard Avenue

This intersection currently contains stops signs only on N. Sheppard Avenue, which carries traffic one-way southbound. There are no denoted pedestrian crosswalks at this intersection. The proposal for this intersection is to denote the pedestrian crosswalks with parallel lines.

N. Colonial Avenue

This intersection currently contains stops signs only on N. Colonial Avenue, which carries traffic one-way northbound. There are no denoted pedestrian crosswalks at this intersection. The proposal for this intersection is to denote the pedestrian crosswalks with parallel lines.

N. Boulevard

This intersection currently contains a traffic signal. The crosswalks at each arm of the intersection are denoted with parallel lines. There is a landscaped median in the Boulevard between the opposite lanes of traffic. The proposal for this intersection, in accordance with the recommendations made during conceptual review, is to provide "ladder" style crosswalks.

N. Mulberry Street

This intersection currently contains stops signs only on N. Mulberry Street, which carries traffic one-way southbound. There are no denoted pedestrian crosswalks at this intersection. The proposal for this intersection is to denote the pedestrian crosswalks with parallel lines.

N. Robinson Street

This intersection currently contains a traffic signal. The crosswalks at each arm of the intersection are denoted with parallel lines. There are no proposed improvements at this intersection.

N. Davis Avenue

This intersection currently contains stops signs only on N. Davis Avenue, which carries two-way traffic. There are no denoted pedestrian crosswalks at this intersection. The proposal for this intersection includes installing a traffic circle, and denoting pedestrian crosswalks with parallel lines.

N. Stafford Avenue

This intersection currently contains stop signs only on N. Stafford Avenue, which carries two-way traffic. The crosswalks at each arm of the intersection are denoted with parallel lines. There are no proposed improvements at this intersection.

Strawberry Street

This intersection currently contains a four-way stop. The crosswalks at each arm of the intersection are denoted with parallel lines. The proposal for this intersection includes removing the stop signs on Floyd Avenue, installing a traffic circle, and repainting the pedestrian crosswalks with parallel lines.

N. Shields Avenue

This intersection currently contains stop signs only on N. Shields Avenue, which carries two-way traffic. There are no denoted pedestrian crosswalks at this intersection. The proposal for this intersection is to denote the pedestrian crosswalks with parallel lines.

N. Rowland Street

This intersection currently contains a four-way stop. There are no denoted pedestrian crosswalks at this intersection. The proposal for this intersection includes removing the stop signs on Floyd Avenue, installing a traffic circle, and denoting pedestrian crosswalks with parallel lines.

N. Meadow Street

This intersection currently contains a traffic signal. The crosswalks at each arm of the intersection are denoted with parallel lines. There are no proposed improvements at this intersection.

N. Granby Street

This intersection currently contains stop signs only on N. Granby Street, which carries two-way traffic. There are no denoted pedestrian crosswalks at this intersection. The proposal for this intersection is to denote the pedestrian crosswalks with parallel lines.

N. Allen Avenue

This intersection currently contains a four-way stop. There are ladder-style pedestrian crosswalks at each arm of this intersection. The proposal for this intersection includes removing the stop signs on Floyd Avenue, installing a traffic circle, and repainting the pedestrian crosswalks with ladder-style markings.

N. Vine Street

This intersection currently contains a four-way stop. There are ladder-style pedestrian crosswalks at each arm of this intersection. The proposal for this intersection includes removing the stop signs on Floyd Avenue, installing a traffic circle, and repainting the pedestrian crosswalks with ladder-style markings.

N. Lombardy Street

This intersection currently contains a traffic signal. The crosswalks at each arm of the intersection are denoted with parallel lines. There are no proposed improvements at this intersection.

N. Plum Street

This intersection currently contains a four-way stop. There are no denoted pedestrian crosswalks at this intersection. The proposal for this intersection includes removing the stop signs on Floyd Avenue, installing a traffic circle, and denoting pedestrian crosswalks with parallel lines.

N. Harvie Street

This intersection currently contains stop signs only on N. Harvie Street, which carries two-way traffic. The crosswalks at each arm of the intersection are denoted with parallel lines. The proposal for this intersection includes installing a traffic circle and repainting the pedestrian crosswalks with parallel lines.

N. Morris Street

This intersection currently contains a five-way stop. N. Brunswick and N. Morris Streets intersect with Floyd Avenue on the southern side of the intersection, and N. Morris Street then continues north of the intersection. The crosswalks at each arm of the intersection are denoted with parallel lines. The proposal for this intersection includes removing the stop signs on Floyd Avenue, installing a traffic circle, and repainting the pedestrian crosswalks with parallel lines.

