TAKOMA JUNCTION REDEVELOPMENT PROJECT CITY COUNCIL QUESTIONS – MAY 7, 2018

BUILDING DESIGN & PLACEMENT ON THE PROPERTY

Setback – Along Carroll Avenue: The set-back of the building along Carroll Avenue is aligned with the neighboring structures, creating a consistent "street wall" of storefronts.

Please clarify what the approximate dimensions of the sidewalk and public space will be along the entire stretch.
 (SS) The sidewalk square footage is based on an 8' clear path from end to end – with a few adjustments to follow the building edges. The Public Space square footage target is 2700 SF, from the face of the building to the curb, as the sidewalk is part of the public space.

Setback – Along Columbia Avenue: The set-back of the building along Columbia Avenue is respectful of the adjoining residential neighborhood and in keeping with adjacent commercial buildings.

- How far back into the currently wooded area does the proposed building protrude? (AMT) The existing parking lot is not parallel with the rear building wall. The proposed building extends approximately 40 feet back into the wooded area from existing tree line/ fence on the east side and only about 10' at the west end (adjacent to the existing Fire House parking structure).
- How much additional space is taken up by the bio-retention feature? (AMT) The proposed bio-retention is approximately 500 SF and will abut southern wall of the proposed building.

Orientation: The primary entrances to the building squarely face the street like those of nearby commercial buildings.

• No related questions.

Scale: The overall size of the building and the incorporation of varied architectural styles in the design of its façade respect the human scale of the commercial area.

• No related questions.

Proportion: The architectural details of the building – its windows, doors, decorative elements - are appropriately located and sized.

• Is NDC open to providing additional public art opportunities on the building such as the side next to the garage entrance on elsewhere on the site? (*NDC*) We are open for additional art work in the building.

• Is the final project likely to have this sort of decorative window on the upper floors? (SS) What has been shown is the design intent.

Rhythm: The spacing and placement of repetitive façade elements of the building's windows and doors respect the architectural character of the area and contribute to the rhythm of the streetscape.

• No related questions.

Massing: The building's design elements and its use of varied architectural styles contribute to the character of the commercial area.

- How would a 5% or 10% reduction in the size of the footprint or height of the building or an increase in the width of the service corridor impact the basic design of the building? (SS) The changes suggested would adversely impact the tenant square footage and usability of the spaces.
- How would these changes impact the economics of the project? (*NDC*) Any reduction in the leasable area would not only adversely impact the project economic but would also directly impact the value of the project which intern will reduce the tax revenue.

Height: The height of the building and the elevator tower do not detract from the commercial streetscape.

- Please explain why the proposed first floor is the height shown in the elevations and what the reasoning is. (SS) Restaurant space needs to accommodate sizable ductwork, in addition to sprinkler piping and other utilities. A dining area with a taller ceiling allows for greater air and sound movement. While the floor-to-floor height is 20 feet, the interior clear height of the first floor would be approximately 16 feet.
- Can the height of the building be reduced by two feet? What would be the impact? (SS) This would adversely impact the flexibility of the first and second floor spaces, limiting the interest by potential tenants.
- What perspective was used in preparing the renderings? (SS)The renderings were prepared from a three-dimensional model and place in Google street views.

Materials: The use of varied materials to create a series of storefronts adds to the visual interest of the building and the streetscape.

• No related questions.

Roof Shape and Details: The flat roof and the use of a curved parapet wall are in keeping with the existing character of the streetscape.

- What potential impact will the elevator tower have on the viability of the solar panels installed on the adjacent Healey Surgeon building? *(SS) The sun study of massing will show generally whether there are shading impacts from the new project on the Healy building and its solar panels.*
- How will HVAC equipment on flat roof be shielded from resident view on Columbia Avenue? (SS) The grade difference alone, of approximately 60 feet, will shield the view of the equipment, but with the trees and position of the equipment on the roof, this is not expected to be an issue. Screens can be explored in design development.
- Would altering or reducing the roofline change the appearance/sense of height of the building? (SS) Yes.

Storefront – Carroll Avenue: The storefront design allows for the display of merchandise and provides visual access to the business.

• No related questions.

Rear Façade – Columbia Avenue: The back of the building and the open windows of the below grade parking garage respect the residential character of the neighborhood.

