

PAUL MORTENSEN ARCHITECT

Memorandum

Date: (09/13/2012)
To: Sara Imhulse – Riverdale Park City Manager
From: Paul Mortensen
Re: Response to the Preliminary Plan of Subdivision 4-12004
Drawings Signed and Dated on 7-24-12

In response to a request by the Town of Riverside to evaluate the latest drawings produced by the Cafritz Development Team, we have reviewed a set of 5 drawings signed by the team's Surveyor and Civil Engineer on July 24, 2012. In our review, we have identified prominent urban design changes to the "plan" that was ratified by the District Council this past spring, and we have identified concerns we have with the plan in its goal to create a vibrant mixed-use community that is pedestrian friendly. We have also identified some dimensional discrepancies to the plan that should be rectified. The set of drawings includes subdivision plans at both 100 and 50 scales and street sections at 16th and 32nd scales. It does not include an illustrated site plan other than the small key plans used for locating street sections. Part of our confusion might be resolved after a review of the illustrated site plan. We offer these comments so that they can be discussed and accepted or modified by all of the stakeholders within the subdivision process.

Dimensional Issues:

- It appears that most of the blocks "build-to" lines which identify the line of separation between the street right-of-way and where a building can be built to are typically chamfered at each corner of blocks. Although this may not be a problem, it does suggest that the corner radii at the street intersections may be significantly large and need the chamfer to accommodate the large turn. Because the street corners include "bulb-outs" (as shown on the section diagrams) which extends the planting strip and sidewalk out into the parking lanes of the streets, this might be a concern. In order to reduce automobile and truck speeds turning around corners, and to reduce crosswalk distances, **we suggest corner radii to be between 10 feet and 20 feet** depending on the volume of truck traffic at those corners.
- On the northern side of Woodbury Street between 45th and 46th shows the street right-of-way extending north towards the townhouses by approximately 15 feet. Does this suggest that the Development Team is suggesting angled on-street parking along this street?
- The right-of-way typically includes the paved throughway from curb to curb, a planting or tree well strip, and often the public portion of the street sidewalk, which may also include in some cases, a planting area between the sidewalk and the frontage space of the private lots within the block. As the Development Plan suggests that street right-of-ways will fall under Riverdale Park control once they are completed, it is important to have clearly delineated right-of-ways. From the section drawings, the following conditions may promote confusion.

PAUL MORTENSEN ARCHITECT

- **Sections A-A and C-C:** The right-of-way lines fall 12 inches inside the outer edges of the planting strip areas and does not include any of the sidewalk. Because this is an urban retail street condition, we do not have issue with the exclusion of the sidewalks, but it might be prudent to have the right-of-way align with the outer edge of the planting strips.
- **Section D-D:** The right of way line falls 12 inches outside of the planting strips into the sidewalk zone. Again, they could align with the outer edge of the planting strips.
- **Sections F-F and H-H:** The right-of-way lines fall 2 feet into the planting strip zone (3 feet from the street side edge of the sidewalks.) They might want to be aligned with the outer edge of the planting strips.
- **Section J-J:** If the right-of-way section is taken from the outer edge of the planting strip on the right side of the section drawing and then extends 50 feet to the other side, as suggested on the plan drawings, the left side right-of-way line lays approximately 12 inches inside of the building arcade structure. We would assume the structure should not be within the right-of-way.
- **Sections K-K and L-L:** The right-of-way lines extend 3 ½ feet into the 5 feet wide sidewalk dimensions. It seems that the right-of-way should either fully include, or exclude the sidewalk.
- **Section M-M:** We just want to clarify that the right-of-way lines extend 1 ½ feet into the building frontage areas. This may be fine.
- **Section N-N:** This appears to be the driveway entrance into the multi-family parking structures along the CSX train lines so it likely does not need a sidewalk along the building or on-street parking at this location. **However, we would like to see the street section proposed for Maryland Avenue going south towards the Riverdale Park Town Center along the new development blocks and along the existing uses to the south.**
- **Section O-O:** The tree planting strip along Route 1 is shown to be 8 feet wide. In order to allow some of the existing trees along the Route 1 right-of-way to remain, this dimension should be labeled as “varies” in order to allow the sidewalk along the right-of-way to meander within the park to avoid existing trees. It should also be noted that this section is taken to show the park at its widest dimension presumably at the 147 feet dimension.
- **We would like to see a section cut through VanBuren Street one block west of Section B-B.** This new section would show the building aligning VanBuren on the northern side, and would allow us to see what is envisioned between the southern curb of the street and the parking lot for Whole Foods. In the rendered perspectives shown to the District Council and community stakeholders last spring, there is an arcade/trellis to the south of VanBuren that both screens the parking lot,

PAUL MORTENSEN ARCHITECT

and provides a possible location for outdoor market type activities. This arcade/trellis is not shown on the illustrated plan diagrams on pages 4 and 5.

