



To: Urban Design Committee
From: Planning and Preservation Division
Date: November 6, 2014
RE: **Final Location, Character and Extent Review of a roundabout at the intersection of Idlewood Avenue, Grayland Avenue and the Interstate 195 off-ramp; UDC File No. 2014-30(2)**

I. APPLICANT

Jian Xu, Department of Public Works, Traffic Engineering Division

II. LOCATION

Intersection of Idlewood Avenue, Grayland Avenue and the Interstate 195 off-ramp

Property Owners:

City of Richmond and St. Andrews Association

III. PURPOSE

The application is for final location, character and extent review of a roundabout at the intersection of Idlewood Avenue, Grayland Avenue and the Interstate 195 off-ramp.

IV. SUMMARY & RECOMMENDATION

This is a request to provide a roundabout at the intersection of Idlewood Avenue, Grayland Avenue and the Interstate 195 off-ramp. Between S. Cherry and S. Harrison Streets, Idlewood Avenue will now carry two-way traffic, which will eliminate all of the on-street parking on Idlewood Avenue from the roundabout to S. Harrison Street. A total of 24 existing on-street parking spaces are being lost through this project, but 12 new on-street parking spaces will be provided, leaving a net loss of 12 spaces.

Overall, Staff is very supportive of the proposal to add a roundabout to this intersection. The reconfiguration of the intersection with a roundabout, coupled with making Idlewood two-way, should calm traffic moving to and through the Oregon Hill neighborhood. Staff finds that having Idlewood Avenue transition to two-way traffic will add desirable connectivity to the Randolph neighborhood and points west.

Staff is pleased with the alterations made to the roundabout apron surface and with the landscaping since conceptual review. Staff finds that the extensive landscaping plan will help to convey a positive impression of this area. The sidewalks in the project area are not well maintained, and Staff would prefer that they be re-established as part of the project. Lastly, Staff finds the proposal consistent with the recommendations of the Master Plan and the Urban Design Guidelines, and with the recommendations made by the UDC and Planning Commission during conceptual review. Therefore, it is Staff's position that the Urban Design Committee should recommend that the Planning Commission grant final approval with the following condition:

- That the sidewalks from S. Cherry Street to S. Harrison Street be cleaned up and re-established as part of the roundabout installation project.

Staff Contact:

V. FINDINGS OF FACT

a. Site Description and Surrounding Context

The subject intersection is located between the residential neighborhoods of Randolph and Oregon Hill and is bordered by Hollywood Cemetery on the south and land owned by St. Andrew's School on the north. The Randolph area to the west is primarily zoned R-48 (Multi-family residential) with a pocket of R-6 (Single-family attached residential), the area to the south of the intersection is zoned R-5 (Single-family residential), and the areas to the north and east are zoned R-7 (Single and two-family urban residential).

Currently, both Idlewood and Grayland Avenues carry one lane of traffic one-way eastbound with posted speed limits of 25 mph. Heading east from S. Harrison Street, Grayland Avenue merges into Idlewood Avenue, and then slightly east of that, traffic exiting the Downtown Expressway (I195) merges into Idlewood Avenue. At this point, Idlewood Avenue becomes a two-lane road carrying one-way traffic, which continues to the intersection with S. Cherry Street. Between S. Cherry Street and S. Belvidere Street, Idlewood Avenue is two-way. There is concrete sidewalk on the south side of Idlewood Avenue from Grayland Avenue east, and on the north side of Idlewood Avenue from the I195 merge east. There is on-street parking on both sides of Idlewood Avenue east of where the Downtown Expressway off-ramp merges in.

b. Scope of Review

The proposed roundabout is subject to location, character, and extent review under Section 17.07 of the Richmond City Charter as a "widening, extension, narrowing, enlargement, vacation or change of use of streets".

c. UDC Review History

The UDC reviewed and the Planning Commission approved the conceptual plans in September 2014 with the following conditions:

- That the applicant investigates all traffic calming options, including textured pavement and directional deflections, in order to reduce the speed of vehicles in the roundabout.
- That the applicant narrows the apron and asphalt travel way around the central island to the smallest possible dimensions.
- That the applicant considers providing cobblestones in the apron instead of the proposed concrete.
- That the applicant consider providing larger trees in the central island.
- That the applicant uses a more native plant palette, and that the invasive Barberry shrub is replaced with a native equivalent.
- 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 providing irrigation to the central island to improve the survival rate of the proposed landscaping.
- That the crosswalk from Grayland Avenue across Idlewood Avenue contain ladder-style markings consistent with the other crosswalk.
- That the applicant removes the street surface on Grayland Avenue to the east of the "hammer head" and replaces it with grass and curb.

- That the sidewalks from S. Cherry Street to S. Harrison Street be cleaned up and re-established as part of the roundabout installation project.
- That the final plans include a lighting plan.

d. Project Description

This is a request to provide a roundabout at the intersection of Idlewood Avenue, Grayland Avenue and the Interstate 195 off-ramp. Currently, both Idlewood and Grayland Avenues carry one lane of traffic one-way eastbound with posted speed limits of 25 mph. Heading east from S. Harrison Street, Grayland Avenue merges into Idlewood Avenue, and then slightly east of that, traffic exiting the Downtown Expressway (I195) merges into Idlewood Avenue. At this point, Idlewood Avenue becomes a two-lane road carrying one-way traffic, which continues to the intersection with S. Cherry Street. Between S. Cherry Street and S. Belvidere Street, Idlewood Avenue is two-way.