- How high are the windows of the below grade parking facility from the floor of the garage? How does this compare to the height of the headlights of a typical vehicle? (SS) Please refer to the prepared sections of this area.
- What sort of ventilation will be needed for the parking garage, and where will it be located? (*2POV*) It is anticipated to have the garage fresh air intake at the west end of the garage in the ramp wall. For the exhaust to function as code requires the south east section of the garage would be the appropriate location for this to allow for cross ventilation.
- What steps will be taken to minimize possible noise and light pollution in the adjoining residential neighborhood along Columbia Avenue? (SS) Lighting at the back of the building will be minimal and generally per any specific code requirements. Our intent is to be respectful of neighboring properties, dark skies requirements and NOT to light the area significantly due to its future designation as a conservation easement. We expect the noise impacts at the rear of the building to be minimal there is no service or delivery activity occurring at the rear of the lot.

Also, to meet LEED requirements that are intended to minimize light trespass and negative human health/wildlife habitat impacts.

• Would additional landscaping, possible changes in materials or public art such as a mural help minimize the visual impact of the rear of the building? (SS) The design of

the rear of the building is intended to be a pleasant backdrop for the treed site.

Details and Ornamentation: The decorative features of the building's façade are consistent with many of the businesses operating along the Carroll Avenue corridor.

• No related questions.

PUBLIC SPACE AND SUSTAINABILITY FEATURES

Smart Growth: The project furthers the City's commitment to smart growth and sustainable development. (Development that is located on an underdeveloped in-fill site, human-scaled and includes mixed-use centers; conserves environmental and cultural resources; is transit-accessible and pedestrian-oriented.)

• What additional design features or operational measures are planned to make this a pedestrian- and bike-friendly project? (NDC) Creating a pedestrian and bike friendly environment is important, and needs to be done in concert with State Highway and the overall community bike friendly plan. In regards to the operational measures, we plan to encourage access to the site by bus, bicycle and foot, working with tenants to clarify parking expectation to staff, etc. In addition, Bike racks will be provided in underground garage to facilitate bicyclists.

Green Space: The proportion of the overall property that will be undeveloped and maintained as green space and the establishment of a forest conservation easement are appropriate.

• What portion of the lot would remain undeveloped green space? (AMT) The southern portion of site along Columbia Avenue is wooded area zoned as residential will remain undeveloped. Influenced by LEED requirements (min 30% of total project area, 25% of which must be vegetated).

How much of the current sloped, wooded area would be used for parking? For stormwater management?

 (AMT) The proposed building extends approximately 4,000 SF beyond existing tree line. With the proposed Storm water Management facility and storm drain conveyance onto Columbia Avenue additional area of approximately 2,400 SF will be disturbed behind the proposed building.

- How much of the slope, by height, will be removed? Are there key options or decisions that affect this?
 (AMT) The proposed building F.F.E is at ±294 with underground garage elevation of ±283. It is our plan to limit land disturbance behind the building southern wall as much as possible which would require clearing of trees and grade existing slopes.
- What level of clean-up of the wooded area is anticipated (i.e. the removal of invasive plants, thinning for forest health, replanting, etc.)? How would the wooded area be maintained on an ongoing basis?

(AMT) MNCPPC and City of Takoma Park will likely require a replacement planting plan as well as a 5-year maintenance plan to manage/remove invasive plants. Clean up / improvements will be subject to MNCPPC and City of Takoma Park approval. Removal and ongoing management of invasive plants as well as care for new plantings will be provided, based on a maintenance plan that will be required as part of the permitting process. Maintenance plan will be subject to MNCPPC and City of Takoma Park arborist approval.

- Is it possible to have a walking path or benches in this area? If not, why not? (AMT) It is not likely, due to the fact that the grading required to create an accessible path may have a negative impact on existing trees' critical root zones. The team can propose improvements to MNCPPC staff, if desired. However, since the wooded area will likely need to be part of a forest conservation easement, they will typically want the area to be free of activity.
- How many trees might need to be removed during construction? How visible will be rear of the building from Columbia Avenue be in the short-run until the vegetation is restored and the trees re-grow?

(AMT) Once the limits of disturbance is determined as the design moves forward, care will be taken to avoid impact to existing trees. More engineering and design will occur during the Site Plan design phase to determine the impacts. Some smaller trees that may need to be removed at the top of the slope are invasive species. Removal of trees over 7-5/8" diameter will be subject to City of Takoma Park approval.

What are the Montgomery County Forest Conservation Law requirements for a site of this size? How will the project met or exceed these requirements?

