

Docket Item #7
Development Site Plan#2015-0012
1900 King Street – Amendment of King St Metro
Reconfiguration

CONSENT AGENDA ITEM
 If no one asks to speak about this case prior to the hearing, it will be approved without discussion as part of the Consent Agenda.

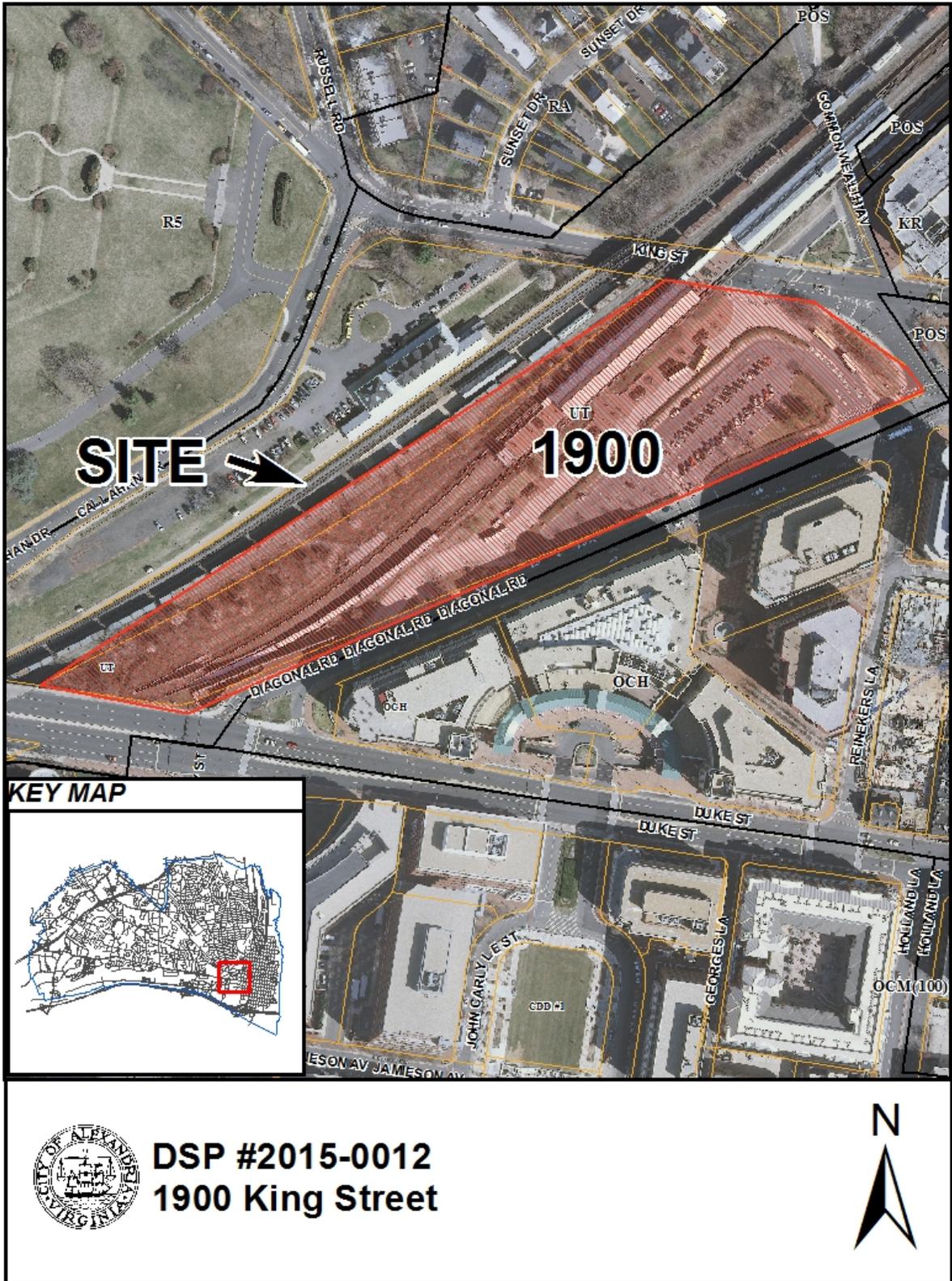
Application	General Data	
Project Name: King St Metro Bus Loop Reconfiguration	PC Hearing:	September 1, 2015
	CC Hearing:	NA
	If approved, DSP Expiration:	September 1, 2018
	Plan Acreage:	5.96 acre
Location: 1900 King St	Zone:	UT/Utility and Transportation
	Existing/Proposed Use:	Transit Facility
	Dwelling Units:	NA
	Gross Floor Area:	NA
Applicant: WMATA and City of Alexandria	Small Area Plan:	King St Metro/Eisenhower Ave
	Historic District:	NA
	Green Building:	NA

Purpose of Application: Consideration of an amendment of previously approved site plan DSP#2011-0027 for a reconfiguration of the King Street Metrorail facility parking lot in order to increase the number of bus bays, separate buses from passenger vehicles and improve pedestrian and bicycle accommodations.

Special Use Permits and Modifications Requested:

- None

Staff Recommendation: APPROVAL WITH CONDITIONS
Staff Reviewers: Jim Maslanka, T&ES, jim.maslanka@alexandriava.gov
 Maya Contreras, P&Z, maya.contreras@alexandriava.gov



I. SUMMARY

A. Recommendation & Summary of Issues

Staff recommends *approval* of an amendment of Development Site Plan #DSP2011-0027 for the King Street Access Improvement Project. As described in the previous approval (attached), this project will reconfigure the existing parking lot area in order to provide:

- Four additional bus bays;
- Consolidation of bus traffic ingress to a single curb cut;
- Separation of bus circulation from automobile traffic, including taxis and private shuttles;
- Improved pedestrian circulation through expanded sidewalk connections on Diagonal Road and to the Carlyle Concourse;
- Improved pedestrian navigation through new onsite wayfinding;
- Increased number of bicycle parking spaces;
- Introduction of a Capital Bikeshare station; and
- Consideration for a location for a future on-site Transit Store.

Amendments from the previous approval include:

- Removal of a previously requested subdivision; and,
- Removal of a previous modification request for reduced crown coverage

Site construction will be done in two phases and is projected to take approximately two years. The Metrorail facility will remain fully operational, and bus service will be configured with each phase. City staff will coordinate with DASH and WMATA to provide informational updates to the community before, during and after the project.

II. STAFF ANALYSIS

The previous Development Site Plan for the King Street Metro Improvements project was approved by the Planning Commission on May 1, 2012. Since that time, the project has completed two Final Site Plan reviews, and coordinated on a number of issues, which have been reviewed and addressed. These included discussions on safety and design elements, and property ownership and maintenance.

Located between Old Town Alexandria and the Carlyle neighborhood, the King Street Metro is one of the most important transportation hubs within the City, and a primary entrance point for employees, regional visitors, and tourists. Staff worked closely with WMATA during the Final Site Plan process on how to incorporate some key elements, several of which are not part of WMATA's standard designs. These range from safety issues, such as the introduction of pedestrian signals within the parking lot area to modulate the flow of pedestrians and buses, to design related elements, including the use of City standard bus shelters and lighting.

In the previous approval, the City and WMATA had negotiated a subdivision where the new Kiss-n-Ride and taxi stand area adjacent to Daingerfield Road would be transferred to the City, while WMATA retained control over the bus bay portion of the site. Under the new agreement, WMATA will keep title to the land, but give the City a permanent easement to the property. The City will now be able to incorporate the desired safety and design elements and maintain the property at an improved standard from its current condition. Because the property is no longer proposed to be split between two entities, all associated crown coverage will apply to the project. Therefore, a modification for reduced crown coverage is no longer required.

Funding

Funding for the \$11.7 million dollar project comes from three sources: the City, state grants and federal grants; \$3.8 million is from the city's Transportation Improvement Program (TIP), and \$7.9 million is from federal and state grants.

The project's initial cost elements were revised in the summer of 2014. While the site plan design has not changed, costs of some of the items increased, including on-site grading due to the discovery of additional underground utilities, and revisions to the originally estimated costs of WMATA's project management. These changes increased the cost estimate of the project considerably, and required a discussion during the FY2016 budget planning.

In February, 2015, Mark Jinks, then Acting City Manager, sent a letter to City Council, indicating that design work on this project would resume. City Council approved the additional funds as part of the FY2016 budget, and, pending approval of the site plan, the project will complete the Final Site Plan process and begin construction next year.

Construction Phasing

Because this is the most active transit center in the City, management of the construction phasing will be crucial to providing and maintaining transit services throughout the duration of the project. The conditions of approval require safe and accessible pedestrian pathways be maintained at all times during construction. During peak travel times, site users will be given priority, to the greatest extent possible. Construction is expected to take approximately two years.

Coordination between the multiple agencies involved and the community will be crucial to a successful project. The conditions of approval acknowledge that need by requiring on-going inter-agency meetings as well as informational community meetings prior to the start of each phase of construction. City staff is working with the engineers, WMATA and the City's Communications Team to plan a strategy for management of the project and outreach.

A future project will update Union Station, located on the west side of the King Street Station metro tracks. This station is served by Amtrak intercity and Virginia Railway Express (VRE) commuter rail lines. Improvements would include provision of a direct pedestrian connection between Union Station and King Street Metro station and the removal of the at-grade crossing

for pedestrians. As the timeline for both projects develops, staff has included recommendations to ensure coordination as they move forward.

III. COMMUNITY

City staff has continued to update the community about this project since the initial approval. Articles about the redevelopment have run in the Alexandria Gazette-Packet on June 4, 2015 and in the Alexandria Times on June 18, 2015. City staff has also coordinated with the Upper King Street Neighborhood Association, the Rosemont Civic Association, and the Federation of Civic Associations. Over the summer, outreach has included the following:

June 30, 2015 - City staff distributed information at King St-Old Town Metro

July 21, 2015 - City staff presented at meeting of the Old Town Business and Professional Organization

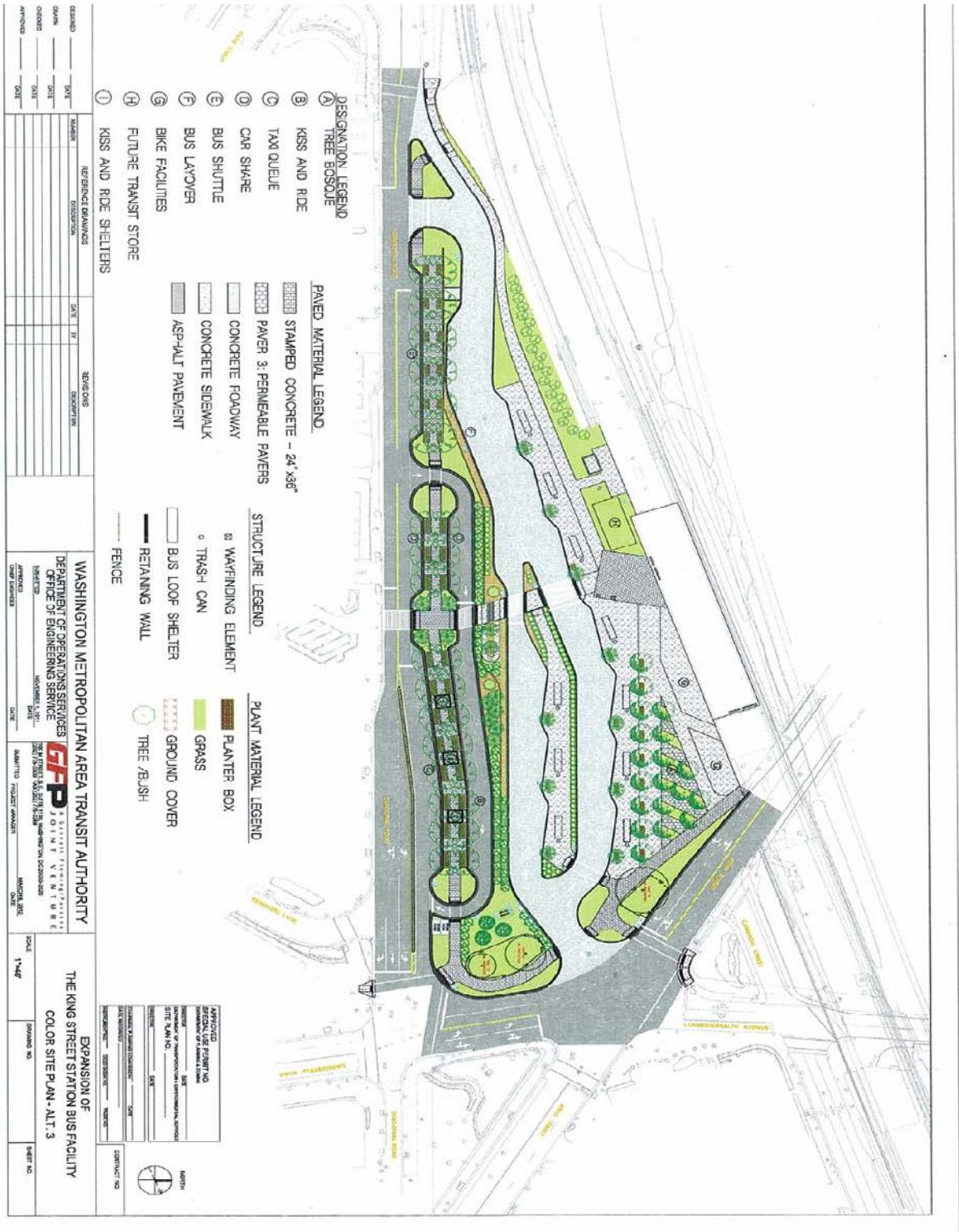
July 22, 2015 - City staff distributed information at the U.S. Patent and Trademark Office

August 6, 2015 - City staff distributed information at King St-Old Town Metro

IV. CONCLUSION

Staff recommends **approval** of the development site plan, subject to compliance with all applicable codes and the staff recommendations and conditions found under section VIII of the staff report.