- **In the County Planning meeting on 09/05/12, the County Transportation Staff suggested that the Route 1 right-of-way must be widened to maximum 110 feet total, or 55 feet on each side from the current center line. Originally in the MUTC Zoning Change process, the County had suggested adding 10 feet to the Route 1 right-of-way on both sides of the street. This newly suggested expanded right-of-way could take an additional 15 to 25 feet out of the Route 1 buffer park.**

Noted Modifications to the Plan:

- **Maryland Avenue:** It appears that the new subdivision drawings suggest that Maryland Avenue no longer continues along the CSX train line from the south end of the site up to Woodbury Street along the northern end. The new drawings show a driveway from Woodbury Street into a parking garage at the north end of the site, and a driveway into a parking garage at the southern end of the multi-family buildings. This through connection of the street was suggested in order to provide a promenade with activity and visual security to the proposed Riverine Park along the tracks. The current plan diagram currently shows the multi-family buildings and garages tucked up fairly tightly to the tracks thereby possibly eliminating the Riverine Park, and also eliminating the need for an active street promenade. If our assumptions of the new design at this location are correct, then we would agree that a continuation of the street would not be warranted. This issue and design intent should be further explained.
- **CSX Crossing:** The fragmented and partial design of the new CSX overpass suggested on these plans is confusing and seemingly fractured from any future development on the east side of the tracks. It is also clear in discussions with the Development Team and some of the stakeholders (other than the University of Maryland) that few are on board with this design as it currently is shown. We believe this alternative creates the following issues:
 - The curving of the bridge overpass will add a considerable amount to the overall cost of the overpass structure. It will also likely add to the length of the overpass and ramp. As the Development Team's contribution to the overpass is limited, any additional costs due to the design will need to be picked up by the municipalities.
 - The new location suggests that the bridge and its traffic will exit down into the residential neighborhood to the south and east at or near Tuckerman Street and the residential park. This would likely put an undue amount of traffic in this neighborhood rather than into the Technical Park where many regional jobs and primary circulating streets are located. Direct connections between the new and existing jobs to the east and the new residential and retail uses at the Cafritz site would seem to be paramount.
 - It is clear that the new CSX crossing must be coordinated with the University of Maryland's urban design plans for their entire side east of the tracks rather than trying to avoid it as the current plan is presumably trying to do. Each of the three

PAUL MORTENSEN ARCHITECT

alternative crossing sites should be studied in light of the University's intentions for this area.

