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To: Urban Design Committee  
From: Planning and Preservation Division  
Date: July 7, 2016  
RE: **Final Location, Character, and Extent Review of East Riverfront Transportation Improvements; UDC 2016-29**

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**I. APPLICANT**

Adel Edwards, Department of Public Works

**II. LOCATION**

Dock St between Pear and Peeble St., E. Main St. between Peeble and Nicholson St. for a total length of 0.75 miles.

**Property Owner:**

Richmond Department of Public Works

Right-of-way acquisition will be necessary from other owners if the plans are approved.

**III. PURPOSE**

The application is for final location, character and extent review of the East Riverfront Transportation Improvements, which include a relocation of Dock Street between Pear and Peeble Streets, the construction of a new roundabout out of the 100 year floodplain, and a new alignment and streetscape for E Main Street between Peeble St. to Nicholson St. inclusive of intersections.

**IV. SUMMARY & RECOMMENDATION**

Staff finds the project to support a complete streets vision of transportation, and provides safe accommodation for passengers on the Pulse BRT, bicycle traffic, pedestrians, and activity generated by future development in the corridor. Furthermore, the project plans for connectivity, including North-South connections such as the Gillies Creek Greenway that are beyond the scope of this project, in a way that encourages these connections. Therefore, it is Staff's position that the Urban Design Committee should recommend that the Planning Commission grant final approval as submitted.

**Staff Contact:**

Kathleen Onufer, (804) 646-5207

**V. FINDINGS OF FACT**

**a. Site Description and Surrounding Context**

Dock St. currently runs from Pear St. to Ash St., where it becomes Wharf St., which passes underneath Intermediate Terminal before turning uphill to intersect with Main St. and become Nicholson St. Current Dock and Water St. do not have pedestrian or cyclist accommodations other than where the VA Capital Trail alignment is located along the Dock St ROW from Pear to Ash St. East Main St. currently lacks any pedestrian or cyclist accommodation.

The area is zoned for manufacturing uses and is part of the development of the Stone Brewing facilities in the area, including the soon-to-begin Phase 2 development at Intermediate Terminal.

**b. Scope of Review**

The project is subject to location, character, and extent review as “widening, extension, narrowing, enlargement, vacation or change in the use of streets and other public ways” under Section 17.07 of the City Charter.

**c. UDC Review History**

At its May 5, 2016, meeting, the Urban Design Committee recommended approval of the conceptual design with the following considerations:

- That the applicant consider other sidewalk materials and pedestrian lightings more in keeping with the industrial context of the area
- That the applicant consider designating the roundabout a space for signature public art
- To look at undergrounding of utilities
- That an effort is made to reduce the overall right-of-way width, including working with Planning staff on appropriate sidewalk widths, and the reduction or removal of the center median
- To delete the tree grates and look at a plan for linear verge strips or tree wells along the entire project
- That the speed limit be lowered to 25 mph
- That the design ensures that there are pedestrian connections to Fulton Hill and Church Hill neighborhoods
- That planning staff provide an overall plan that provides more context to what’s going on in the area with other projects and City Master Plan work, to include Gillies Creek and Capital Trail connections
- That in addition to looking at undergrounding utilities, that the applicant look at removing any unnecessary utilities there currently
- To ensure that pedestrian refuges remain around crosswalks

At their May 16, 2016, meeting, the Planning Commission reviewed the conceptual design, as well as DPW response to the UDC recommendation. The conceptual design was approved with considerations given to the UDC recommendations and that a six foot median and five-foot tree grates be incorporated into the design.

**d. Project Description**

The goal of this project is to provide a multi-modal transportation network that will enhance safety, improve mobility and connectivity, accommodate the rapidly developing East Riverfront area, and implement the City’s under-development complete streets policy. Improvements will include: improved pedestrian and bicycle access along the E. Main St. corridor, public parking accommodations, and necessary upgrades for safe operation of the Pulse BRT system. A separate but companion project in the area will be the Route 5 bridge replacement over Norfolk Southern Railroad. All of this will help implement a transportation system that will support and enhance ongoing and envisioned development in the area, including the Stone Brewery & Bistro, USP-Echo Harbor Parcel, parkland at the former Lehigh Cement parcel, improvements to Intermediate Terminal Dock, Rocketts Landing, the VA Capital Trail, and the Gillie’s Creek Greenway.

This project involves the relocation of Dock St. between Pear and Peeble St; the installation of a roundabout at the intersection of Dock St, E Main St, and Peebles St; the reconstruction of E Main St with a new cross-section and streetscape between Peeble St and Nicholson St; and changes to the intersection of E Main St and Nicholson St for a total length of 0.75 miles.

Specific elements within the project include:

### **Relocation of Dock Street**

Dock St between Pear and Peeble St will be relocated, shifting further north using a series of horizontal curves to elevate the road in order to enter the roundabout above the 100 year floodplain at elevation 33'. The beginning of the relocation at western end of Dock St is at elevation 17'; the existing grade at the center of the proposed roundabout area is near elevation 26' and so will be raised with fill between 8-9'.