V. GRAPHICS



VI. STAFF RECOMMENDATIONS:

1. **CONDITION AMENDED BY STAFF:** The Final Site shall be in substantial conformance with the completeness plan dated May 12, 2015 ~~April 9, 2012~~ and comply with the following conditions of approval:

PEDESTRIAN/STREETSCAPE:

2. **CONDITION AMENDED BY STAFF:** Provide the following pedestrian improvements to the satisfaction of the Directors of P&Z, RP&CA and T&ES:
 - a. Complete all pedestrian improvements prior to project completion, pursuant to the phasing plan approved by the City.
 - b. Install ADA accessible pedestrian crossings serving the site.
 - c. Construct all sidewalks ~~within the right-of-way~~ to City standards. The minimum unobstructed width of newly constructed sidewalks shall be 6' in commercial, mixed-use or other high-density areas Sidewalk widths and alignment shall be in general compliance with the Site Plan submitted to the City 11/29/11.
 - d. All sidewalks ~~within the public right-of-way shall be concrete and~~ shall generally comply with the City's Memo to Industry 05-08 and 01-13.
 - e. Sidewalks shall be flush across all driveway crossings.
 - f. All newly constructed curb ramps in Alexandria shall be concrete with detectable warning and shall conform to current VDOT standards.
 - g. Provide separate curb ramps for each direction of crossing (i.e., two ramps per corner). Curb ramps shall be perpendicular to the street to minimize crossing distances. Any changes must be approved by the Director of T&ES.
 - h. Provide thermoplastic pedestrian crosswalks at all crossings within the proposed development, which must be designed to the satisfaction of the Director of T&ES.
 - i. All crosswalks shall be standard, 6" wide, white thermoplastic parallel lines with reflective material, with 10' in width between interior lines. High-visibility crosswalks (white, thermoplastic ladder crosswalks as shown in the Manual on Uniform Traffic Control Devices (MUTCD)) may be required as directed by staff at Final Site Plan. All other crosswalk treatments must be approved by the Director of T&ES.
 - j. Install pedestrian countdown signals with matte black finish and pedestrian activated push-buttons in accordance with City Standards. All pedestrian-activated push buttons shall be accessible per ADA Accessibility Guidelines (ADAAG).
 - k. Coordinate with City staff on the proposed materials for all hardscape areas and wall materials, to the satisfaction of the Director of P&Z. Provide the following modifications to the proposed hardscape and wall details:
 - i. Delineate all the pedestrian paths (including those on WMATA property within the permanent access easement) with an edge treatment (soldier course or banding, or an appropriate alternative) and provide each path with a surface treatment distinct from adjoining paths so that they read as

- individual entities, with joint coursing or patterning running either perpendicular or parallel to the course of the individual path.
- ii. Provide large scale details of the edge treatment for all paths and transitions where two or more paths intersect (including intersections with existing sidewalks).
 - iii. The stamped concrete shall be a minimum unit size of 2' by 3'.
 - iv. Replace the proposed 12" x 4" stamped concrete finish with broom finished concrete or, concrete with aggregate finish.
 - v. Concrete paving which is installed in panels shall have the panel size coordinated with any required surface control joints.
 - vi. At the retaining wall between the bus bays and Kiss & Ride, provide a stone veneer finish. Planting medium shall extend a minimum 6" above the bottom of the veneer on the front, rear and end facades of the wall with appropriate waterproofing material screened entirely by adjacent planting.
 - vii. Railings for all walls shall be a black metal picket.
 - viii. The new fence that runs parallel to the sidewalk, leading to the entrance to the Duke Street pedestrian tunnel, shall be limited to 6 feet in height and should be black metal pickets. This fence shall be placed between the existing chain link fence and the back of the new sidewalk. Provide a return at the end of the picket fenceline that tie into the adjacent existing Duke St pedestrian tunnel wall at an appropriate architectural location (e.g. the end of the wall, at the base of a pier etc.). If, during the final site plan process, a decorative metal fence design is determined to meet both WMATA and City standards, it may be used in lieu of the proposed chain link fence and black metal pickets, subject to the approval of the Directors of P&Z and T&ES.
 - ix. All street furniture within the area maintained by the City shall be City-standard, including, but not limited to, benches, light poles, trash and recycling cans, bike racks, etc.
- l. Provide section detail(s) through the proposed staircase and ramp east of the main station entrance to indicate the transitions between the steps, ramp, railings, grading and planting for this area.
 - m. Provide the actual footprint for the various proposed bicycle facilities together with a proposed integration into the surrounding hardscape and landscape elements.
 - n. Explore the provision of seating within the tree bosque area. Seating shall be selectively located to allow clear pedestrian passage through the paved areas of the bosque.
 - o. Amend the size of the proposed tree wells between Diagonal Road and the Kiss & Ride to allow better pedestrian connection from parked vehicles to the sidewalk. Tree wells shall be a maximum 15 ft in length. If necessary, adjust the spacing of the street trees (between a range of 30-35ft on center).

OPEN SPACE/LANDSCAPING:

3. Develop, provide, install and maintain an integrated Landscape Plan with the final site plan that is coordinated with other associated site conditions to the satisfaction of the Directors of P&Z and/or RP&CA.
 - a. At a minimum, the Landscape Plan shall:
 - i. Provide an enhanced level of detail plantings throughout the site (in addition to street trees). Plantings shall include a simple mixture of seasonally variable, evergreen and deciduous shrubs, ornamental and shade trees, groundcovers and perennials that are horticulturally acclimatized to the Mid-Atlantic and Washington, DC National Capital Region. In addition, make the following changes to the proposed plantings: Replace the *Lagestromia indica* at all curbside locations for a taller tree with greater clear stem to avoid damage from buses. Species selection shall be extremely tolerant of urban conditions including salt spray and pollution.
 - ii. Replace the *Lagestromia indica* on Diagonal Road, east of the main station entrance for a taller species which will serve to denote this area as a key gateway to the site.
 - iii. Replace the *Prunus yeodensis* in the double row along the pedestrian path north of the main station entrance with *Ulmus parvifolia cv* of a min 2.5” caliper.
 - iv. Replace *Ilex glabra* for alternate specie(s) with less rangy growth characteristics.
 - v. Replace the *Forsythia intermedia* for a combination of tree and groundcover planting. Clearly distinguish the extents of the sod and other planting for this area to ensure complete planted cover between the pedestrian path and the existing fenceline.
 - vi. Interplant the areas of *Hemerocallis* spp. with at least one additional species which offers evergreen seasonal interest
 - b. Ensure positive drainage in all planted areas.
 - c. Provide detail, section and plan drawings of tree wells showing proposed plantings and associated materials, irrigation, adjacent curb/pavement construction, including edge restraint system, dimensions, drainage, and coordination with site utilities.
 - i. Provide a separate, dimensioned section detail for each type/size of tree well proposed, which includes an accurately dimensioned rootball.
 - ii. Continuous tree trenches shall be provided along streets where there are street trees and the trench outline shall be indicated on the site plan and landscape plan.
 - iii. Provide an exhibit that demonstrates all street tree planting meets the minimum soil volume requirement from the *Landscape Guidelines* (300 cu. ft. per tree).

- iv. Provide the maximum possible soil volume for all other tree planting, in coordination with P&Z staff.
 - v. Provide dimensioned sections for proposed tree wells which indicate how the edges of the well and adjacent sidewalk are structurally supported. It is unacceptable to propose uncompacted growing medium as structural support for sidewalks.
 - vi. Provide longitudinal section details through typical tree trenches which include underdrains.
 - d. Provide planting details for all proposed conditions including street trees, multi-trunk trees, shrubs, perennials, and groundcovers.
 - e. Provide information in the planting schedule to indicate:
 - i. The clear stem height of all material at a curbside location or adjacent to pedestrian areas. Trees in these locations shall have suitably high clear stems to prevent damage from vehicles and pedestrians.
 - ii. The proposed plant spacing on center dimension for all planting except trees. (P&Z)(RP&CA)
4. Provide the following modifications to the landscape plan and supporting drawings:
- a. Provide a Landscape Plan and associated drawings per the City's *Landscape Guidelines*:
http://alexandriava.gov/uploadedFiles/recreation/info/040907_land_guidelines.pdf
. Standards and Requirements for all Landscape Drawings are Documents are provided on p.2-4, in particular:
 - i. Existing vegetation to-be-saved and associated tree protection area
 - ii. Proposed and existing to-be-saved utilities (in grayscale linework)
 - iii. Building entrances
 - iv. Extents of retaining wall veneer
 - v. A planting plan with clearly identifiable vegetation symbols, or labels
 - vi. On and off-site lighting locations
 - vii. Site features such as all wayfinding and signage
 - viii. Proposed benches and site furniture
 - b. On the Landscape sheets, provide the tabulations for the required existing and proposed crown coverage per the City's *Landscape Guidelines*.
 - c. On the landscape details sheet, provide information and cut sheets at a large scale for all proposed landscape elements such as
 - i. Proposed benches and site furniture
 - ii. Bus shelters
 - iii. Railings (railings shall be black in color and of the same material /style as the fence proposed for the retaining walls).
 - iv. Tree grates for any tree wells adjacent to the Kiss & Ride and shuttle bus/carshare/taxi parking and bus bay areas.
 - d. Proposed plantings shall be coordinated with on-site utilities. Horizontal and vertical location of all site utilities including storm and sanitary sewer, water,

- electrical, gas and associated appurtenances shall be adjusted to maximize accommodation of street and on-site plantings. (P&Z)
- e. Project elements associated with pedestrian areas including sidewalks, crosswalks, depressed curbs, street and site lighting, site lighting and site furnishings, signals and signs shall be located and coordinated so as maximize accommodation of street and on-site plantings. Horizontal and vertical locations of all associate service, footings and foundations shall be adjusted to maximize accommodation of street and on-site plantings. (P&Z)
 - f. Provide verification from WMATA that the standard depths of concrete and aggregate shown on sheet M-70 and which are proposed to support the pedestrian walkways are sufficient for any likely overrun by maintenance vehicles. Adjust the section details to meet any conditions required by WMATA. (P&Z)
 - g. Provide all future landscape documents, drawings submissions, specifications and as-built documents in compliance with the City's Landscape Guidelines. All such documents shall be prepared, sealed and dated by a Landscape Architect certified to practice in the Commonwealth of Virginia. (P&Z)
5. Provide a site water management plan developed installed and maintained to the satisfaction of the Directors of RP&CA, P&Z and Code Administration.
- a. Provide an exhibit or narrative that demonstrates that all parts of the site can be accessed by a combination of building mounted hose bibs, ground set hose connections or alternative (specify)_irrigation equipment. The narrative shall clarify any distinctions for irrigation provision on City-owned and WMATA-owned property and shall include any limits of provision (e.g. if irrigation is proposed for any time-limited periods).
 - b. Hose bibs, ground set water connections and FDCs must be fully accessible and not blocked by plantings, site utilities or other obstructions.
 - c. Install all lines beneath paved surfaces as sleeved connections.
 - d. Locate water sources and hose bibs in coordination with City Staff.
6. Develop a palette of site furnishings using City Standards, to the satisfaction of the Directors of P&Z and T&ES.
- a. Provide location and specification for site furnishings that depicts the scale, massing and character of site furnishings to the satisfaction of the Directors of P&Z and T&ES.
 - b. Site furnishings shall include benches, bicycle racks, trash receptacles, and other associated features. (P&Z)(T&ES)
7. Provide material, finishes, and architectural details for all retaining walls, seat walls, decorative walls, and screen walls. Indicate methods for grade transitions, handrails- if required by code, directional changes, above and below grade conditions. Coordinate with adjacent conditions. Design and construction of all walls shall be to the satisfaction of the Directors of P&Z, and T&ES. (P&Z)(T&ES)

8. Prior to commencement of landscape installation/planting operations, a pre-installation/construction meeting will be scheduled with the City's Landscape Architects to review the scope of installation procedures and processes. (P&Z)

TREE PROTECTION AND PRESERVATION:

9. Provide, implement and follow a tree conservation and protection program that is developed per the City of Alexandria *Landscape Guidelines* and to the satisfaction of the Directors of P&Z, and/or RP&CA and the City Arborist. (P&Z)(RP&CA)
10. The area of the limits of disturbance and clearing for the site shall be limited to the areas as generally depicted on the preliminary landscape plan submitted to the City 11/29/11 and reduced if possible to retain existing trees and grades. In particular:
 - a. Re-route the stormwater connection labeled as ' 97' 15 RCP' which runs in close proximity /through the critical root zone of the 20" oak to a minimum 8 ft outside the drip line. (P&Z)(RP&CA)
11. On the demolition plans clearly label each tree as either 'to-be-saved' or 'to-be-removed'. For all trees identified as 'to-be-saved' provide tree protection as required by the City's *Landscape Guidelines*. Areas to be demolished and areas of construction shall be carefully selected to limit the potential damage to existing trees. The label for tree protection currently shown on the demolition plan is insufficient. . (P&Z)(RP&CA)
12. Amend the 'Limit of demolition' hatching to exclude the tree protection areas. (P&Z)(RP&CA)
13. On the demolition plans, grading plans and landscape plans please provide:
 - a. Areas of tree protection. The areas shall be broadly in conformance as those depicted on the 11.29.11 Landscape Plan submitted to the City, and amended to be to the maximum possible extent.
 - b. Depiction of the actual canopy of all existing vegetation to be saved (P&Z)(RP&CA)
14. ~~CONDITION DELETED BY STAFF: Per Zoning Ordinance section 11-410, a crown coverage equal to at least 25% of the site's total area is required. Although a modification has been requested, the applicant shall continue to work with the City during the final site plan to find locations for trees in order to provide crown coverage to the greatest extent possible. (P&Z)(RP&CA)~~

BUILDING:

15. The applicant shall work with the City for recycling and/or reuse of the existing site materials as part of the demolition process, including leftover, unused, and/or discarded building materials. *** (T&ES)(P&Z)

16. Within 90 days after receipt of written request from the City, WMATA shall permit construction of a transit facility as generally depicted on the plans dated April 9, 2012. The final location and building plans will be designed in coordination with WMATA, and to the satisfaction of the Directors of P&Z, T&ES and DASH. (P&Z)(TES)(DASH)

SIGNAGE:

17. Within 90 days after receipt of written request from the City, WMATA shall permit the City to install wayfinding signage in the locations as generally depicted on the plans dated April 9, 2012. The City shall be responsible for the design, acquisition and installation of the signage. (P&Z) (T&ES)
18. Install a temporary informational sign on the site prior to the approval of the final site plan for the project. The sign shall be displayed until construction is complete or replaced with a contractor or real estate sign incorporating the required information; the sign shall notify the public of the nature of the upcoming project and shall provide a phone number for public questions regarding the project.* (P&Z)(T&ES)

PARKING:

19. For long-term enclosed bicycle parking, provide an area with minimum dimension of 20' by 46' immediately adjacent to the main entrance. *(T&ES)
20. Provide a clear, unobstructed space for a Capital Bikeshare station with 27 docks and 14 bicycles adjacent to the long-term enclosed bicycle parking. Location should be clear and unobstructed to provide 4 hours of sunlight each day for station's solar panel. Minimum dimensions for the Capital Bikeshare station area shall be 20' by 72'. *(T&ES)
21. For short term bicycle parking, provide 25 spaces for 50 bicycles, each rack holding two bicycles, adjacent to the Capital Bikeshare station with inverted U racks. Minimum dimensions for short-term bicycle parking area shall be 20' by 60'. *(T&ES)
22. All on-street parking controls and restrictions within the project area shall be determined by the City. Any such controls and restrictions which the applicant desires shall be shown on the final site plan. (P&Z)(T&ES)

BUS STOPS AND BUS SHELTERS:

23. Show all existing and proposed bus stops on the final site plan with associated features, to include shelters and benches in the vicinity of the site. Any proposed features shall be ADA compliant; all bus shelters shall include a bench, illumination (solar or electric), and the ability to accommodate future real time bus information LED screens and connections to the satisfaction of the Director of T&ES. The final bus shelter and bus stop bench design shall meet City standards and the approval of the Director of T&ES. (T&ES)

24. Continue to coordinate with staff to refine the turning movement required by buses to enter the first bus bay. A revised design shall be provided with the first final site plan submittal. (P&Z)(T&ES)(DASH)
25. **CONDITION AMENDED BY STAFF:** The pedestrian shelters on Diagonal Road shall be generally as located on the plans dated ~~April 9, 2012~~ May 12, 2015. The final design should be completed prior to release of the final site plan and shall meet City standards and the approval of the Directors of P&Z and T&ES. (P&Z)(T&ES)
26. Make bus stops at the project site ADA compliant. ADA compliance includes:
 - a. Install an unobstructed bus stop passenger loading pad that is thirty-five (35) feet wide parallel to the roadway, by eight (8) feet wide perpendicular to the curb,
 - b. The loading pad shall be at the same grade as the sidewalk, connect the curb to the sidewalk, and the pad's surface material shall match the sidewalk. The exiting width of the sidewalk may be counted towards the 8 foot wide perpendicular to the curb area.
 - c. Passenger loading pads shall never be placed on storm drain inlets, catch basins, and other obstacles that would make the bus stop and bus stop loading pad inaccessible (P&Z)(T&ES)(DASH)
27. Each bus bay must include standard U-channel pole or other approved structure to be made available for transit operators to mount bus stop signage at each bus bay. (T&ES)

SITE PLAN:

28. Coordinate location of site utilities with other site conditions to the satisfaction of the Directors of P&Z and/or RP&CA, and T&ES. These items include:
 - a. Location of site utilities including above grade service openings and required clearances for items such as transformers, telephone, HVAC units and cable boxes.
 - b. Minimize conflicts with plantings, pedestrian areas and major view sheds.
 - c. Do not locate above grade utilities in dedicated open space areas. (RP&CA)(P&Z)(T&ES)
29. **CONDITION AMENDED BY STAFF:** Provide a lighting plan with the final site plan to verify that lighting meets City standards. The plan shall be to the satisfaction of the Directors of T&ES, P&Z, and/or RP&CA in consultation with the Chief of Police and shall include the following:
 - a. Clearly show location of all existing and proposed street lights and site lights, shading back less relevant information.
 - b. If existing lighting does not meet minimum standards within the City right-of-way adjacent to the site, additional lighting must be provided so that the lighting meets City standards or to the satisfaction of the Director of T&ES.

- c. A lighting schedule that identifies each type and number of all fixtures, mounting height, and strength of fixture in Lumens or Watts.
 - d. Manufacturer's specifications and details for all proposed fixtures including site, landscape, pedestrian, sign(s) and security lighting.
 - e. A photometric plan with lighting calculations that include all existing and proposed light fixtures, including any existing street lights located on the opposite side(s) of all adjacent streets. Photometric calculations must extend from proposed building face(s) to property line and from property line to the opposite side(s) of all adjacent streets and/or 20 feet beyond the property line on all adjacent properties and rights-of-way. Show existing and proposed street lights and site lights.
 - f. Photometric site lighting plan shall be coordinated with architectural/building mounted lights, site lighting, street trees and street lights to minimize light spill into adjacent residential areas.
 - g. Provide location of conduit routing between site lighting fixtures so as to avoid conflicts with street trees.
 - h. Detail information indicating proposed light pole and footing in relationship to adjacent grade or pavement. All light pole foundations shall be concealed from view.
 - i. The lighting for the areas not covered by the City of Alexandria' standards shall be designed to the satisfaction of Directors of T&ES and P&Z.
 - j. Gadsby Light fixtures are required along the King St and Diagonal Rd frontages. Coordinate with staff from P&Z and T&ES for the provision of these fixtures, as shown on sheet M-78 of the approved planset.
 - k. Provide numeric summary for various areas (i.e., roadway, walkway/ sidewalk, alley, and parking lot, etc.) in the proposed development.
 - l. Full cut-off lighting shall be used at the development site to prevent light spill onto adjacent properties. (P&Z)(T&ES)(RP&CA)(Police)
30. Submit the final as-built per City guidelines and requirements immediately upon completion of site work, prior to reopening the site for public use. Prior to commencing the final phase of construction, the applicant and engineer shall meet with staff to develop a schedule for submission and review of the final as-built, to include landscaping per the City's *Landscape Guidelines*. ***(P&Z)(T&ES)
31. Verify that the north arrow shown on all sheets is at the correct orientation.

DEDICATION:

32. **CONDITION DELETED BY STAFF:** ~~A plat of dedication delineating the new right-of-way property, as generally shown in the plan dated April 9, 2012, shall be submitted to the City. The dedication and all applicable documents shall be approved by the City prior to the release of the final site plan. The final approved plat and restriction language shall be recorded among the land records. (P&Z)(TES)(City Attorney)~~

CONSTRUCTION:

33. Submit a construction phasing plan to the satisfaction of the Director of T&ES, for review, approval and partial release of Erosion and Sediment Control for the final site plan. In addition, building and construction permits required for site preconstruction shall be permitted prior to release of the final site plan to the satisfaction of the Director of T&ES. * (T&ES)

34. Submit a construction management/phasing plan for review and approval by the Directors of P&Z, T&ES, Code Administration and DASH prior to final site plan release. The plan shall be included in the Final Site Plan submission and:
 - a. Include a plan for temporary pedestrian and vehicular circulation for each project phase. ADA accessibility shall be maintained between the Metro station, all active bus bays, and the public rights of way at all times;
 - b. Develop an interim parking plan to determine the parking needs for taxis, Kiss & Ride, shuttles, and other uses, for each phase of construction.
 - c. All temporary bus stops shall be ADA compliant;
 - d. All temporary bus bays should allow for a transit bus to pull the first step of the front door within a maximum of 4” of the loading platform.
 - e. To the greatest extent possible, the applicant shall provide and maintain ADA accessible shelters for bus patrons throughout construction. Final design and location of temporary shelters (if needed) shall be determined during the Final Site Plan process.
 - f. Provide and maintain a bus stop wayfinding information signage, visible from the main station entrance for the duration of all phases of construction. This wayfinding information signage shall be updated with up-to-date bus bay assignments, provided by WMATA and DASH for each construction phase.
 - g. Provide and maintain a WMATA standard pole to be made available to WMATA and DASH to install bus stop signage at each active bus bay during construction.
 - h. During all phases of construction, provide lighting during the evening/night hours for pedestrians accessing the station from Diagonal Road, Daingerfield Road, and King Street and for bus patrons at each bus bay within the station. The lighting shall not interfere with accessibility along pedestrian pathways or at bus stops within the station;
 - i. For any area where a bus will be parked (layover or bus bay), demonstrate that a second bus can pass the parked bus safely, assuming every bus bay and layover space is occupied.
 - j. Indicate number of bus layover spaces available in each phase on the plan. The buses must be able to exit the layover area without encroaching in the construction zone or adjacent layover spaces, assuming every bus bay and layover space is occupied.
 - k. Minimize impact to pedestrian pathways during peak travel times. Short term sidewalk closures shall be scheduled during off peak hours.

- l. Require the contractor to attend a community meeting with City, WMATA and DASH staff to be held prior to each project phase to determine any field changes or modifications needed to this plan to ensure safe and efficient operations;
 - m. Require the contractor to meet with the community and adjacent property owners prior to each project phase to provide information on construction phasing and changes to the street network and sidewalks;
 - n. Require the contractor to designate a direct point of contact with City, WMATA and DASH staff for any issues requiring immediate attention.
 - o. Contractor(s) will designate a procedure for notifying transit operators of any unscheduled/unplanned closures in and around project area. Notifications should be given to the City, WMATA and DASH with maximum possible notice.
 - p. Construction interference with transit bus operations should be minimized during or kept outside of peak periods, designated as 6-9 am and 3-7 pm Mondays-Fridays.
 - q. Any area designated for exclusive bus use, including but not limited to any bus stop, layover area or access road shall not be used at any time for equipment and personnel parking, staging, and storage.
 - r. Include the overall schedule for construction and the hauling route;
 - s. Existing-to-remain and proposed planting which is installed in an earlier construction phase shall be fully protected from damage during later construction phases. Appropriate plan and details for planting protection shall be included in the construction phasing plan.
 - t. Copies of the plan shall be posted in the construction trailer and given to each subcontractor before they commence work;
 - u. If the plan is found to be violated during the course of construction, citations will be issued for each infraction and a correction notice will be forwarded to the applicant. If the violation is not corrected within five (5) calendar days, a “stop work order” will be issued, with construction halted until the violation has been corrected. * (P&Z)(T&ES)(Code) (DASH)
35. **CONDITION AMENDED BY STAFF:** Provide off-street parking for all construction workers without charge to the construction workers. Construction workers shall not be permitted to park on-street. For the construction workers who use Metro, DASH, or another form of mass transit to the site, the applicant shall subsidize ~~a minimum of 50~~ 100% of the fees for mass transit. Compliance with this condition shall be a component of the construction management plan, which shall be submitted to the Department of P&Z and T&ES prior to final site plan release. This plan shall:
- a. Establish the location of the parking to be provided at various stages of construction, how many spaces will be provided, how many construction workers will be assigned to the work site, and mechanisms which will be used to encourage the use of mass transit.
 - b. Provide for the location on the construction site at which information will be posted regarding Metro schedules and routes, bus schedules and routes.
 - c. If the plan is found to be violated during the course of construction, a correction notice will be issued to the developer. If the violation is not corrected within five