(AMT) information about the Maryland Forest Conservation Law that can be found here: <u>http://dnr.maryland.gov/forests/Pages/programapps/newfca.aspx</u>. A forest conservation easement on Lot 39 will most likely be required to protect the natural forest. Off-site forest easements could also be considered if necessary. We will work with MNCPPC and the City of Takoma Park to propose general improvements to improve the quality of the forest, i.e., replantings, removal of invasive species, etc. if possible.

Environmental Cleanup: The proposal provides for the stabilization of the site, a former public dump, and the removal and mitigation of contaminants.

• Based on initial assessments, what do you anticipate in terms of environmental clean-up needs? Is it possible this could be a lot more costly and intensive than anticipated? (*NDC*) *ECS completed vapor tests for the City's site, and a Phase I was completed for the Takoma Auto Clinic. The City site was found to be full of landfill, however, no significant contaminants were found. Key findings from the Phase I environmental study of the Auto Clinic:*

- Auto Clinic has two Above-ground Storage Tanks (ASTs) containing waste oil and waste coolant. ECS recommends proper removal and disposal of those ASTs.
- Auto Clinic was previously a gasoline filling station. There are four Underground Storage Tanks (USTs) on site. ECS is waiting for Maryland Department of Environment's response about whether six USTs were removed from the site.
- There are three USTs are currently in use on 7224 Carroll Avenue (the gas station across the street)
- ECS recommends:
 - ECS recommends proper removal and disposal of the ASTs.
 - ECS recommends an Asbestos Containing Material Survey be performed if demolition is planned.

Landscape Features: The proposal provides for the installation of street trees and planters and the enhancement and preservation of a significant portion of the wooded area located along Columbia Avenue at the rear of the property.

- What types of street trees will be planted and planters installed along Carroll Avenue? (VIKA) The open space to the west will afford larger street trees such as Elm, Oak and Sweetgum. The tree planters between the layby and storefront that are over the garage below will be suited for a smaller species such as Serviceberry, Sweetbay Magnolia, Smoke Tree, or Crape Myrtle.
- What measures will be taken to ensure that the street trees and landscape elements along Carroll Avenue will thrive given potentially adverse conditions (i.e. limited sun, space, poor soils, etc.)? (VIKA) *Soil volumes of at least 600 CY will be sought for the larger street trees, with amended soil panels below paving to provide additional space for root expansion. Several suspended pavement systems can be used to provide for soils with low compaction rates. These are all required M-NCPPC environmental standard that will required by staff prior to Site Plan approval.*

Stormwater: The development of the green roof, the installation of a bio-retention area, and the preservation of the wooded area furthers the Council's ongoing stormwater management goals.

What specific stormwater measures will be taken during and immediately after construction (i.e. infiltration, bio-retention, erosion control efforts, etc.)? The team is working on further refining the stormwater management design. (AMT) For storm water management green roof and a bio-retention facility are being proposed for the site. A Concept Storm water Management plan has been submitted to City of Takoma Park for their review. An ESC plan will be implemented for the site. Some of the considerations are silt fence and a construction entrance along Carroll Avenue and super silt fence along the southern end of site. we will further evaluate during our design phase for additional ESC practices if required.

• What is the stormwater treatment goal (50%? 100%)?

- (AMT) The project site has an existing impervious area that exceeds 40%, the development (of 69% impervious existing) is considered as redevelopment. Per the Maryland Stormwater Design Manual, for redevelopment project existing impervious is either reduced or treated by 50% and any new impervious will be treated 100% onsite.
- Will the steep slope create any stormwater challenges during or immediately after construction? What steps will be taken to address these concerns? *(AMT) The proposed bio-retention (planter box) abut the southern building wall. This will limit any additional grading required for the placement of bio-retention facility.*
- Will the project meet or exceed City's stormwater management requirements for a redevelopment project? Would these requirements be met on- or off-site? *(AMT)* The project will exceed the stormwater management requirements for a redevelopment project. These requirements will be met on-site with proposed green roof and bio-retention. These facilities are designed to provide 3,227 CF of ESDv when 2,490 CF of ESDv volume is required. Note: LEED requirement is on site.
- Can the proposed green roof be designed to absorb more stormwater? (AMT) The proposed green roof is designed with 8" thickness. The team will further evaluate during the design phase for additional options.

LEED Certification: NDC's development team has sufficiently committed to meeting or exceeding the LEED Gold certification requirements of the Development Agreement.