A retaining wall will be necessary, south of Dock St and near the roundabout, to ensure the fill necessary to elevate relocated Dock St and the roundabout does not impact the Virginia Capital Trail. The retaining wall will be approximately 250' long and up to 15' in height; material has not been determined yet, but will likely be concrete and could include a form liner to enhance aesthetics. If/when the Virginia Capital Trail is relocated to the riverside on the current USP-Echo Harbor parcel, this retaining wall could likely be removed.

The typical section of the relocated Dock St. will be a 12' travel lane in each direction, inclusive of a 1.5' city standard curb & gutter, and 6.5' lateral offsets. One of the key changes since the conceptual plans is the extension of a traffic control median strip leading up to roundabout in the middle of Dock St. This median would allow for only right-in, right-out turning behavior for any future vehicular access points to on land to the south. On the southern side of the street, a 10' shared use path will tie into the VA Capital Trail and provide safe pedestrian and cyclist accommodations for a total ROW of 47'.

Pedestrian lighting is proposed on the southern side of Dock St., using a City standard. There will be an access point along relocated Dock St. for the USP-owned parcel, in keeping with their approved POD on file, with a unit-paver crosswalk bridging the curb cut.

The plans indicate Columbia Planetree, Chinese Pistache, American Hornbeam, and River Birch tree plantings in keeping with the overall plan established with the Lowline.

### **Roundabout**

A roundabout will be established at the intersection of E Main St, Peebles St, and relocated Dock St. This roundabout will be raised above the 100 year flood plain, allowing access out of the floodplain along Peebles St to the City Gasworks property and potentially other opportunities along E. Main St.

The roundabout will have a raised central island of 84' diameter with a concrete curb, a cobblestone truck apron of 13' width, an 18' travel lane, concrete curb & gutter, and a 10.5' brick paver sidewalk. Slopes will be limited to 2%.

There are designated pedestrian crossings, with concrete unit paver crosswalks and planted medians at E Main St on both sides of the roundabout, Peebles, and relocated Dock St. 5' brick paver sidewalks will connect E Main St on both sides of the roundabout with the Peebles St crossing, and the western portion of E Main St to relocated Dock St. On the southern edge of the roundabout, the 10' asphalt multi-use trail from Dock St will be extended through the roundabout, with one concrete unit paver crosswalk over another potential southern access point to the USP parcel.

Conduit will be installed in the roundabout as part of the project to enable the lighting of future public art in this space. Proposed plantings have turf grass in the center, to allow space for future public art, and surrounded by groundcover plantings. A full listing is in the packet. Two willow oaks mark the E Main St entrance from the Northeast into the roundabout; other tree plantings include Columbia Planetree, Chinese Pistache, and Hornbeam.

### **East Main St (Roundabout to Gillies Creek Outfall)**

Coming out of the roundabout, E Main St will be widened and reconstructed with on-street parking up until the Gillies Creek outfall.

The typical section will have a 10.5' brick paver sidewalk on each side, a city standard curb and gutter, an 8' parking lane on both sides of the street, a striped 6' bike lane in both directions, an 11' travel lane in each direction, with a 6' median in the middle for a total right of way of 83'. The median is planted with turf grass; other plantings in the median will indicate the approach the Gillies Creek pedestrian crossing. It is indicated that the parking lane will have pervious pavers.

Pedestrian lighting of a city-standard "Charleston" pole is proposed on both the northern and southern sides of E Main St on an even off-set of 60'. Street trees in this section are proposed as pairs of American hornbeam and Chinese Pistache in 5' by 5' tree grates.

Water St. between Ash St. and Nicholson St. will be closed to accommodate Phase 2 of the Stone Brewery Development, the Beer Garden & Bistro at the Intermediate Terminal building. Diverted traffic from Water St will need to utilize E Main St and the relocated Dock St.

### **Gillies Creek Outfall & Crossing**

Approaching the Gillies Creek outfall, street tree plantings in tree wells will cease in order to allow mixed informal tree plantings on the outside perimeter of the brick paver sidewalk. Proposed trees include River Birch, Scarlet Maple, Planetree, Chinese Pistache, Eastern Redbud, and Serviceberry. In this area, alternating 12' by 3'6" sections of cobble pavers and 8' by 3'6" planting beds will line the sidewalk up to a proposed pedestrian and bicyclist crossing, with 6'6" of brick paver sidewalk running behind. Planting beds will contain groundcover as indicated in the plan.

A bump-out concrete unit paver pedestrian and bicyclist crossing, with accessible ramps, lighting, and median break will serve both the Stone Bistro and the future Gillies Creek Greenway alignment down to the former Lehigh parcel.

The median plantings shift in advance of the crossing from turf grass do Dwarf Sweetspire and Gold Drop Cinqfoil.

### **East Main St (Gillies Creek to Nicholson St)**

On the other side of the pedestrian crossing at Gillies Creek, Main St. will be reconstructed to allow for safe travel and BRT Pulse operations.