(5) days, a "stop work order" will be issued, with construction halted until the violation has been corrected. * (P&Z)(T&ES)

36. The sidewalks shall remain open during construction or pedestrian access shall be maintained to the satisfaction of the Director of T&ES throughout the construction of the project. (T&ES)
37. No major construction staging shall be allowed within the public right-of-way on King Street, Diagonal Road, Daingerfield Road or Commonwealth Avenue. The applicant shall meet with T&ES to discuss construction staging activities prior to release of any permits for ground disturbing activities. ** (T&ES)
38. **CONDITION AMENDED BY STAFF:** A "Certified Land Disturber" (CLD) shall be named in a letter to the Division Chief of Infrastructure and Right-of-Way Construction & Inspection prior to any land disturbing activities. If the CLD changes during the project, that change must be noted in a letter to the Division Chief. A note to this effect shall be placed on the Phase I Erosion and Sediment Control sheets on the site plan. (T&ES)
39. Prior to commencing clearing and grading of the site, the applicant shall hold a meeting with notice to all adjoining property owners and civic associations to review the location of construction worker parking, plan for temporary pedestrian and vehicular circulation, and hours and overall schedule for construction. The Departments of P&Z and T&ES, and DASH shall be notified of the date of the meeting before the permit is issued. (P&Z)(T&ES)
40. Identify a person who will serve as a liaison to the community throughout the duration of construction. The name and telephone number, including an emergency contact number, of this individual shall be provided in writing to residents, property managers and business owners whose property abuts the site and shall be placed on the project sign, to the satisfaction of the Directors of P&Z, and/or RP&CA and T&ES. (P&Z)(RP&CA)(T&ES)
41. Implement a waste and refuse control program during the construction phase of this development. This program shall control wastes such as discarded building materials, concrete truck washout, chemicals, litter or trash, trash generated by construction workers or mobile food vendor businesses serving them, and all sanitary waste at the construction site and prevent offsite migration that may cause adverse impacts to neighboring properties or to the environment to the satisfaction of Directors of T&ES and Code Administration. All wastes shall be properly disposed offsite in accordance with all applicable federal, state and local laws. (T&ES)
42. Contractors shall not cause or permit vehicles to idle for more than 10 minutes when parked. (T&ES)

STORMWATER:

43. Demonstrate compliance with flood plain ordinance Section 6-300 to Section 6-311 of Article VI Special and Overlay Zones. No final plan shall be released until full compliance with flood plain ordinance has been demonstrated. *(T&ES)
44. Furnish specific engineering data and information, in addition to Zoning Ordinance Requirements, as to the effect of the proposed construction on future flood heights. No final site plan shall be released until the applicant has demonstrated that no increase in water surface elevation for the 100-year flood will result due to implementation of this project. Computations are to include backwater calculations starting at a downstream cross section to an upstream cross section. Computations shall be made by modifying the existing HEC-RAS model, as prepared by the U.S. Army Corps of Engineers, Baltimore District. * (T&ES)
45. **CONDITION AMENDED BY STAFF:** For the design of storm water infrastructure/conveyance system, ~~All prepared storm water calculations shall utilize the City's standard rainfall intensities for the 2 year and 10 year rain fall event (5 minute time of concentration) $I_2 = 6.2$ in/hr and $I_{10} = 9.0$ in/hr~~ may be used. For providing storm water quality improvements and quantity control, Natural Resources Conservation Services (NRCS) rainfall distribution must be used.*(T&ES)
46. The proposed storm easements shall extend to an existing or proposed right of way line. *(T&ES)

SOLID WASTE:

47. **CONDITION AMENDED BY STAFF:** Provide adequate space for ~~and~~ installation of four (4) Iron Site Bethesda Series, Model SD-42 decorative black metal trash cans with domed lid by Victor Stanley. The receptacle(s) shall be placed in the public right-of-way along Diagonal Road and at strategic locations in the vicinity of the site as approved by the Director of T&ES. *** (T&ES)
48. **CONDITION ADDED BY STAFF:** Provide adequate space for installation of four (4) Iron Site Bethesda Series, Model SD-42 decorative blue metal recycling cans with domed lid by Victor Stanley. The receptacle(s) shall be placed in the public right-of-way along Diagonal Road and at strategic locations in the vicinity of the site as approved by the Director of T&ES. *** (T&ES)

STREETS / TRAFFIC:

49. If the City's existing public infrastructure is damaged during construction, or patch work required for utility installation then the applicant shall be responsible for construction/ installation or repair of the same as per the City of Alexandria standards and

- specifications and to the satisfaction of Director, Transportation and Environmental Services. *** (T&ES)
50. A pre-construction walk/survey of the site shall occur with Transportation and Environmental Services Construction and Inspection staff to document existing conditions prior to any land disturbing activities. (T&ES)
 51. Submit a Traffic Control Plan as part of the final site plan, for construction detailing proposed controls to traffic movement, lane closures, construction entrances, haul routes, and storage and staging shall be provided for informational purposes. In addition, the Traffic Control Plan shall be amended as necessary and submitted to the Director of T&ES along with the Building and other Permit Applications as required. The Final Site Plan shall include a statement "FOR INFORMATION ONLY" on the Traffic Control Plan Sheets. * (T&ES)
 52. All Traffic Control Device design plans, Work Zone Traffic Control plans, and Traffic Studies shall be signed and sealed by a professional engineer, registered in the Commonwealth of Virginia. * (T&ES)
 53. Show turning movements of standard vehicles (passenger, DASH and WMATA buses and fire trucks) turning into and maneuvering through the site. Turning movements shall meet AASHTO vehicular guidelines and shall be to the satisfaction of the Director of T&ES. * (T&ES)

UTILITIES:

54. Locate all private utilities outside of the public right-of-way and public utility easements. (T&ES)

SOILS:

55. Provide a geotechnical report, including recommendations from a geotechnical professional for proposed cut slopes and embankments. * (T&ES)

WATERSHED, WETLANDS, & RPAs:

56. The storm water collection system is located within the Timber Branch watershed. All on-site storm water curb inlets and public curb inlets within 50 feet of the property line shall be duly marked using standard City markers, or to the satisfaction of the Director of T&ES. *** (T&ES)

BMP FACILITIES:

57. The City of Alexandria's storm water management regulations regarding water quality are two-fold: first, phosphorus removal requirement and second, water quality volume

- default. Compliance with the phosphorus requirement does not relieve the applicant from the water quality default requirement. The water quality volume determined by the site's proposed impervious area shall be treated in a Best Management Practice (BMP) facility.
* (T&ES)
58. **CONDITION AMENDED BY STAFF:** Provide BMP narrative and complete pre and post development drainage maps that include areas outside that contribute surface runoff from beyond project boundaries to include adequate topographic information, locations of existing and proposed storm drainage systems affected by the development, all proposed BMPs and a completed Worksheet A or B and Worksheet C, as applicable. However, if there is an increase in pollutant loading from any point of discharge or an increase in the rate or volume of runoff based on the previously approved plans, then the project is not considered grandfathered and must demonstrate compliance with the state stormwater quality and quantity requirements in Section 13-109 by using the Virginia Runoff Reduction Method spreadsheet version 2.8. Proposed stormwater quality facility BMPs must then meet the design specifications found in the Virginia BMP Clearinghouse - <http://www.vwrrc.vt.edu/swc/PostConstructionBMPs.html> * (T&ES)
59. The storm water Best Management Practices (BMPs) required for this project shall be constructed and installed under the direct supervision of the design professional or his designated representative. Prior to project completion, the design professional shall submit a written certification to the Director of T&ES that the BMPs are:
- a. Constructed and installed as designed and in accordance with the approved Final Site Plan.
 - b. Clean and free of debris, soil, and litter by either having been installed or brought into service after the site was stabilized. *** (T&ES)
60. Submit two originals of the storm water quality BMP Maintenance Agreement with the City to be reviewed as part of the Final #2 Plan. The agreement must be executed and recorded with the Land Records Division of Alexandria Circuit Court prior to approval of the final site plan.* (T&ES)
61. The Applicant/Owner shall be responsible for installing and maintaining storm water Best Management Practices (BMPs). The Applicant/Owner shall execute a maintenance service contract with a qualified private contractor for a minimum of three years and develop an Owner's Operation and Maintenance Manual for all Best Management Practices (BMPs) on the project. The manual shall include at a minimum: an explanation of the functions and operations of the BMP(s); drawings and diagrams of the BMP(s) and any supporting utilities; catalog cuts on maintenance requirements including mechanical or electrical equipment; manufacturer contact names and phone numbers; a copy of the executed maintenance service contract; and a copy of the maintenance agreement with the City. A copy of the contract shall also be placed in the BMP Operation and Maintenance Manual. Prior to project completion, a copy of the maintenance contract shall be submitted to the City. ***(T&ES)

62. Submit a copy of the BMP Operation and Maintenance Manual to the Office of Environmental Quality on digital media prior to project completion. *** (T&ES)
63. Prior to project completion, the Applicant is required to submit a certification by a qualified professional to the satisfaction of the Director of T&ES that any existing storm water management facilities adjacent to the project and associated conveyance systems were not adversely affected by construction operations. If maintenance of the facility or systems were required in order to make this certification, provide a description of the maintenance measures performed. *** (T&ES)

CONTAMINATED LAND:

64. Should any unanticipated contamination, underground storage tanks, drums or containers be encountered at the site, the Applicant must immediately notify the City of Alexandria Department of Transportation and Environmental Services, Office of Environmental Quality. *** (T&ES)
65. **CONDITION AMENDED BY STAFF:** If environmental investigations and assessments finds the presence of onsite contamination and the results of these investigations and assessment warrants, the final site plan shall not be released, and no construction activity shall take place until the following has been submitted and approved by the Director of T&ES:
 - a. Submit a Site Characterization Report/Extent of Contamination Study detailing the location, applicable contaminants, and the estimated quantity of any contaminated soils and/or groundwater at or in the immediate vicinity of the site.
 - b. Submit a Risk Assessment indicating any risks associated with the contamination.
 - c. Submit a Remediation Plan detailing how any contaminated soils and/or groundwater will be dealt with, including plans to remediate utility corridors. Utility corridors in contaminated soil shall be over excavated by 2 feet and backfilled with “clean” soil.
 - d. Submit a Health and Safety Plan indicating measures to be taken during remediation and/or construction activities to minimize the potential risks to workers, the neighborhood, and the environment.
 - e. Applicant shall submit 3 hard copies and 2 electronic copies of the above. The remediation plan must be included in the Final Site Plan. * (T&ES)

NOISE:

66. All exterior loudspeakers shall be prohibited and no amplified sound shall be audible at the property line. External speakers as integral to the Real Time Bus Information panels at bus bays shall be exempt. (T&ES)

ARCHAEOLOGY:

67. **CONDITION ADDED BY STAFF:** The statements in archaeology conditions below shall appear in the General Notes of all site plans and on all site plan sheets that involve demolition or ground disturbance (including Basement/Foundation Plans, Demolition, Erosion and Sediment Control, Grading, Landscaping, Utilities, and Sheeting and Shoring) so that in the unlikely event that archaeological materials are encountered during construction contractors should contact Alexandria Archaeology:
- a. The applicant/developer shall call Alexandria Archaeology immediately (703-746-4399) if any buried structural remains (wall foundations, wells, privies, cisterns, etc.) or concentrations of artifacts are discovered during development. Work must cease in the area of the discovery until a City archaeologist comes to the site and records the finds.
 - b. The applicant/developer shall not allow any metal detection or artifact collecting to be conducted on the property, unless authorized by Alexandria Archaeology.