- Please provide more specific information regarding the project's LEED features. (SPB) In order to achieve at minimum LEED v4 Core & Shell Gold, the project will address sustainability across 6 main design and construction topic areas: Location & Transportation, Sustainable Sites, Water Efficiency, Energy & Atmosphere, Materials & Resources, and Indoor Environmental Quality. By approaching the planning, design, and construction phases of the project in an integrated fashion, the goals of reduced water and energy use, habitat protection, and healthy indoor spaces, amongst others, will be pursued. Targeted LEED credits, and their potential strategies, may include the following:
 - Sensitive Land Protection (develop on previously developed land)
 - Access to Quality Transit and Bicycle Facilities (proximity to bus lines; bike storage and changing facilities)
 - Reduced Parking Footprint and Green Vehicles (reserved parking for fuelefficient vehicles)
 - Site Development- Protect or Restore Habitat (wooded area preservation and removal of invasive species)
 - Open Space (usable, accessible outdoor space)
 - Rainwater Management (stormwater managed onsite using low impact development and green infrastructure)
 - *Heat Island Reduction (high reflectance roofing and pavement, below-grade parking)*

- Outdoor and Indoor Water Use Reduction (reduced potable water use, highefficiency fixtures)
- Fundamental and Enhanced Commissioning (commissioning of building systems to ensure proper operation)
- Optimize Energy Performance (energy efficient HVAC, lighting/thermal controls, and ventilation)
- Storage and Collection of Recyclables (recycle paper, corrugated cardboard, glass, plastics, metals, electronic waste)
- Product Disclosure and Optimization (materials and products with life-cycle impacts and ingredients)
- Construction Waste Management (waste diverted from landfills)
- Low-Emitting Materials (low-VOC indoor materials)

As the project design progresses through the Design Development and Construction Documentation stages, this list may change to reflect updated programming, community goals, and economic synergies.

• What options and tradeoffs for this site have been considered?

(SBP) Preserving the onsite wooded area while also creating open spaces that serve the community and stormwater management facilities that sustainably manage runoff are all decisions that must be considered and balanced to achieve LEED certification. Studying various quantities of reserved green vehicle parking spaces vs. open retail parking spaces, as well as water/energy efficiency goals vs consumer preferences and mechanical system limitations are other tradeoffs that have, and will, be explored. LEED intentionally contains synergies and tradeoffs, thus not all credits are applicable to all projects. A goal of this project is to continue prioritizing sustainability options while recognizing site constraints and building limitations.

• Will NDC provide a commitment to meeting or exceeding LEED gold requirements with both energy neutral and environmental requirements? *(SBP) Energy neutrality may be explored as the design progresses. Site, programming,*

and budget constraints will influence whether or not this is possible. All environmental regulations will be met in addition to the LEED Gold minimums. Note, LEED **v4** Gold requirements are much higher that previous commitments.

- What modifications would be required for the building to be energy neutral (on or off site measures) or to produce 50% of its energy onsite? (SBP) Energy modeling of the building will first be performed, including various energy efficiency measures, to assess the most cost-effective path to reduce the energy density of the building by the Montgomery County minimum of 20% (8 pts) and beyond. Energy efficient HVAC systems and lighting design, thermal and lighting controls, and ventilation will be explored as strategies. Once the energy density and load of the building is reduced as much as possible, renewables will be considered for further savings. An extensive solar photovoltaic system would be required for the building to achieve energy neutrality. Another possibility is purchasing renewable energy certificates (RECs) to offset a portion of the building's annual energy usage.
- Can solar panels be added? If not, why not? (SBP) A solar PV system is one strategy that could be considered. Before solar panels can be studied, energy density reduction and energy load minimization must be

achieved. Balancing the competing priorities of stormwater management, a vegetated roof, and open green space are also considerations when deciding to implement a solar PV system.

 How will the project integrate Montgomery County's International Green Construction Code (IgCC) requirements for a building of this size? (SBP) If projects in Montgomery County pursue LEED as the IgCC compliance path, they must achieve Silver (50 points) minimum and earn at least 8 points under Option 1 of Energy & Atmosphere credit Optimize Energy Performance. This project is pursuing LEED v4 Gold (60 points) and will earn, at minimum, 8 points for Optimize Energy Use to reduce energy use by at least 50% below the average commercial building's consumption in the base year 2000. The project is also targeting 75% diversion of construction waste from landfills (the Montgomery County minimum is 50%) and the mitigation of heat island effects, also a County requirement.