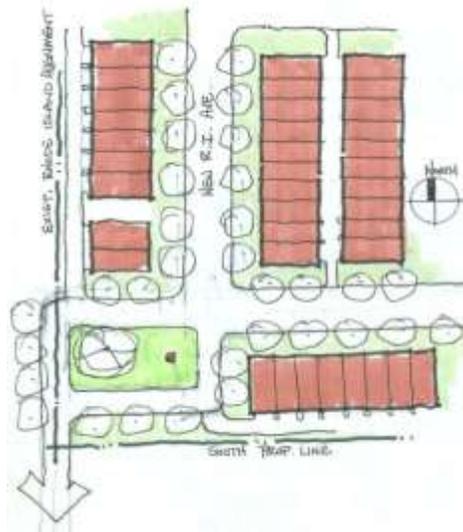
- By moving the Rhode Island Avenue further east from the original alignment, the issue of having enough distance for the sloped ramp to rise up to the overpass also presents a possible concern for the VanBuren alignment alternative and the alignment to the new streets alternative further south in the plan.
- **Additional Townhouses:** It appears that a new string of 7 townhouses has been added north of Woodbury Street, west of the 46th Street axis. This replaces a surface parking lot. We applaud this modification to the plan.
- **Mix of Townhouses:** Currently it appears that every townhouse has the same dimension and configuration throughout the entire site as has been proposed throughout the zoning process. We continue to suggest that the Development Team modify this plan to allow for a greater mix of building and housing types throughout the site. A greater mix will allow for a greater diversity of social and economic individuals and families throughout the community which has been proven to add to community economic stability and security. Larger and smaller sized townhouses, stacked townhouses and small apartment buildings could all be added to the mix to stimulate a more diverse community.
- **Hiker/Biker Trail:** As was shown in the zoning process, Rhode Island Avenue and the Hiker/Biker Trail alignment has been moved off of the original Rhode Island Avenue alignment to the east (by approximately 120 feet from centerline to centerline) in order to have the new townhouses front a double loaded street (housing facing both sides of street), rather than a street with the trail facing the post office site. The current Hiker/Biker Trail is in alignment with Rhode Island Avenue throughout this part of the region and ideally, we believe it should continue along the same axis. A large portion of the Trail in Riverdale Park, and in College Park runs either along, or in the middle of a street in these communities which makes the trail integral to the strong public realm of the communities. We believe an opportunity exists for the future transformation of Rhode Island Avenue, within the site, to become a great street with a trail once again. We also believe this street could then connect to the existing Rhode Island Avenue, Riverdale Park Center Plaza and facing retail and office uses to the south. Under this scenario, the Town Center Plaza becomes an integral part with the Cafritz development. This urban design solution could also then help maximize and integrate the future redevelopment of the US Postal Facility to the west and south of the Cafritz site. The problem with this alternative is that the future redevelopment of the post office site is uncertain and would require a single loaded Rhode Island Avenue with Hiker/Biker Trail for an unknown amount of time. Although we do not feel that it is ideal to shift the original Rhode Island alignment, we can understand Cafritz's design solution within their marketing program. It is easier to sell townhouses facing a double loaded street rather than a single loaded street with a current quasi-industrial use on the other side. This alignment should be further discussed between Cafritz, Riverdale Park and the Hiker/Biker community.
- **However, we do have a concern about how the trail is tied back to the existing alignment to the north and south ends of the site, and how the trail traverses the new traffic/park circle** without adding confusion, frustration and safety concerns to the

PAUL MORTENSEN ARCHITECT

pedestrian and bike trips. These connections must be studied, discussed and greatly enhanced to assure their success.

- At the northern end of the site, the existing Rhode Island Avenue trail right-of-way north to College Park intersects into the public Woodbury Street on site. This direct connection of the public realm allows for a clear understanding of what is public street and trail versus what is private residential land. It also allows for future public improvements on the right-of-way land to build better connections between Riverdale Park, the Cafritz property and College Park. However, the southern trail connection back to the exiting Rhode Island right-of-way that connects to the Riverdale Park Town Center Plaza is not direct. It appears that a small piece of land is given to the trail to make the connection but it is confusing between what is public realm and what is the private realm of the townhouses at this attempted trail connection. We believe this connection from the existing Rhode Island right-of-way to the new Rhode Island Avenue trail must be direct and overtly public in order to relieve confusion and to allow for future improvements and connections between the new street and the existing Hiker/Biker trail to the south. One solution to this connection might be the following:

- The proposed arrangement of townhouses at the southwest corner of the site limits the possibility of creating a vehicular connection along Rhode Island Avenue to the existing Town Center Plaza. By removing some, or all of the last bar of townhouses at the western side of the new Rhode Island Avenue, a traffic circle, or some alternative terminus could be created here that allows for a direct future connection to the existing alignment. See [Diagram A1](#) for clarification of this alternative.



• **Diagram A1**

- **In the new plan, are there any locations where existing mature trees may be saved?**
- Wherever possible, driveway and/or alley curb cuts should not be located on primary streets or facing onto parks. In the current plan, it appears that alleys may enter and exit directly onto the grand circle/park on VanBuren off the back side of the Rhode Island Avenue townhouses. In order to better frame the dramatic circle, and to maximize the pedestrian safety of those walking around the circle, we suggest these alleys not be allowed to enter the circle.
- It appears that a good portion of the Stormwater Management storage from major events will be trapped and stored in cisterns or underground facilities. These types of facilities

PAUL MORTENSEN ARCHITECT

offer a tremendous opportunity to filter and reuse this graywater for irrigation and possibly toilet flushing on site. In order to minimize the impact of this development on site, and to garner USGBC LEED Certification points, we think this opportunity should be explored and exploited.