CITY DEPARTMENT CODE COMMENTS

Legend: C - Code Requirement R - Recommendation S - Suggestion F – Finding

Transportation and Environmental Services

- F - 1. Sheets M-51 – M-53; increase text size within the profile to ensure readability. Ensure the material and class of pipe is labeled within the profile. (T&ES- Engineering)
- F - 2. Demolition plan shall have E&SC information (add inlet protection). (OEQ)
- F - 3. Any plan that shows E&SC shall have contours. (OEQ)
- F - 4. Planter boxes under pavement shall have a continuous soil channel running under pavement. (OEQ)
- F - 5. **FINDING ADDED BY STAFF:** If the project increases pollutant discharges and/or the rate and volume of runoff, which will remove the grandfathered status of the project, the project must demonstrate compliance with current provisions of Section 13-109 using the VRRM spreadsheet and other applicable calculations. In this event, porous pavers and other materials being proposed as pervious must meet Table 7.6 specifications found in Specification 7 of the VA BMP Clearinghouse. (Storm)
- F - 6. M-54 and M-55 do not match with WM 45 and WM46. (OEQ)
- F - 7. For long term bicycle parking, WMATA uses Dero Decker, most recently at the College Park Metro Station and eventually at Franconia Springfield (description here <http://fabb-bikes.blogspot.com/2011/11/bike-station-at-franconia-springfield.html>). Bikes are stored horizontally in each tray. Each Dero Decker uses 80” of depth per bike. Minimum ceiling height is 108”. Recommended access aisle between occupied Dero Deckers is 60”. Minimum aisle is 48”. Dero’s website: <http://www.dero.com/products/dero-decker/> For WMATA’s other enclosed bike parking, access is done through Bike Link <http://www.bikelink.org/> (T&ES- Transportation)
- F - 8. For Capital Bikeshare Stations, boom truck access is needed for station installation. Station configuration for a station with 27 docks and 14 bicycles would be 20’ by 72’. Final station configuration shall be made to the satisfaction of the Director, Transportation and Environmental Services. (T&ES)
- F - 9. An increased level of detail for the traffic signal plans must be submitted with the first final site plan submission to ensure construction of the proposed signal installations and signal modifications meet both MUTCD and City standards. (T&ES- Transportation)

- F - 10. Sheet M-39 – With the final site plan submission, show a stop sign on the Cameron Street approach at King Street (signal is being removed from this location so the stop sign is necessary). (T&ES- Transportation)
- F - 11. Provide minimum 25' overlap for match lines on all sheets. (T&ES- Transit, DASH)
- F - 12. Sheet M-38-39: Stripe bus layby area to match layby striping at Van Dorn and Braddock Metro stations. (T&ES- Transit, DASH)
- F - 13. Since the record drawings, maps, and other documents of the City of Alexandria, State, and Federal agencies show the true north pointing upwards, therefore, the Site Plan shall show the true north arrow pointing upward as is customary; however, for the sake of putting the plan together and/or ease of understanding, the project north arrow pointing upward, preferably east, or west may be shown provided it is consistently shown in the same direction on all the sheets with no exception at all. The north arrow shall show the source of meridian. The project north arrow pointing downward will not be acceptable even if, it is shown consistently on all the sheets. (T&ES)
- F - 14. The Final Site Plan must be prepared per the requirements of Memorandum to Industry 02-09 dated December 3, 2009, Design Guidelines for Site Plan Preparation, which is available at the City's following web address:
- <http://alexandriava.gov/uploadedFiles/tes/info/Memo%20to%20Industry%20No.%2002-09%20December%203,%202009.pdf>
- F - 15. The plan shall show sanitary and storm sewer, and water line in plan and profile in the first final submission and cross reference the sheets on which the plan and profile is shown, if plan and profile is not shown on the same sheet. Clearly label the sanitary and storm sewer, or water line plans and profiles. Provide existing and proposed grade elevations along with the rim and invert elevations of all the existing and proposed sanitary and storm sewer at manholes, and water line piping at gate wells on the respective profiles. Use distinctive stationing for various sanitary and storm sewers (if applicable or required by the plan), and water line in plan and use the corresponding stationing in respective profiles. (T&ES)
- F - 16. The Plan shall include a dimension plan with all proposed features fully dimensioned and the property line clearly shown. (T&ES)
- F - 17. Include all symbols, abbreviations, and line types in the legend. (T&ES)
- F - 18. All storm sewers shall be constructed to the City of Alexandria standards and specifications. Minimum diameter for storm sewers shall be 18" in the public Right of Way (ROW) and the minimum size storm sewer catch basin lead is 15". The acceptable pipe materials will be AWWA C-151 (ANSI A21.51) Class 52 or Reinforced Concrete Pipe (RCP) ASTM C-76 Class IV. For roof drainage system, Polyvinyl Chloride (PVC)

- ASTM D-3034-77 SDR 26 and ASTM 1785-76 Schedule 40 pipes will be acceptable. The acceptable minimum and maximum velocities will be 2.0 fps and 15 fps, respectively. The storm sewers immediately upstream of the first manhole in the public Right of Way shall be owned and maintained privately (i.e., all storm drains not shown within an easement or in a public Right of Way shall be owned and maintained privately). (T&ES)
- F - 19. All sanitary sewers shall be constructed to the City of Alexandria standards and specifications. Minimum diameter of sanitary sewers shall be 10" in the public Right of Way and sanitary lateral 6" for all commercial and institutional developments; however, a 4" sanitary lateral will be acceptable for single family residences. The acceptable pipe materials will be Polyvinyl Chloride (PVC) ASTM D-3034-77 SDR 26, ASTM 1785-76 Schedule 40, Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52, or reinforced concrete pipe ASTM C-76 Class IV (For 12" or larger diameters); Class III may be acceptable on private properties. The acceptable minimum and maximum velocities will be 2.5 fps and 10 fps, respectively. Laterals shall be connected to the sanitary sewer through a manufactured "Y" or "T" or approved sewer saddle. Where the laterals are being connected to existing Terracotta pipes, replace the section of main and provide manufactured "Y" or "T", or else install a manhole. (T&ES)
- F - 20. Lateral Separation of Sewers and Water Mains: A horizontal separation of 10' (edge to edge) shall be provided between a storm or sanitary sewer and a water line; however, if this horizontal separation cannot be achieved then the sewer and water main shall be installed in separate trenches and the bottom of the water main shall be at least 18" above of the top of the sewer. If both the horizontal and vertical separations cannot be achieved then the sewer pipe material shall be Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52 and pressure tested in place without leakage prior to installation.(T&ES)
- F - 21. Crossing Water Main Over and Under a Sanitary or Storm Sewer: When a water main over crosses or under crosses a sanitary / storm sewer then the vertical separation between the bottom of one (i.e., sanitary / storm sewer or water main) to the top of the other (water main or sanitary / storm sewer) shall be at least 18" for sanitary sewer and 12" for storm sewer; however, if this cannot be achieved then both the water main and the sanitary / storm sewer shall be constructed of Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52 with joints that are equivalent to water main standards for a distance of 10 feet on each side of the point of crossing. A section of water main pipe shall be centered at the point of crossing and the pipes shall be pressure tested in place without leakage prior to installation. Sewers crossing over the water main shall have adequate structural support (concrete pier support and/or concrete encasement) to prevent damage to the water main. Sanitary sewers under creeks and storm sewer pipe crossings with less than 6" clearance shall be encased in concrete. (T&ES)
- F - 22. No water main pipe shall pass through or come in contact with any part of sanitary / storm sewer manhole. Manholes shall be placed at least 10 feet horizontally from the

- water main whenever possible. When local conditions prohibit this horizontal separation, the manhole shall be of watertight construction and tested in place. (T&ES)
- F - 23. Crossing Existing or Proposed Utilities: Underground telephone, cable T.V., gas, and electrical duct banks shall be crossed maintaining a minimum of 12” of separation or clearance with water main, sanitary, or storm sewers. If this separation cannot be achieved then the sewer pipe material shall be Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52 for a distance of 10 feet on each side of the point of crossing and pressure tested in place without leakage prior to installation. Sanitary / storm sewers and water main crossing over the utilities shall have adequate structural support (pier support and/or concrete encasement) to prevent damage to the utilities. (T&ES)
- F - 24. Dimensions of parking spaces, aisle widths, etc. shall be provided on the plan. (T&ES)
- F - 25. Show the drainage divide areas on the grading plan or on a sheet showing reasonable information on topography along with the structures where each sub-area drains. (T&ES)
- F - 26. Provide proposed elevations (contours and spot shots) in sufficient details on grading plan to clearly show the drainage patterns. (T&ES)
- F - 27. All the existing and proposed public and private utilities and easements shall be shown on the plan and a descriptive narration of various utilities shall be provided. (T&ES)
- F - 28. The Traffic Control Plan shall replicate the existing vehicular and pedestrian routes as nearly as practical and the pedestrian pathway shall not be severed or moved for non-construction activities such as parking for vehicles or the storage of materials or equipment. Proposed traffic control plans shall provide continual, safe and accessible pedestrian pathways for the duration of the project. (T&ES)
- F - 29. Sheets M-30-M32; provide the data used to determine the Tc (time of concentration). The data appears to be missing from the provided tables. (Engineering)
- F - 30. Sheets M-34-M-36; improve the readability of the profiles. The text is small. Include the specific pipe material information within the profiles. (RCP CL XX) (Engineering)
- F - 31. Correct Sheet M-33 with appropriate BMP calculations. (OEQ)
- F - 32. **FINDING ADDED BY STAFF** Construction phasing plan may be required to be amended if impacted by VRE pedestrian tunnel construction. (T&ES)
- C - 1 Per the requirements of the City of Alexandria Zoning Ordinance Article XI, the applicant shall complete a drainage study and adequate outfall analysis for the total drainage area to the receiving sewer that serves the site. If the existing storm system is determined to be inadequate then the applicant shall design and build on-site or off-site improvements to discharge to an adequate outfall; even if the post development storm

water flow from the site is reduced from the pre-development flow. The Plan shall demonstrate to the satisfaction of the Director of T&ES that a non-erosive stormwater outfall is present. (T&ES)

- C - 2 **CONDITION AMENDED BY STAFF:** Per the requirements of the City of Alexandria Zoning Environmental Management Ordinance (~~AZO~~) Article XIII, the applicant shall comply with the peak flow requirements and prepare a Stormwater Management Plan, ~~so that from the site, the post-development peak runoff rate from a two-year storm and a ten-year storm, considered individually, shall not exceed their respective predevelopment rates. If combined uncontrolled and controlled stormwater outfall is proposed, the peak flow requirements of the Zoning Ordinance shall be met.~~ If the project site lies within the Braddock-West watershed then the applicant shall provide an additional 10% storage of the pre-development flows in this watershed to meet detention requirements. (T&ES)
- C - 3 **CONDITION AMENDED BY STAFF:** Per the requirements of Article 13-1134 (dF) of the AZO, all stormwater designs that require analysis of pressure hydraulic systems, including but not limited to the design of flow control structures and storm water flow conveyance systems shall be signed and sealed by a professional engineer, registered in the Commonwealth of Virginia. The design of storm sewer shall include the adequate outfall, inlet, and hydraulic grade line (HGL) analyses that shall be completed to the satisfaction of the Director of T&ES. Provide appropriate reference and/or source used to complete these analyses. (T&ES)
- C - 4 The proposed development shall conform to all requirements and restrictions set forth in Section 6-300 (Flood plain District) of Article VI (Special and Overlay Zones) of the City of Alexandria Zoning Ordinance. (T&ES)
- C - 5 Location of customer utility services and installation of transmission, distribution and main lines in the public rights of way by any public service company shall be governed by franchise agreement with the City in accordance with Title 5, Chapter 3, Section 5-3-2 and Section 5-3-3, respectively. The transformers, switch gears, and boxes shall be located outside of the public right of way. (T&ES)
- C - 6 (a) Per the requirements of Section 5-3-2, Article A, Chapter 3 of the City of Alexandria Code, all new customer utility services, extensions of existing customer utility services and existing overhead customer utility services supplied by any existing overhead facilities which are relocated underground shall, after October 15, 1971 be installed below the surface of the ground except otherwise exempted by the City Code and to the satisfaction of the Director, Department of Transportation and Environmental Services.
(b) Per the requirements of Section 5-3-3, Article A, Chapter 3 of the City of Alexandria Code, all new installation or relocation of poles, towers, wires, lines, cables, conduits, pipes, mains, and appurtenances used or intended to be used to transmit or distribute any service such as electric current, telephone, telegraph, cable television, traffic control, fire alarm, police communication, gas, water, steam or petroleum, whether or not on the streets, alleys, or other public places of the City shall, after October 15, 1971, be installed

below the surface of the ground or below the surface in the case of bridges and elevated highways except otherwise exempted by the City Code and to the satisfaction of Director, Department of Transportation and Environmental Services. (T&ES)

- C - 7 In compliance with the City of Alexandria Zoning Ordinance Article XI, the applicant shall complete a sanitary sewer adequate outfall analysis as per the requirements of Memorandum to Industry No. 02-07 New Sanitary Sewer Connection and Adequate Outfall Analysis dated June 1, 2007. The memorandum is available at the following web address of the City of Alexandria (T&ES)

[http://alexandriava.gov/uploadedFiles/tes/info/New%20Sanitary%20Sewer%20Connection%20and%20Adequate%20Outfall%20Analysis%20\(02-07\).pdf](http://alexandriava.gov/uploadedFiles/tes/info/New%20Sanitary%20Sewer%20Connection%20and%20Adequate%20Outfall%20Analysis%20(02-07).pdf)

- C - 8 Per the requirements of Title 4, Chapter 2, Article B, Section 4-2-21, Appendix A, Section A 106(6), Figure A 106.1 Minimum Standards for Emergency Vehicle Access: provide a total turning radius of 25 feet to the satisfaction of Directors of T&ES and Office of Building and Fire Code Administration and show turning movements of standard vehicles in the parking lot as per the latest AASHTO vehicular guidelines. (T&ES)

- C - 9 The applicant shall provide storage space for solid waste and recyclable materials containers as outlined in the City's "Solid Waste and Recyclable Materials Storage Space Guidelines", or to the satisfaction of the Director of Transportation & Environmental Services. . The City's storage space guidelines and required Recycling Implementation Plan forms are available at: www.alexandriava.gov or contact the City's Solid Waste Division at 703-746-4410, or via email at commercialrecycling@alexandriava.gov, for information about completing this form. (T&ES)

- C - 10 The applicants will be required to submit a Recycling Implementation Plan form to the Solid Waste Division, as outlined in Article H to Title 5 (Ordinance Number 4438), which requires all commercial properties to recycle. (T&ES)