Public Space: The proposal includes sufficient and appropriate space for programmed and unprogrammed use by the public, seating for resident interactions, and activation of the area.

- How will the green space on the roof be developed and used? (SS) The intent is to provide a small area as a tenant amenity and the balance to contribute to swm requirements. As the extent of HVAC equipment is determined, the team will develop details for planting and paving.
- Are there any opportunities to use the green space on the roof more creatively (i.e. garden for community or tenant, native plant area, public space, etc.)? (*NDC*) the green roof is design for stormwater management a requirement for a redevelopment project. However, we have a small seat area for the tenant uses in the roof and possibly for private events.
- Would NDC make a larger space available for community gathering and seating on the roof, with a clear policy on its use? If so, what is workable? Open (unprogrammed) public access at certain times of day or evening? Access only for (programmed) community events? Café style seating (paid and free)? (NDC) Due to strong public comments, the roof deck access is restricted to tenants of the building. However, if there is a demand to lease the space for private event, NDC will be open to explore the opportunity through the property manager.
- What kind of amenities or building modifications would be required to increase access to and use of the roof? What trade-offs would have to be made if public access to the roof were increased?

(NDC) In order to increase the access and use of the roof - it will require additional staircase exist on the eastern side of the project. If public access to the roof were to increased, it will adversely impact the stormwater management design, increase construction cost as well as the liability in the project.

• Is it possible to reduce the building footprint to provide more street level public space?

(SS) The setback at the western end of the project is at an optimal distance from the curb - balancing the desire for more public space outside the building as well as ensuring that tenant visibility does not suffer adversely.

- What is the plan for year-round use of the ground level public space? (SS) The public space is unprogrammed, yet provides opportunity for a variety of social interactions. Is there a specific concern?
- How does the project satisfy the public space requirements of the Montgomery County Zoning Ordinance (Section 6.3.6 Public Open Space)? [Montgomery County Zoning 59.6.3.7 addresses amenities and open space in an NR zone.]
 (AMT) The open space requirements will be met thru the sidewalk space in front of the building. This area is planned to be hardscaped with seating, landscaping and other applicable site furniture based on the approved use and layout of the space, including the layby.
- Is temporary public use of some indoor space for community events possible until such all spaces are rented? (*NDC*) *yes, it will be managed by the property or leasing manager.*

Alternative Modes of Transportation: The plan provides for the continued availability of bike share options.

 Where would the bikeshare station be relocated once the proposed lay-by is constructed if no changes were made to the intersection? If the existing intersection were re-configured as proposed by the Traffic Group? (SS) This has not been finalized.

TRAFFIC & CIRCULATION

Internal Circulation: The proposed installation of a lift on the eastern edge of the proposed development, once its location and function are clarified, will provide Co-op shoppers with access to the below grade parking facility.

• What progress has been made to determine the location and function of the proposed lift? At what point in the development of the project does a decision need to be made to allow for the installation of the proposed lift? *(NDC) NDC is willing to work with the Co-op to install an additional elevator at the opposite end that goes between the lower level garage and street level.*

Pedestrian Safety: The proposal addresses concerns about the safety of pedestrians traveling through the site, providing a sufficient buffer between the walkways and the proposed lay-by and loading zone.

- What measures will be taken to ensure that the transition from the sidewalk in front of the proposed building to the front of the Coop building is smooth and easy to navigate? (SS) All sidewalk areas will be continuous and designed to seamlessly connect to the existing conditions that remain, in addition to complying with code and accessibility requirements.
- What measures will be taken to ensure that the pedestrian walkways and the public space will be adequately buffered from the proposed lay-by and loading zone? (SS) We understand the concern and are currently proposing bollards with a connecting guard chain.

On-site Parking – Parking Spaces: The additional number of off-street parking spaces created by the proposal will benefit the development and area businesses.

- How much parking is anticipated to be needed and/or utilized by the businesses within the new development? (SS) There are 72 proposed parking spaces within the garage structure.
- How many spaces would likely be dedicated to staff and/or office use vs. available for public use to park and shop? *(NDC) Parking operations will be determined at the time of leasing.*
- Is NDC willing to negotiate with other businesses in the Junction to provide parking opportunities if a lease arrangement and/or validation is desired? (NDC) NDC has expressed a willingness to discuss options with other businesses in the Junction.
- What assumptions were made to determine the number of parking spaces required by the proposed project?

(SS) There are 72 proposed parking spaces within the garage structure. The design of the garage including number of spaces is a function of the building design, column placement, ramp length and unusable floor space within the deck.