The proposed roundabout would be placed just west of where Grayland Avenue and Idlewood Avenue currently intersect. As part of the provision of the roundabout, Grayland Avenue will no longer connect through, instead terminating in a hammerhead (eliminating 4 on-street parking spaces) just west of the roundabout, in part to preserve the in-demand on-street parking. The three spokes intersecting in the roundabout will be eastern and western sections of Idlewood Avenue and the Downtown Expressway off-ramp. Between S. Cherry and S. Harrison Streets, Idlewood Avenue will now carry two-way traffic, which will eliminate all of the on-street parking (20 spaces) on Idlewood Avenue from the roundabout to S. Harrison Street, but will increase connectivity to the Randolph neighborhood and points west. Twelve new on-street parking spaces will be provided on the east side of the roundabout.

The roundabout will create a raised circular island 45'-47' in diameter with a standard concrete curb and mountable (sloped) apron 10' in width, with a 3" mountable curb at its exterior edge. The apron, which will be composed of concrete pavers with a cobblestone appearance, is used to visually direct the traffic away from/around the island. It will also allow for larger trucks to negotiate the roundabout without enlarging the overall size. There will also be another 20' of asphalt driving surface between the apron and the exterior concrete curbs. Raised medians or splitters are used to divide and guide traffic on the Idlewood Avenue spokes of the intersection. These splitters will also provide protected spaces for pedestrians crossing each of the spokes. Traffic entering the roundabout from the Downtown Expressway off-ramp will be slowed and guided into the intersection by a diverting bump-out. The concrete sidewalk along the northeastern side of Idlewood Avenue will be extended westward to an accessible ramp, leading to a crosswalk just east of the roundabout, connecting to existing sidewalk on the south side of the street, which is continuous from S. Harrison to S. Cherry Streets. The existing sidewalks in the subject area are composed of both concrete and brick.

The alignment of the proposed roundabout would necessitate the acquisition of right-of-way from the City's Department of Parks, Recreation and Community Facilities (0.0503 acres) and from St. Andrew's Association (0.0058 acres). Construction would require a temporary easement from both of these entities as well as from the Richmond Redevelopment and Housing Authority (RRHA).

The proposed landscaping for the roundabout includes three river birch trees, a multi-stemmed tree growing to 40'-60' tall and wide, surrounded by a bed of Otto Luyken Laurel shrubs (growing 3' tall and 6' wide) and Dwarf Fountain Grass (growing 2' to 3' tall and 1' to 2' wide), all surrounded by Autumn Joy Stonecrop (growing 18" to 24" tall and wide). The splitters will be landscaped with Autumn Joy Stonecrop, and the landscaped areas along the edges of the project area will contain 17 Greenspire Littleleaf Linden trees (a single stem tree growing 50' to 60' tall and 40' wide) underplanted with Indian Princess Indian Hawthorne (a shrub growing 3' tall and 5' wide), Rosy Returns Daylilies and Dwarf Fountain Grass. The applicant notes that irrigation will be included in the plan as a 'design-build' (i.e. designed and constructed by the Contractor) component of the plan and bid as a bid alternate for the plantings in the central island only. If the project budget can support the cost of the irrigation system, then it may be included in the project. In either case, the plants will be warranted for up to a one year by the contractor.

There are existing cobrahead lights in the project area. No pedestrian-scaled streetlights are located in the project area or along Idlewood Avenue outside of the project area. Two Richmond Metropolitan Authority cobrahead lights are adjacent to the off-ramp in the project area; one will be replaced with a City-standard cobrahead light fixture atop a wooden pole, to match the existing, and the other will be removed. One other City-standard cobrahead fixture will be added to the northernmost curve of the roundabout.

The current estimated budget is \$650,000, funded by Virginia Commonwealth University (\$250,000), a 50-50 split between the Commonwealth of Virginia and the City (\$200,000), and City Traffic Calming Capital Improvement Project funds (\$200,000). Ordinance No. 2013-209-193, adopted by City Council on October 14, 2013, authorized the City to accept the proposed funds from VCU.

e. Master Plan

The subject intersection straddles the line between the areas covered by the Downtown Master Plan and those covered in the citywide Master Plan. The area to the north and east of the intersection is located in Downtown Master Plan boundary, and is designated as part of the General Urban Character Area.

The area to the west of the intersection is designated for Single-family (medium density) uses, while the area to the south is designated for Institutional uses as defined in the citywide Master Plan. There is no language in either plan specific to the proposed improvements.

f. Urban Design Guidelines

The Urban Design Guidelines are very supportive of on-street parking, noting that it "is important for not only providing for some of the parking needs of adjacent uses, but also as a means of defining the character of a corridor or neighborhood" (page 6). The Guidelines go on to say that "on-street parking creates pedestrian activity and provides a buffer between those pedestrians and moving traffic" (page 6).

The Guidelines note that "intersections should be designed to serve pedestrians, bicyclists and motorists in a safe manner" and that "roundabouts should be considered in certain situations as an alternative to the traditional intersection"

(page 7). The 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). 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).

VII. ATTACHMENTS

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