- C - 11 All easements and/or dedications must be recorded prior to release of the site plan.* (T&ES)

- C - 12 Plans and profiles of utilities and roads in public easements and/or public Right of Way must be approved prior to release of the plan.* (T&ES)

- C - 13 Provide a phased erosion and sediment control plan consistent with grading and construction plan. (T&ES)

- C - 14 Per the Memorandum to Industry, dated July 20, 2005, the applicant is advised regarding a requirement that applicants provide as-built sewer data as part of the final as-built process. Upon consultation with engineering firms, it has been determined that initial site

- survey work and plans will need to be prepared using Virginia State Plane (North Zone) coordinates based on NAD 83 and NAVD 88. Control points/Benchmarks which were used to establish these coordinates should be referenced on the plans. To insure that this requirement is achieved, the applicant is requested to prepare plans in this format including initial site survey work if necessary. (T&ES)
- C - 15 The thickness of sub-base, base, and wearing course shall be designed using “California Method” as set forth on page 3-76 of the second edition of a book entitled, “Data Book for Civil Engineers, Volume One, Design” written by Elwyn E. Seelye. Values of California Bearing Ratios used in the design shall be determined by field and/or laboratory tests. An alternate pavement section for Emergency Vehicle Easements (EVE) to support H-20 loading designed using California Bearing Ratio (CBR) determined through geotechnical investigation and using Virginia Department of Transportation (VDOT) method (Vaswani Method) and standard material specifications designed to the satisfaction of the Director of Transportation and Environmental Services (T&ES) will be acceptable. (T&ES)
- C - 16 All pedestrian, traffic, and way finding signage shall be provided in accordance with the Manual of Uniform Traffic Control Devices (MUTCD), latest edition to the satisfaction of the Director of T&ES. (T&ES)
- C - 17 All driveway entrances, curbing, etc. in the public ROW or abutting public ROW shall meet City design standards. (T&ES)
- C - 18 All sanitary laterals and/or sewers not shown in the easements shall be owned and maintained privately. (T&ES)
- C - 19 The applicant shall comply with the City of Alexandria’s Noise Control Code, Title 11, Chapter 5, which sets the maximum permissible noise level as measured at the property line. (T&ES)
- C - 20 The applicant shall comply with the Article XIII of the City of Alexandria Zoning Ordinance, which includes requirements for stormwater pollutant load reduction, treatment of the water quality volume default and stormwater quantity management. (T&ES)
- C - 21 The applicant shall comply with the City of Alexandria, Erosion and Sediment Control Code, Section 5, Chapter 4. (T&ES)
- C - 22 **CONDITION AMENDED BY STAFF:** All required permits from Virginia Department of Environmental Quality, Environmental Protection Agency, Army Corps of Engineers, Virginia Marine Resources shall be in place for all project construction and mitigation work prior to release of the final site plan. ~~This includes the state requirement for a VSMP permit for land disturbing activities greater than 2500 SF~~ commencement of land-

disturbing _____ activities.* (T&ES)

C - 23 **CONDITION ADDED BY STAFF:** The applicant must submit for review and approval a complete Stormwater Pollution Prevention Plan to the City for coverage under the VPDES Construction General Permit for land disturbing activities greater than one acre. If applicable, the Construction General Permit must be issued prior to the commencement of land-disturbing activities.* (T&ES)

Virginia American Water Comments

1. Revise City Standard General Notes #28 on Sheet M04 as follows: All water facility constructions shall conform to Virginia American Water (VAW) standards and specifications. No work can be completed on existing and proposed water facilities until all easements and agreements with VAW are finalized, executed and recorded. Developer or contractor shall contact VAW at 703-706-3889 to obtain an approved proposal and pay all required fees, prior to the start of construction, demolition and inspection of water facilities, including, but not limit to, water mains, fire hydrants, domestic and fire service lines. All the proposed wet taps on an existing water main shall be constructed by VAW.
2. Properly label the existing water facilities (e.g. hydrant, meter, valve).
3. Indicate whether the proposed grade will reduce the existing water line cover to less than 3.5 feet.
4. Show the existing and proposed water facilities (e.g. water line, hydrant, valve, meter) on Site Plan (Sheet M33 & M34).

ASA (Alexandria Renew Enterprises) Comments:

1. No comments received from ASA on the Preliminary submission.

Asterisks denote the following:

- * Condition must be fulfilled prior to release of the final site plan
- ** Condition must be fulfilled prior to release of the building permit (or commencing construction?)
- *** Condition must be fulfilled prior to project completion



APPLICATION

DEVELOPMENT SITE PLAN

DSP # 2015-00014

Project Name: Metro Station Bus Loop Recon.

PROPERTY LOCATION: King Street Metro Rail Station, Alexandria, VA 22314

TAX MAP REFERENCE: 063.04 - 61 - 01

ZONE: UT

APPLICANT

Name: Washington Metropolitan Area Transit Authority

Address: 600 Fifth Street, NW, Washington DC 20001

PROPERTY OWNER

Name: Washington Metropolitan Area Transit Authority

Address: 600 Fifth Street, NW, Washington DC 20001

PROPOSED USE: Transit facility

[] **THE UNDERSIGNED** hereby applies for Development Site Plan approval in accordance with the provisions of Section 11-400 of the Zoning Ordinance of the City of Alexandria, Virginia.

[] **THE UNDERSIGNED**, having obtained permission from the property owner, hereby grants permission to the City of Alexandria to post placard notice on the property for which this application is requested, pursuant to Article XI, Section 11-301 (B) of the 1992 Zoning Ordinance of the City of Alexandria, Virginia.

[] **THE UNDERSIGNED** also attests that all of the information herein provided and specifically including all surveys, drawings, etc., required of the applicant are true, correct and accurate to the best of his/her knowledge and belief.

John D. Thomas

Print Name of Applicant or Agent

600 Fifth Street, NW,

Mailing/Street Address

Washington DC 20001

City and State

Zip Code

John D. Thomas
Signature

202-962-2493

Telephone #

Fax #

jthomas@wamta.com

Email address

April 30, 2015

Date

DO NOT WRITE IN THIS SPACE - OFFICE USE ONLY

Application Received: _____

Received Plans for Completeness: _____

Fee Paid and Date: _____

Received Plans for Preliminary: _____

ACTION - PLANNING COMMISSION: _____

ALL APPLICANTS MUST COMPLETE THIS FORM.

The applicant is: (check one)

the Owner Contract Purchaser Lessee or Other: _____ of the subject property.

State the name, address and percent of ownership of any person or entity owning an interest in the applicant, unless the entity is a corporation or partnership in which case identify each owner of more than ten percent.

WMATA is 100% owner of the land.

If property owner or applicant is being represented by an authorized agent, such as an attorney, realtor, or other person for which there is some form of compensation, does this agent or the business in which the agent is employed have a business license to operate in the City of Alexandria, Virginia?

- Yes.** Provide proof of current City business license.
- No.** The agent shall obtain a business license prior to filing application, if required by the City Code.

OWNERSHIP AND DISCLOSURE STATEMENT

Use additional sheets if necessary

1. Applicant. State the name, address and percent of ownership of any person or entity owning an interest in the applicant, unless the entity is a corporation or partnership, in which case identify each owner of more than ten percent. The term ownership interest shall include any legal or equitable interest held at the time of the application in the real property which is the subject of the application.

	Name	Address	Percent of Ownership
1.	WMATA	600 Fifth Street, NW, Washington DC 20001	100%
2.			
3.			

2. Property. State the name, address and percent of ownership of any person or entity owning an interest in the property located at _____ (address), unless the entity is a corporation or partnership, in which case identify each owner of more than ten percent. The term ownership interest shall include any legal or equitable interest held at the time of the application in the real property which is the subject of the application.

	Name	Address	Percent of Ownership
1.	WMATA	600 Fifth Street, NW, Washington DC 20001	100%
2.			
3.			

3. Business or Financial Relationships. Each person or entity listed above (1 and 2), with an ownership interest in the applicant or in the subject property is required to disclose any business or financial relationship, as defined by Section 11-350 of the Zoning Ordinance, existing at the time of this application, or within the 12-month period prior to the submission of this application with any member of the Alexandria City Council, Planning Commission, Board of Zoning Appeals or either Boards of Architectural Review.

	Name of person or entity	Relationship as defined by Section 11-350 of the Zoning Ordinance	Member of the Approving Body (i.e. City Council, Planning Commission, etc.)
1.	WMATA	None	None
2.			
3.			

NOTE: Business or financial relationships of the type described in Sec. 11-350 that arise after the filing of this application and before each public hearing must be disclosed prior to the public hearings.

As the applicant or the applicant's authorized agent, I hereby attest to the best of my ability that the information provided above is true and correct.

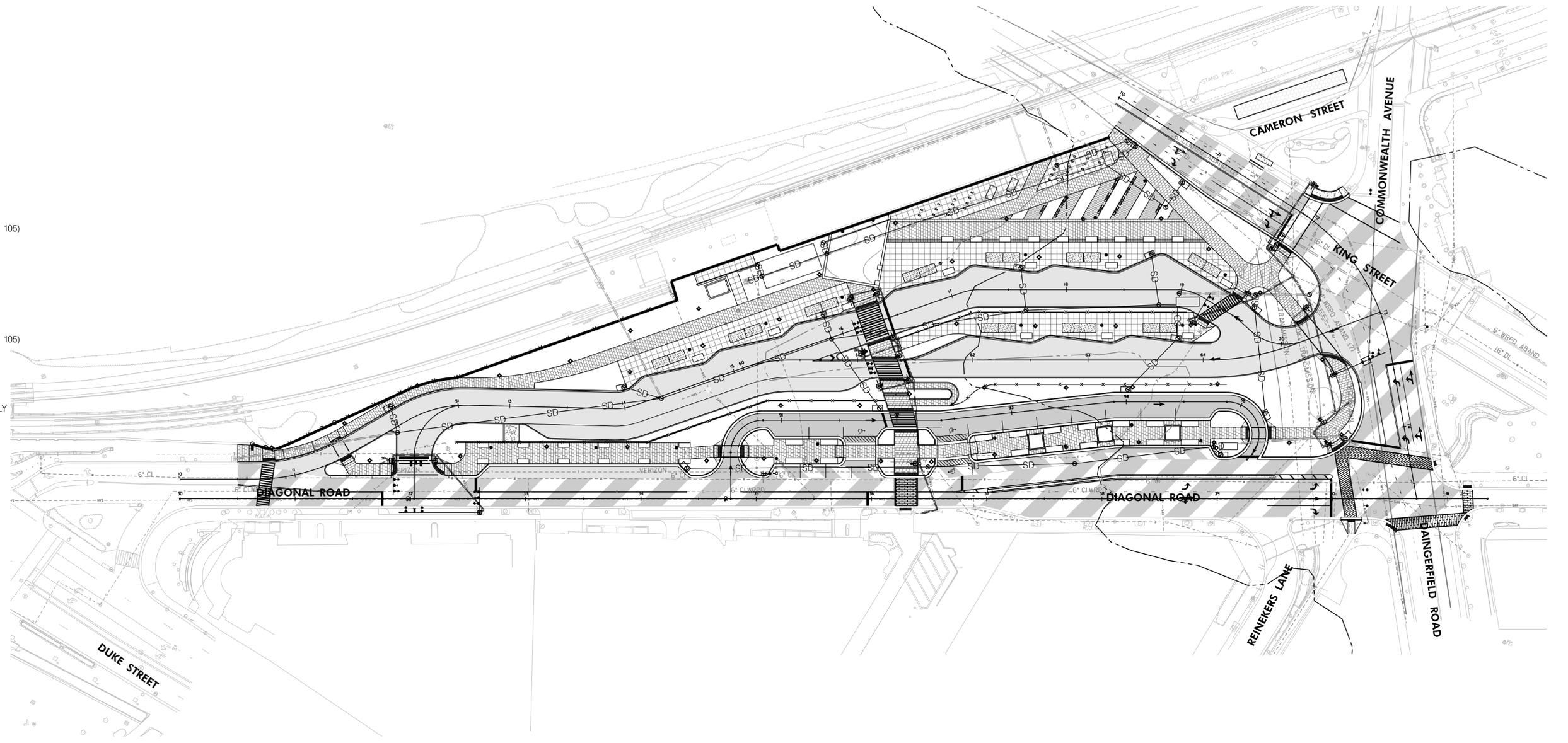
4.30.15
Date

JOHN D. THOMAS
Printed Name

John D. Thomas
Signature

LEGEND

-  CITY OF ALEXANDRIA STANDARD BUS SHELTER SLAB
(SEE DETAIL SHEETS 138 TO 151)
-  VICTOR STANLEY TRASH CAN
(SEE DETAIL SHEET 101)
-  BENCH
(SEE DETAIL SHEET 101)
-  TREE PLANTER
(SEE DETAIL SHEETS 98-100)
-  KISS AND RIDE SHELTER
(SEE DETAIL SHEET 102)
-  2' x 3' STAMPED CONCRETE
(FOR SECTION DETAIL SEE SHEET 23
FOR HARDSCAPE DETAILS SEE SHEET 105)
-  POROUS PAVERS
(SEE SECTION DETAIL SHEET 23
SEE PAVER DETAIL SHEET 105)
-  POURED 5' x 5' CONCRETE SIDEWALK
(FOR SECTION DETAIL SEE SHEET 23
FOR HARDSCAPE DETAILS SEE SHEET 105)
-  FULL DEPTH CONCRETE ROADWAY
(SEE DETAIL SHEET 135)
-  KISS AND RIDE PASSENGER CAR ONLY
FULL DEPTH PAVEMENT SECTION
(SEE DETAIL SHEET 23)
-  CITY OF ALEXANDRIA FULL DEPTH
PAVEMENT SECTION
(SEE DETAIL SHEET 23)
-  ASPHALT MILLING AND OVERLAY
(SEE DETAIL SHEET 23)
-  MAINTENANCE ACCESS PARKING
(SEE DETAIL SHEET 23)
-  EXISTING RIGHT OF WAY
-  PROPOSED EASEMENT
-  SECURITY FENCE
(SEE DETAIL SHEET 103)
-  INTERNAL FENCE
(SEE DETAIL SHEET 105)
-  PROPOSED STORM DRAIN
-  STORM STRUCTURE LABEL
-  PROPOSED FIRE HYDRANT
(SEE DETAIL SHEET 24)
-  PROPOSED WATER LINE
-  EXISTING 100-YR FLOODPLAIN
-  PROPOSED 100-YR FLOODPLAIN
-  EXISTING TRAFFIC CONDUIT