On-site Parking – Access: The proposed ramp to the below grade parking facility provides appropriate access.

- What is the maximum height of vehicles that would be able to access the below grade parking? (SS & 2POV) The maximum height would be approximately 8'-2" for the accessible van spaces. The drive aisles to the van spaces will maintain the 8'-2" clearance. Other areas outside of the van parking or drive aisles will maintain the code required 7'-0" clearance. It remains to be seen if any ceiling areas would require drops to accommodate building systems.
- What is the height of parking ceiling? (see above)
- Would small vehicles or trucks be able to enter the lower level to make deliveries?

(SS) That could be a possibility, but may be discourage by Parking Management.

Delivery Options: The proposed lay-by, located along Carrol Avenue outside of the travel lane, and the use of the service corridor and loading zone is an appropriate approach to the delivery of goods to the site.

- Please explain again why the lay-by is the best option for deliveries based on the constraints of this site. (TTG) A lay-by lane, a commonly used traffic management strategy, is the only option that permits NDC to optimize the development and meet the requirements of the Co-op's 18-wheeler delivery trucks.
- Will the Co-op's smaller as well as larger trucks be allowed to use the lay-by, as well as access the corridor and unloading space without a special agreement/lease? *(TTG) NDC and the City's traffic consultants have stated in presentations to the City Council that the lay-by lane will owned and controlled by the Maryland State Highway Association (SHA). NDC cannot, and does not wish to, restrict Co-op usage of the lay-by in any way. In the interest of the community NDC will restrict deliveries to their tenants in such a way as to minimize traffic disruption.*
- Recognizing that the building has not been leased, please give a sense of the number and frequency and type of trucks you anticipate will use the lay-by for the tenants within the new development.

(TTG) The Lay-by lane will be used primarily in the AM when the heavy vehicle movements are west bound in the opposite direction. We have observed the number and frequency of TPSS Co-op deliveries arriving during the AM and PM peaks and feel the layby lane can sufficiently handle existing truck deliveries. The new Takoma Junction project will have more control on setting delivery times and can attempt to dictate delivery schedule. Restaurants businesses will again receive deliveries early morning typically before the rush hour peak.

• How will/can a jam-up of multiple delivery trucks arriving at the same time be avoided or limited? (TTG) This is an operations/scheduling issue that the building management will coordinate with the tenants and the Co-op.

Delivery Options: The length, location, and operational aspects of the proposed lay-by are sufficient to address anticipated delivery needs of the building tenants and area businesses.

• Please provide specific details on the length of the proposed lay-by and how large the public space would be based on this length. What does this length provide for in terms of how many trucks can be in the lane at the same time? *(TTG) The Lay-by lane designed by TTG consists of 130 ft. of straight full width paving. The number and size of trucks that could use the lay-by at any one time will depend on the length of trucks present.*

- If the intersection is not reconfigured, what will be the impact on the proposed layby lane be? What changes would have to be made? (*TTG*) The Lay-by would be shorter but can work, doesn't supply as much queuing for additional trucks and the trucks will not be able to straighten up like it can on our proposed layby lane.
- What changes would need to be made to address a possible need to reduce the size of the public space because of a shift in the location of the lay-by? (SS) This is best addressed when specifics are better known.
- What alternatives are available to create a public space of similar size and quality of the proposed public space, if the space is relocated to accommodate the lay-by? (Same as above.)
- Is there any information available about average distances or best practices for the design of delivery / loading space? (SS) our entire team of retail and traffic experts has been working together to provide the best delivery and loading space that addresses a myriad of constraints with the location of this site and delivery vehicles used by the Co-op.
- Is the proposed service corridor wide enough for two-way foot delivery traffic (with hand carts) and/or transport of dumpsters to lay-by for pick-up? (SS) Yes.
- What would be the impact if the service corridor were widened? (SS)This would adversely impact tenant square footage.
- Is covering the service corridor an option? (SS) Having the service corridor covered would decrease the width, unless the tenant spaces were to be reconfigured, which would adversely impact tenant square footage. In addition, managing the roof drainage would complicate the construction and potentially impact the existing Co-op building.

(AMT) In addition, keeping the area un-covered was a requirement of meeting with the Fire Review – Montgomery County Planning – They would like to access the roof of the Takoma Junction with ladders from the service corridor area verses requiring emergency responders to climb onto Co-Op roof.