The plans also call for converting N. Brunswick Street to one-way traffic southbound and converting N. Morris Street south of the intersection to one-way traffic northbound. A landscaped extension with granite curb would be provided between N. Brunswick Street and N. Morris Street to better define the travelway. This extension will contain two large trees underplanted with shrubs and annuals/perennials. The brick sidewalk on the N. Brunswick Street side of the extension would be continued to the pedestrian crosswalk. One of the City-standard bike racks will be provided at the southeastern end of the extension.

N. Harrison Street

This intersection currently contains a traffic signal. There are ladder-style pedestrian crosswalks at each arm of this intersection. The proposal for this intersection includes providing granite curb extension islands at each arm of the intersection on Floyd Avenue.

N. Linden Street

This intersection currently contains a traffic signal. There are ladder-style pedestrian crosswalks at each of the three arms of this intersection. The southern portion of N. Linden Street was long ago closed and absorbed by VCU as part of their campus. The proposal for this intersection includes removing the traffic signal, providing a stop sign and bar on N. Linden Street, and providing granite curb extension islands at each arm of the intersection on Floyd Avenue as well as on the southern side of Floyd Avenue directly across from N. Linden Street.

N. Cherry Street

Just west of the intersection with N. Cherry Street is a major pedestrian crossing across Floyd Avenue, connecting the VCU campus. This crossing is set apart with brick paving and yield signs. Granite curb extension islands are proposed for the northeastern and southeastern sides of the crosswalk.

The intersection of Floyd Avenue with N. Cherry Street currently contains stop signs only on N. Cherry Street, which carries one-way traffic southbound to the north of Floyd Avenue, and one-way traffic northbound to the south of Floyd Avenue. There are ladder-style pedestrian crosswalks at each arm of this intersection. The proposal for this intersection includes providing granite curb extension islands on Floyd Avenue on the northeastern and southeastern corners, and repainting the pedestrian crosswalks with ladder-style markings.

N. Laurel Street

This intersection currently contains a traffic signal. This is the terminus of Floyd Avenue, as Monroe Park is situated to the east of the intersection. There are ladder-style pedestrian crosswalks at each arm of this intersection. There are no proposed improvements at this intersection.

e. Master Plan

The majority of the subject corridor is located in the Near West District, as defined by the Citywide Master Plan. Though there is no language in the district plan specific to the project, one of the overall goals of the Master Plan is that “The City of Richmond will support bicycle travel with a safe and effective system of designated bikeways” and that “The City will be a community where pedestrian and bicycle movements are protected as an integral part of the transportation system” (page 32). A strategy to accomplish that goal is to “Promote ridesharing, bicycle commuting and pedestrian walkways as alternatives to the single passenger automobile” (page 33).

The portion of the corridor east of N. Harrison Street is located in the Virginia Commonwealth University & Downtown Neighborhoods focus area, as defined in the Downtown Master Plan. There is no language in the Plan specific to the proposed improvements, however, there are appropriate goals in the section that pertain to the project, such as “Plant and maintain proper urban street trees to create desirable addresses and enhance the pedestrian environment” (page 4.15), and “Promote Monroe Park as the center of a campus and community” (page 4.17). The Plan is broken into seven foundations, and in the “Variety and Choice” foundation, notes that “Traditional cities [like Richmond] have a high level of connectivity, and are therefore the ideal environment for pedestrians, bicyclists, and transit riders, while balancing the needs of motorists. This range of transportation options allows inhabitants to select the mode of travel that works best for them” (page 3.5).

f. Urban Design Guidelines

The Urban Design Guidelines are supportive of traffic management techniques that slow traffic (page 7) and that add “an aesthetic contribution to the urban character of the neighborhoods in which they are placed” (page 8). The Guidelines note that “intersections should be designed to serve pedestrians, bicyclists and motorists in a safe manner” and that circles “should be considered in certain situations as an alternative to the traditional intersection” (page 7).

The Guidelines states that “the use of curb extensions, or bulb-outs, is recommended where appropriate” (page 7). The Guidelines are supportive of on-street parking, noting that it “creates pedestrian activity and provides a buffer between those pedestrians and moving traffic” (page 6). In regards to landscaping, the Guidelines note that “landscaping should provide a sense of

scale and seasonal interest” and that “shade trees for pedestrian comfort should be the predominant plant material in an urban setting” (page 10). The Guidelines also note that “existing granite curbing and stormwater inlets should be retained” and that “any new granite curbing should match existing curbs” (page 4).

VII. ATTACHMENTS

- a. Vicinity Map**
- b. Application**
- c. Plans**