APPROVED
SPECIAL USE PERMIT NO. _____
DEPARTMENT OF PLANNING & ZONING

DIRECTOR _____ DATE _____
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. DSP2011-0027

DIRECTOR _____ DATE _____

CHAIRMAN, PLANNING COMMISSION _____ DATE _____
DATE RECORDED _____

INSTRUMENT NO. _____ DEED BOOK NO. _____ PAGE NO. _____

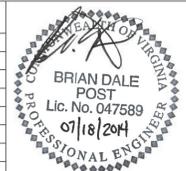


CONTRACT NO.
FQ-12172

DESIGNED	DAS	07/2014
		DATE
DRAWN	DAS	07/2014
		DATE
CHECKED	TC	07/2014
		DATE
APPROVED		DATE

REFERENCE DRAWINGS	
NUMBER	DESCRIPTION
001	FINAL SITE PLAN # 1 SUBMISSION
002	FINAL SITE PLAN # 2 SUBMISSION
003	FINAL SITE PLAN # 3 SUBMISSION

REVISIONS		
DATE	BY	DESCRIPTION
07/2012	GFP	ORIGINAL FINAL SUBMISSION
10/2012	GFP	FINAL SITE PLAN # 1 COMMENTS ADDRESSED
07/2014	GFP	FINAL SITE PLAN # 2 COMMENTS ADDRESSED



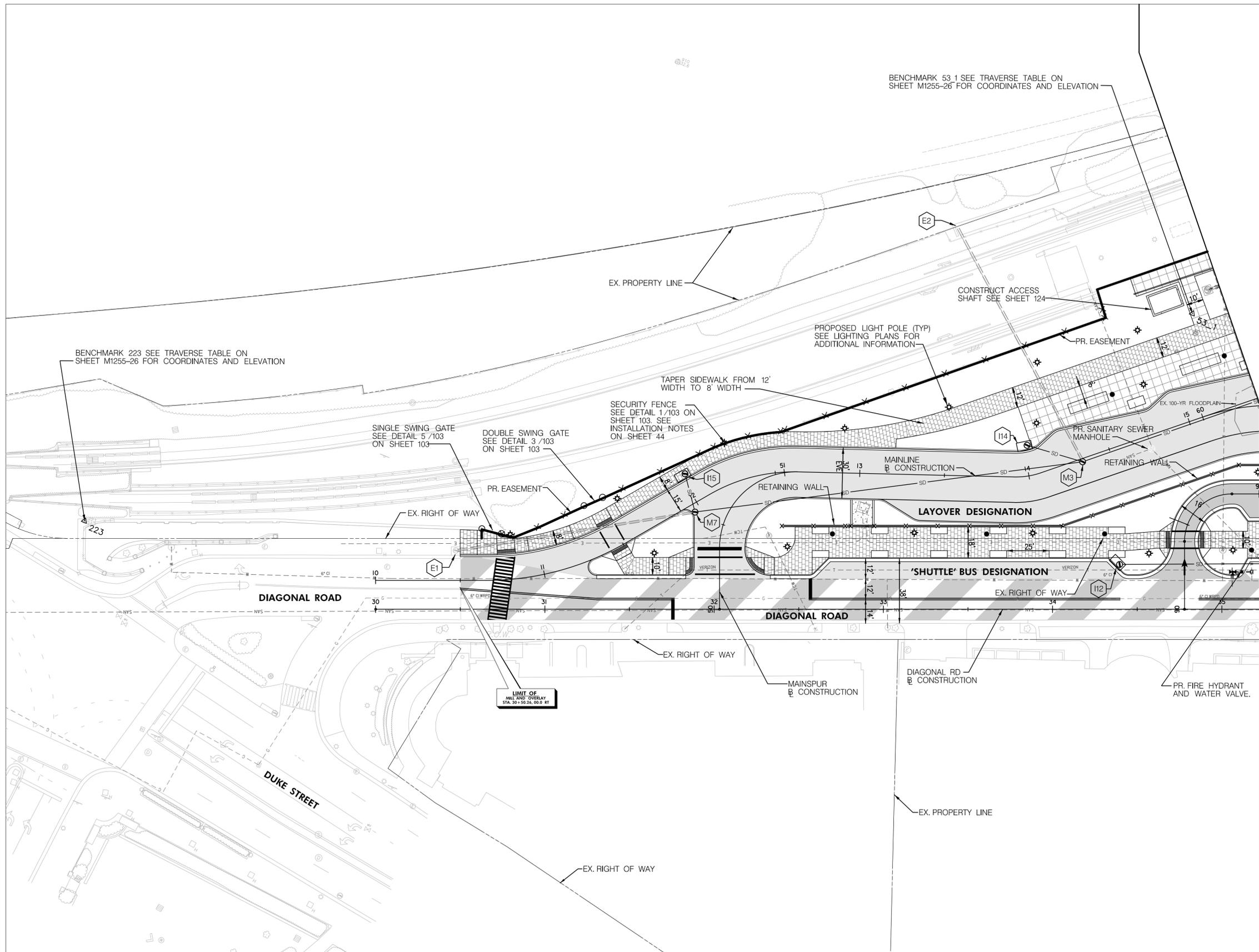
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
DEPARTMENT OF OPERATIONS SERVICES
OFFICE OF ENGINEERING SERVICE

GFP A Gannett Fleming/Parsons JOINT VENTURE
100 M STREET, S.E., SUITE 1100, WASHINGTON, DC 20003-3520
(202) 775-3300 FAX (202) 775-3389

SUBMITTED July, 2014 DATE
APPROVED CHIEF ENGINEER DATE
SUBMITTED PROJECT MANAGER DATE

SECTION C-10A HUNTINGTON ROUTE
KING STREET STATION BUS LOOP RECONFIGURATION
MASTER SITE KEY PLAN

SCALE 1" = 50'
DRAWING NO. C10A-G-0006
SHEET NO. M 1255 - 06

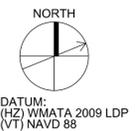


- LEGEND**
- CITY OF ALEXANDRIA STANDARD BUS SHELTER (SEE DETAIL SHEETS 138 TO 151)
 - VICTOR STANLEY TRASH CAN (SEE DETAIL SHEET 101)
 - BENCH (SEE DETAIL SHEET 101)
 - TREE PLANTER (SEE DETAIL SHEETS 98-100)
 - KISS AND RIDE SHELTER (SEE DETAIL SHEET 102)
 - 2'x3' STAMPED CONCRETE (FOR SECTION DETAIL SEE SHEET 23 FOR HARDSCAPE DETAILS SEE SHEET 105)
 - POROUS PAVERS (SEE SECTION DETAIL SHEET 23 SEE PAVEMENT DETAIL SHEET 105)
 - POURED 5'x5' CONCRETE SIDEWALK (FOR SECTION DETAIL SEE SHEET 23 FOR HARDSCAPE DETAILS SEE SHEET 105)
 - FULL DEPTH CONCRETE ROADWAY (SEE DETAIL SHEET 135)
 - KISS AND RIDE PASSENGER CAR ONLY FULL DEPTH PAVEMENT SECTION (SEE DETAIL SHEET 23)
 - CITY OF ALEXANDRIA FULL DEPTH PAVEMENT SECTION (SEE DETAIL SHEET 23)
 - ASPHALT MILLING AND OVERLAY (SEE DETAIL SHEET 23)
 - EXISTING RIGHT OF WAY
 - PROPOSED EASEMENT
 - SECURITY FENCE (SEE DETAIL SHEET 103)
 - INTERNAL FENCE (SEE DETAIL SHEET 105)
 - PROPOSED STORM DRAIN
 - STORM STRUCTURE LABEL
 - PROPOSED FIRE HYDRANT (SEE DETAIL SHEET 24)
 - PROPOSED WATER LINE
 - EXISTING 100-YR FLOODPLAIN
 - PROPOSED 100-YR FLOODPLAIN

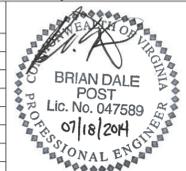
MATCH LINE SEE SHEET M1255-35

- NOTE:
- SEE M1255-57 AND M1255-58 FOR DETAILED STORM DRAIN LAYOUT.
 - SHUTTLE BUS DESIGNATION IS TO BE WMATA TYPICAL PAVEMENT SECTION. SEE WMATA STANDARD DRAWING ST-C-017 SHEET 135.

APPROVED SPECIAL USE PERMIT NO. _____	
DEPARTMENT OF PLANNING & ZONING	
DIRECTOR _____	DATE _____
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES	
SITE PLAN NO. DSP2011-0027	
DIRECTOR _____	DATE _____
CHAIRMAN, PLANNING COMMISSION _____ DATE _____	
DATE RECORDED _____	
INSTRUMENT NO. _____	DEED BOOK NO. _____ PAGE NO. _____



DESIGNED		DATE		REFERENCE DRAWINGS		REVISIONS	
DAS	07/2014	NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION	
DAS	07/2014	001	FINAL SITE PLAN # 1 SUBMISSION	07/2012	GFP	ORIGINAL FINAL SUBMISSION	
TC	07/2014	002	FINAL SITE PLAN # 2 SUBMISSION	10/2012	GFP	FINAL SITE PLAN # 1 COMMENTS ADDRESSED	
		003	FINAL SITE PLAN # 3 SUBMISSION	07/2014	GFP	FINAL SITE PLAN # 2 COMMENTS ADDRESSED	
APPROVED	DATE						



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

DEPARTMENT OF OPERATIONS SERVICES
OFFICE OF ENGINEERING SERVICE

SUBMITTED July, 2014
DATE

APPROVED _____
CHIEF ENGINEER DATE

SUBMITTED _____
PROJECT MANAGER DATE

GFP A Gannett Fleming/Parsons
JOINT VENTURE
100 M STREET, S.E., SUITE 1100, WASHINGTON, DC 20003-3520
(202) 775-3300 FAX (202) 775-3388

**SECTION C-10A HUNTINGTON ROUTE
KING STREET STATION BUS LOOP RECONFIGURATION**

SITE PLAN - AREA 1

SCALE 1"=30'

DRAWING NO. C10A-C-002

SHEET NO. M 1255 - 34

CONTRACT NO. FQ-12172

BENCHMARK 51 SEE TRAVERSE TABLE ON SHEET M1255-28 FOR COORDINATES AND ELEVATION

- LEGEND**
- CITY OF ALEXANDRIA STANDARD BUS SHELTER (SEE DETAIL SHEETS 138 TO 151)
 - VICTOR STANLEY TRASH CAN (SEE DETAIL SHEET 101)
 - BENCH (SEE DETAIL SHEET 101)
 - TREE PLANTER (SEE DETAIL SHEETS 98-100)
 - KISS AND RIDE SHELTER (SEE DETAIL SHEET 102)
 - 2'x3' STAMPED CONCRETE (FOR SECTION DETAIL SEE SHEET 23 FOR HARDSCAPE DETAILS SEE SHEET 105)
 - POROUS PAVERS (SEE SECTION DETAIL SHEET 23 SEE PAVER DETAIL SHEET 105)
 - POURED 5'x5' CONCRETE SIDEWALK (FOR SECTION DETAIL SEE SHEET 23 FOR HARDSCAPE DETAILS SEE SHEET 105)
 - FULL DEPTH CONCRETE ROADWAY (SEE DETAIL SHEET 135)
 - KISS AND RIDE PASSENGER CAR ONLY FULL DEPTH PAVEMENT SECTION (SEE DETAIL SHEET 23)
 - CITY OF ALEXANDRIA FULL DEPTH PAVEMENT SECTION (SEE DETAIL SHEET 23)
 - ASPHALT MILLING AND OVERLAY (SEE DETAIL SHEET 23)
 - MAINTENANCE ACCESS PARKING (SEE DETAIL SHEET 23)
 - EXISTING RIGHT OF WAY
 - PROPOSED EASEMENT
 - SECURITY FENCE (SEE DETAIL SHEET 103)
 - INTERNAL FENCE (SEE DETAIL SHEET 105)
 - PROPOSED STORM DRAIN
 - STORM STRUCTURE LABEL
 - PROPOSED FIRE HYDRANT (SEE DETAIL SHEET 24)
 - PROPOSED WATER LINE
 - EXISTING 100-YR FLOODPLAIN
 - PROPOSED 100-YR FLOODPLAIN

- NOTE:
- SEE M1255-57 AND M1255-58 FOR DETAILED STORM DRAIN LAYOUT.
 - SHUTTLE BUS DESIGNATION IS TO BE WMATA TYPICAL PAVEMENT SECTION. SEE WMATA STANDARD DRAWING ST-C-017 SHEET 135.