• Will NDC provide written statement of 24 hour / 7-day access to the service corridor and loading/unloading lane for Coop for their own trash management, deliveries and loading? (NDC) Yes

Trash and Recycling Collection – Size: The size and design of the planned trash and recycling collection area satisfy the projected needs of the building and allow for the establishment of additional space to accommodate the needs of the building's tenants or the Co-op.

• Where could chilled trash storage be provided if needed?

(NDC) Cold storage may be a part of the project, depending on tenant needs. Dumpster areas will be provided with a tamper-proof hosebib and a drain in order to clean areas regularly.

- Is there sufficient space to provide for enough trash storage for the new building, as well as the Coop, if an arrangement were made with the Coop? (NDC) There is sufficient space to handle trash for the new the project but we do not want to store, handle or have transported through the Takoma Junction project trash that is not generated by our tenants. This would take up valuable space in our project and subject us to operational burdens and potential liability which we feel are beyond the obligations of the Development Agreement.
- What will be done to reduce the smell and potential for rats in the corridor? (NDC) Management would be focused on maintaining the cleanliness of this corridor.
- What are the dimension of the proposed trash and recycling collection area? Can additional space be added if needed to accommodate the tenants? *(SS) access corridor is currently shown 10' wide which is wide enough per industry standards to accommodate all intended uses of the corridor.*

Trash and Recycling Collection – Operations: The proposed process for managing the collection and disposal of trash and recyclables is appropriate.

- Who would be responsible for rolling the dumpsters out to the street for pickup? How far in advance of the planned pick-up would they be rolled out into the loading zone? When would they be returned to the trash area? (NDC) The Takoma Junction project will utilize a Trash and Recycling Management Plan for it's tenants. Trash and recyclables will be stored on site and only brought out to the lay-by when the pickup vehicles arrive and promptly returned inside. No receptacles will be left standing in the lay-by. As with our deliveries, in the interest of the community we will restrict trash pickup in such a way as to minimize traffic disruption.
- What other facilities in the area use a similar approach to the process of managing the collection and disposal of trash and recyclable? (NDC) various mixed used urban development in DC metro area use a similar approach to managing trash and recycling.

External Circulation – Vehicular Traffic: The proposed realignment of Carroll Avenue and the creation of a triangular island providing for west-bound vehicular traffic from Carroll Avenue is an appropriate response for reducing vehicular congestion and traffic delays.

• Can the intersection be reconfigured to create significant public space or plaza next to the storefronts along Carroll Avenue and a small island between the right-turn lane and straight/left lanes (on west-bound Carroll)? (TTG) *Yes, the right turn*

movement SB Carroll to WB Carroll can be shifted to the east to provide a wider sidewalk along the frontage of the existing store fronts.

- Can the intersection be reconfigured without any island and all the space in front of the stores fronts (like a + intersection)? *(TTG)* Yes, although not a recommendation from TTG The right turn movement SB Carroll to WB Carroll is heavy in the am and the change would require all right turning vehicles to cross pedestrian movements moving N/S to from the Co-Op to the newly created Green Space Area.
- What would the impact on pedestrian safety be in each scenario? (*TTG*) *TTG* has reviewed the proposed pedestrian crossings thru the realigned intersection and have provided exclusive Protected Pedestrian crossing times for major movements. The other crossings will be provided with pedestrian indications during appropriate phases and vehicles turning are by law required to yield to pedestrians within the crosswalk. TTG believes a pedestrian will have the ability to cross at a designated crosswalk in less time than waiting for the all red signal phase - 180 seconds.
- What would the impact be on traffic flow, wait times, queuing, etc.? (*TTG*) The signal timing at the intersection is still being tweaked by the county and will not be finalized for some time. TTG will update traffic impact study once the timing is finalized and provide the results.
- Could street parking and the bus stop be maintained in either of those scenarios? (TTG) Yes.
- Will the building and operations as proposed be possible if the intersection is not reconfigured? Will traffic volume and flow be sufficient? Will the lay-by work? What will need to be changed to make the lay-by and other things work if the intersection is not reconfigured? (*TTG*) *The Lay-by lane needs to be located West of the Existing Stop Line for the existing traffic signal. This requirement by MDSHA would likely require some encroachment into the public sidewalk area (approximately half of the area). The Lay-by lane will work, it will not provide additional space for smaller trucks when a WB-67 truck is present.*
- Do the numbers in the analyses take into consideration the re-timing of the lights, or not? Will they after it is fully completed? (*TTG*) our traffic impact study to date doesn't contain the present signal timing installed by the county. The county increased the signal cycle length up to 180 seconds. The signal timing at the intersection is still being tweaked by the county and will not be finalized for some time. TTG will update traffic impact study once the timing is finalized and provide the results.
- How was the determination that the impact of the Centro Nia and Middle School expansion projects on traffic would be negligible reached? *(TTG) The Traffic Group*

quickly calculated the proposed trips anticipated thru the Carroll Avenue intersections and determined minimum vehicle trip increase per signal cycle length.