At the two stations, one eastbound and one westbound, there will be a 10.5' station installed across the sidewalk, city standard curb and gutter, an 11' tapered bus lane for pullover activity to the stop; a 5' bike lane in each direction, an 11' travel lane in each direction, and a 6' median for a total ROW of 83'.

At non-station areas, the typical section includes a 10.5' brick sidewalk, city standard curb and gutter, a 0-11' tapered bus lane for pullover activity to the stop; a 5' bike lane in each direction, an 11' travel lane in each direction, and a 6' median. The total ROW width will vary, as it is widest at the Pulse BRT stop in order to account for the bus pullover lane.

Pedestrian lighting is proposed with the same "Charleston" model regularly spaced with offset 60. The fixture will be on a 12' pole throughout the project, and use a metal halide bulb (150W) rather than high pressure sodium. Street trees are proposed as Shumard Oak and Greenspire Linden, regularly spaced with 30' offset.

The median plantings shift at the approach to the Nicholson St. intersection from turf grass do Dwarf Sweetspire and Gold Drop Cinqfoil.

### **Nicholson St Intersection**

The typical section for Nicholson St. will be a 7.5' sidewalk on each side of the street with city standard curb & gutter, a 15.5' travel lane in each direction. Improvements to Nicholson will consist of pavement replacement or overlay, pedestrian ornamental lights in the same model proposed throughout the project, landscaping, and installation of brick pavers into a widened 7.5' sidewalk.

The proposed signalization of this intersection will be coordinated with the GRTC pulse to allow for queue-jumping. Southbound and Northbound Nicholson will have the option of turning right, left, or continuing through the intersection. Eastbound Main St. will have a new dedicated left hand turn lane, a through lane, and may include a right hand turn lane.

Plantings for this area include Shumard Oak and Greenspire Linden trees; within the medians there are shrubs and turf grass.

### **Overall Elements, Public Process, and Budget**

Throughout the project, street trees will be in 5' by 5' tree grates; DPW is working to identify areas of low pedestrian activity where non-grated planting beds would be appropriate. A proposed bench and trash receptacle are shown in the plans, but locations are not indicated.

A public meeting was held on March 23, 2016 at the Fulton Community Center. Over 65 citizens were present at the meeting. Comment cards were distributed and collected, and all comments received have been posted to the City's website.

The existing traffic volume along Dock St is 9,300 vehicles per day. The volume along E Main St is 8,000 vehicles per day, and Williamsburg Ave carries 10,500 vehicles. The expectation is that east-west traffic, which largely travels along the to-be closed Water St, will likely divert to the Williamsburg Ave corridor.

The East Riverfront Transportation Improvements project budget was adopted by City Council in the FY 16-FY20 Capital Improvement Program in the amount of \$7.9 million. Design was funded in FY 16 for \$800,000 and the construction is funded in FY 17 and FY 18 for \$7.1 million. The City has also applied for FY 2017 revenue sharing funds from the State. The project schedule will develop final plans by the end of year, and will begin construction in early 2017 subject to approvals.

The design will be in compliance with state Stormwater Management Act, state and local stormwater management standards, and specifications approved by the Virginia Department of Environmental Quality, Virginia Erosion and Sediment Control regulations, and will conform to best management practices.

The applicant has worked with the Director of the Department of Planning & Development Review and other stakeholders on elements of the design since the conceptual review. They propose retaining the brick sidewalk and Charleston pedestrian lights in order to provide a cohesive streetscape from Tobacco Row to Rockett's Landing through the project area.

Throughout the project, the City is working with Dominion to works towards undergrounding Dominion utility poles pending available budget to do so. Some overhead lighting, including a possible cobra head at the roundabout, may be necessary to ensure adequate lighting of the road.

The Director of Planning and Development Review has asked that the project pull in some of the elements of the Low Line at the western end of the project area, including longer planting beds and planting scheme. The applicant has agreed to pursue this strategy in areas where less pedestrian traffic is expected. Areas near Stone Bistro and the BRT stations will remain tree grates.

**e. Master Plan**

The Downtown Plan has a series of recommendations for this area, focused on improving visual and physical access to the River and creating an interconnected system of parks along the river. The plan emphasizes the importance of streetscape, N-S connections to the River, and ensuring that development is paired with river access and consideration for viewsheds (page 4.47).

The Riverfront Plan echoes the recommendations of the Downtown Plan, and also emphasizes the importance of the Gillies Creek Greenway. It envisions upgrading Dock St to include streetscapes, on-street parking, and bike lanes (page 98).

**f. Urban Design Guidelines**

The Urban Design Guidelines contain several recommendations regarding street design, including that "on-street, curb parking should be retained wherever possible (page 4). 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 impart that streetscape elements, such as street trees and street lighting, should be used to encourage pedestrian activity and that striped crosswalks, pedestrian crosswalk signals, and other improvements that enhance safety should be installed as a standard amenity at all signalized intersections (page 6).

#### ATTACHMENTS

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