Street Sections/Lane Designs:

A primary goal of the Cafritz Development is to create a mixed-use development that is pedestrian friendly and safe. Although this is a broad and general goal, it speaks to the desire of creating a neighborhood where pedestrians, bicyclists and drivers all have equal influence and importance. Although automobiles must have access to this development in order for it to thrive, their speed must be dramatically reduced and conflicts with pedestrians and building uses must be simplified, reduced and controlled. In the book *Designing Walkable Urban Thoroughfares: A Context Sensitive Approach* produced by the Institute of Transportation Engineers (ITE) and the Congress for the New Urbanism (CNU), safety aspects of creating walkable urban streets are explained in detail. They explain that wider streets with less obstacles, like those designed in many suburbs over the past 60 years, might be more forgiving to driver errors, but they also facilitate higher vehicle speeds which increases frequency and severity of vehicular and vehicular/pedestrian crashes.

Because conflicts with pedestrians, cyclists, and other motorists are inherent in urban environments, speed is one of the most important factors that can influence the incidence or avoidance of a crash event. In studies done by the Federal Highway Administration they clearly show that pedestrians hit by cars traveling 20 miles per hour or less have approximately a 6% fatality rate. Pedestrians hit by cars traveling at 30 miles per hour have a 45% fatality rate. This relatively small increase of speed has huge ramifications to the pedestrian.

The width of the traveled way affects the user's perceptions of the street and can influence speed. In most cases, wider streets produce greater speeds. Likewise, streets with fewer obstructions, like those designed with wider corner radii, wider parking lanes and less street trees also helps to increase auto speeds. These designs also increase crosswalk lengths thereby increasing pedestrian crossing times. By creating narrower streets with fewer lanes, narrower lanes, narrower parallel parking lanes, smaller corner turn radii, and more street trees, auto speeds can be reduced and controlled. Smaller street sections are already the norm on most of the streets in Riverdale Park including Queensbury Road which has retail, civic and residential uses along its length. Queensbury Road is 24 feet wide with parking on one side. This allows for a 7 foot parking lane and two 8 feet 6 inch travel lanes. Although the county provides some guidelines for street dimensions, it is the local jurisdiction who will maintain the streets and who therefore can dictate their dimension.

In all of the street sections proposed for the Cafritz development, lanes are 12 feet wide or wider and parking lanes are all 8 feet wide. Likewise, tree planting wells or strips are all 5 feet wide

PAUL MORTENSEN ARCHITECT

which is a minimum width (and fairly standard) for small to medium sized trees. Wider strips would allow for larger trees and more pervious areas along the streets.

In the ITE and CNU book, the following standards for traveled ways are suggested in General Urban (C-4)** conditions for streets with volumes between 1,500 and 20,000 vehicle trips per day:

- Target speed: 25 mph
- Lane width: 10 – 11 feet
- Parallel Parking Width: 7 feet
- Bike Lanes: 5 to 6 feet

Using this information and background, we propose that the following modifications be incorporated into the street sections.

- **Sections A-A, C-C, F-F, G-G, H-H, I-I, J-J, K-K, and L-L:** Travel lanes to be 10 feet wide for a typical “Driving Surface” of 20 feet maximum. We also propose that the parking lanes on each of these streets be 7 feet wide.
- **Sections B-B and D-D:** “Driving Surface” of 14 feet which allows for cars to slowly move around cars queuing for parking along the primary road into the development.
- **Section E-E:** It seems that two travel lanes with no parallel parking is proposed around the circle. If this is the case, we suggest that the lanes be reduced to 10 feet for a “Driving Surface” of 20 feet total.
- With the reduction of lane and parking width in most street sections, we would suggest that these additional feet of dimensions be incorporated into the sections in one of the following ways: 1.) Larger tree space width which could allow for larger tree specimens and could provide an opportunity for more bioretention opportunities. 2.) The widening of the pedestrian areas at the sidewalks. Or 3.) The narrowing of the right-of-way to allow for larger front landscape areas, or slightly wider developable lots.

This document includes our assessment of what is being proposed in the current Preliminary Plan of Subdivision 4-12004 signed by the Development Team Surveyor and Civil Engineer. We hope this will provide the various stakeholder committees and Riverdale Park Mayor and Council with information to be discussed with the Development Team in the Subdivision process with Prince George’s County.

*** The C-4 Urban designation has been created by the CNU and clarifies the type and density of development from rural to very high density urban. C-4 Urban is a density in line with the Cafritz development and densities similar to downtown College Park.*