- When will the traffic studies be fully completed? (*TTG*) The Traffic Group will complete the revised traffic impact study as soon as the signal timing is finalized.
- What are options for reworking of Coop parking lot to fit into the proposed realignments—recognizing it is private property. *(TTG) The realigned Intersection design maintains existing turning maneuvers from both directions of Ethan Allen at the Co-Op Access. The Co-Op parking would need to be reversed to allow vehicle in from SB Carroll. If the Co-Op desire is to maintain its SB Entry from the state road and not reverse flow traffic and the right turns from re-aligned Carroll Avenue are restricted, the Co-Op Traffic Inbound can only access the existing SB entrance from West and East from Ethan Allan.*
- What assumptions were made to determine anticipated vehicular traffic created by the development? (*TTG*) the Traffic Group generated proposed vehicular trips based upon the amount of building size of the various uses utilizing ITE International Traffic Engineering trip rates. These rates were approved by MNCPPC prior to TTG beginning the traffic Impact Study.
- What is the estimated cost of reconfiguring the intersection? (*AMT*) *AMT are task* with preparing Preliminary Cost Estimate and the price will be determined on final configuration plan.

External Circulation – Pedestrians: The proposed crosswalks routing pedestrians across Carroll and Ethan Allen Avenues, through the proposed island, and the elimination of the Barnes Dance Crossing (all red) signalization address safety concerns and minimize the wait time of pedestrians.

- How much of a pedestrian safety improvement does an all-red signalization provide? (*TTG*) all vehicular traffic stops at an all RED Signal Phased Intersection. An all red pedestrian phase removes all possibility of conflicts between pedestrians and vehicular traffic.
- To what extent does an all-red signalization create additional delays for vehicular traffic? (TTG) if "All Red" signal phasing for pedestrian movement is eliminated plus the awkward crosswalk from TPSS Co-op to Grant Avenue corner, TTG believes the intersection will work and have less than the required 80 second delay. It's TTG understanding that an "All Red" pedestrian phase option is being tested by the County for the Carroll at Philadelphia Signal intersection. TTG will need to model this new "All Red" option as well. Can this "All Red" also be eliminated to gain project approval?

• Can an "all-red" signalization be an option at all times other than the south bound AM rush? (*TTG*) *TTG* believes this would be contrary to driver and pedestrian expectancies and would not be recommended.

External Circulation – Buses: The proposed re-location of the existing bus stop is an appropriate option for transit users and will provide access to area businesses.

- Where would the bus stop be located once the proposed lay-by is constructed if no changes were made to the intersection? If the existing intersection were reconfigured as proposed by the Traffic Group? (*TTG*) the Co-Op frontage is an option for existing and for the proposed Re-alignment of Carroll Avenue Intersection. Under the existing configuration scenario, the All Red signal phasing and the awkward crosswalk directly across to Grant street are to be removed, the existing stop line can be slightly moved to the east creating an area for the relocated Bus Stop. The proposed intersection design already relocates the EB stop line closer to Sycamore Avenue creating an Opportunity to move the bus stop in front of the Co-Op.
- In these reconfigurations with a "plaza," could the bus stop for Carroll Avenue (currently located in front of Spring Mill) be merged with the existing bus stop for 410 that is currently in BY Morrison park so that both are in the same location, perhaps just after Grant Avenue? If these are viable possibilities, please provide an analysis of these options and a sketch. (*TTG*) the right lane WB Carroll Ave. provides queuing area for vehicles to turn to head NB along Philadelphia. Yes, It is possible to move the WB bus stop midway between the intersections.
- Could you foresee a situation in which the bus stop might be relocated in the proposed public space in front of the lay-by? If so, what will be done to ensure that this is still a space "protected from the roadway" and comfortable? What other public space amenities to make up for the loss might be provided if this has to happen? (*TTG*) Not Recommended. A bus stop in front of the public space would result in the stopped bus blocking sight lines to/from exiting garage vehicles.