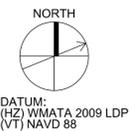
APPROVED SPECIAL USE PERMIT NO. _____
 DEPARTMENT OF PLANNING & ZONING

DIRECTOR _____ DATE _____
 DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
 SITE PLAN NO. DSP2011-0027

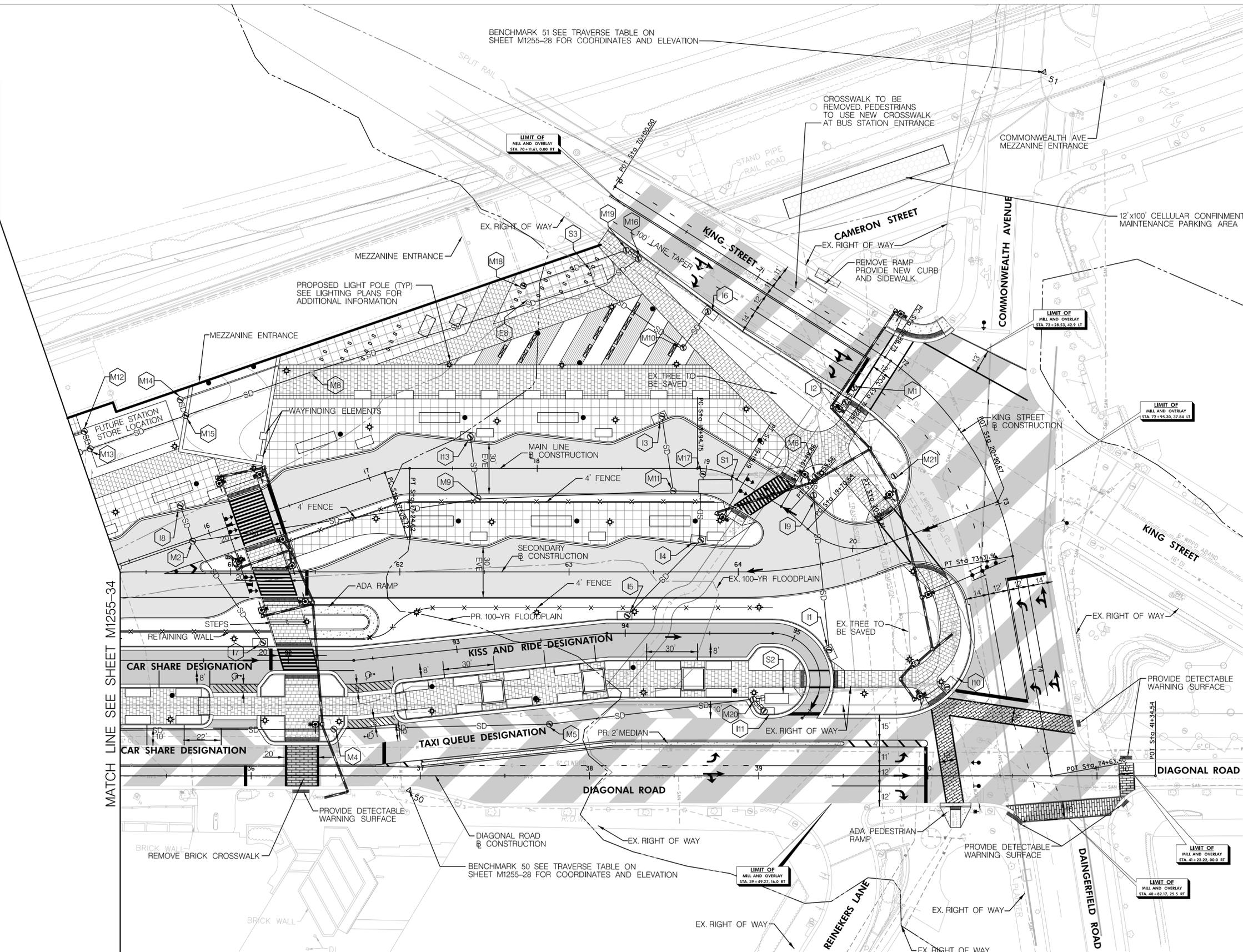
DIRECTOR _____ DATE _____

CHAIRMAN, PLANNING COMMISSION _____ DATE _____
 DATE RECORDED _____

INSTRUMENT NO. _____ DEED BOOK NO. _____ PAGE NO. _____



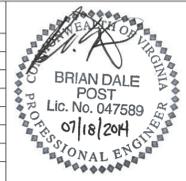
CONTRACT NO. **FQ-12172**



DESIGNED	DAS	07/2014
DRAWN	DAS	07/2014
CHECKED	TC	07/2014
APPROVED		DATE

REFERENCE DRAWINGS	
NUMBER	DESCRIPTION
001	FINAL SITE PLAN # 1 SUBMISSION
002	FINAL SITE PLAN # 2 SUBMISSION
003	FINAL SITE PLAN # 3 SUBMISSION

REVISIONS	
DATE	DESCRIPTION
07/2012	ORIGINAL FINAL SUBMISSION
10/2012	FINAL SITE PLAN # 1 COMMENTS ADDRESSED
07/2014	FINAL SITE PLAN # 2 COMMENTS ADDRESSED



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
 DEPARTMENT OF OPERATIONS SERVICES
 OFFICE OF ENGINEERING SERVICE

SUBMITTED July, 2014
 DATE

APPROVED _____
 CHIEF ENGINEER DATE

SUBMITTED _____
 PROJECT MANAGER DATE

GFP A Gannett Fleming/Parsons JOINT VENTURE
 100 M STREET, S.E., SUITE 1100, WASHINGTON, DC 20003-3520
 (202) 775-3300 FAX (202) 775-3389

SECTION C-10A HUNTINGTON ROUTE KING STREET STATION BUS LOOP RECONFIGURATION	
SITE PLAN - AREA 2	
SCALE 1"=30'	DRAWING NO. C10A-C-0023
SHEET NO. M 1255 - 35	

Washington Metropolitan Area Transit Authority
Board Action/Information Summary

<input checked="" type="radio"/> Action <input type="radio"/> Information	MEAD Number: 200314	Resolution: <input type="radio"/> Yes <input checked="" type="radio"/> No
---	------------------------	--

TITLE:

King Street Conveyance

PRESENTATION SUMMARY:

Approval for an easement conveyance of the King Street Metro station's Kiss & Ride, bus loop, and sidewalks to the City of Alexandria while Metro retains authority over bus operations and future reconfiguration and reconstruction within the easement area.

PURPOSE:

Obtain Board approval to negotiate and convey permanent easement to the City of Alexandria at King Street Station.

DESCRIPTION:

In 2010 the City of Alexandria initiated a reimbursable project to upgrade facilities at King Street Station. The project reconfigures and expands the bus loop, relocates Kiss & Ride parking, and improves sidewalks and landscaping. In 2013 the City requested a conveyance of the property to facilitate implementation of the improvements.

Key Highlights:

Conveyance of the easement to the City would:

- Result in Metro foregoing short term parking meter revenue in the amount of approximately \$20K/year;
- Preserve the maintainability and function of adjoining Metro controlled facilities;
- Transfer primary policing responsibility of the new bus loop and kiss-and-ride area to the City of Alexandria. Metro Transit Police would still have primary jurisdiction for the Metrorail station itself;
- Have capital costs for station enhancement project funded entirely by the City of Alexandria;
- Have the City assume all future costs to maintain, repair, replace, and secure the facilities in perpetuity; and
- Reduce Metro's future operating expenses and capital needs at this station, as these operating expenses exceed the foregone lost parking meter revenue.

Background and History:

The City of Alexandria entered into a reimbursable agreement in 2010 with Metro to design and construct upgrades to the parking and bus facilities at the King Street Metro station. In early 2013, the City requested that the land under the facilities be conveyed to the City as a component of the project. The City thereafter would be responsible for maintenance, repair, replacement, and security of the facilities at its expense.

Discussion:

Conveyance of the easement to the City would relieve Metro of future operational and capital expenses for the facilities; allow the City to upgrade the facilities to its own design standards, which are different from Metro's and Metro retains authority over bus operations, future reconfiguration and reconstruction in the easement area.

FUNDING IMPACT:

No Funding Impact - Conveyance of easements would decrease Metro's operational expenses and eliminate any future capital requirements.	
Project Manager:	Kasondra Johnston
Project Department/Office:	Department of Finance and Administration/Office of Real Estate and Station Planning

TIMELINE:

Previous Actions	No previous Board actions
Anticipated actions after presentation	Execution of easements to the City of Alexandria with Metro retaining operational control over the bus loop.

RECOMMENDATION:

Approval for an easement conveyance of the King Street Metro station's Kiss & Ride, bus loop, and sidewalks to the City of Alexandria.

PRESENTED AND ADOPTED: October 24, 2013

SUBJECT: APPROVAL OF THE CONVEYANCE OF LIMITED EASEMENT RIGHTS TO KING STREET STATION PROPERTY TO THE CITY OF ALEXANDRIA

2013-24

**RESOLUTION
OF THE
BOARD OF DIRECTORS
OF THE
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY**

WHEREAS, The City of Alexandria has expressed interest in implementing infrastructure improvements and reconfiguration at King Street Station through a reimbursable project focused on increasing bus capacity at the station; and

WHEREAS, The Washington Metropolitan Area Transit Authority (WMATA) Board of Directors approved and established a reimbursable project for reconfiguration at King Street Station in Resolution Number 2010-03; and

WHEREAS, The City of Alexandria is contemplating additional station area amenities including enhanced landscaping, enhanced streetscaping, and other public infrastructure beyond those elements typically provided at WMATA stations; and

WHEREAS, The City of Alexandria has expressed a desire for WMATA to convey property rights to facilitate project execution and long-term maintenance of the aforementioned infrastructure and enhanced amenities; and

WHEREAS, The WMATA Board of Directors adopted in June 2008, Resolution Number 2008-29, that provided guidelines relating to the transfer of Authority real property to local jurisdictions and state governments for reimbursable and other transit projects' now, therefore be it

RESOLVED, That the conveyance of the King Street station property must be executed in accordance with the guidelines established in Resolution Number 2008-29; and be it further

RESOLVED, That WMATA shall convey permanent easements to the City of Alexandria for the construction of the reimbursable project to enhance bus capacity and enhance station area streetscaping and landscaping; and be it further

RESOLVED, That the City of Alexandria shall be responsible in perpetuity for ongoing maintenance to and repair of the new infrastructure and public amenities, including snow removal and salting of roads and sidewalks; and be it further

Motioned by Ms. Bowser, seconded by Mr. Dyke

Ayes: 8 - Mr. Downs, Mr. Downey, Mr. Nichols, Mrs. Hudgins, Mr. Dyke, Ms. Bowser, Mr. Acosta and Mr. Goldman

RESOLVED, That the City of Alexandria shall have primary jurisdiction for policing the new infrastructure and public amenities while WMATA shall retain primary jurisdiction for policing the Metrorail station itself; and be it further

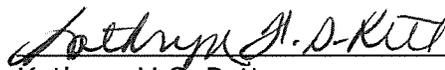
RESOLVED, That WMATA will retain authority over current and ongoing bus operations, any changes to bus operations, and any proposed future reconfiguration or reconstruction of transit facilities, and that these authorities will be implemented through permanent easements and/or covenants, conditions, and restrictions that run with the land; and be it further

RESOLVED, That the final design of the reimbursable project must accommodate parking for WMATA non-revenue support vehicles and must reserve space for a WMATA bike station that is currently planned for the King Street Station; and be it further

RESOLVED, That the Board of Directors approves the negotiation and execution of the documents required for conveyance of limited easement rights at the King Street Station Property to the City of Alexandria, subject to the conditions above and appropriate restrictions being incorporated in the conveyance agreements, and be it finally

RESOLVED, That this Resolution shall be effective immediately.

Reviewed as to form and legal sufficiency,



Kathryn H.S. Pett
General Counsel

WMATA File Structure Nos.:

12.7.3 Station Area Plans

23.3.2 Disposal of Less-Than-Fee Permanent Interest (easements)



Docket Item #11
Development Site Plan#2011-0027
Subdivision #2011-0007
1900 King Street - King St Metro -Reconfiguration

Application	General Data	
Project Name: King St Metro Bus Loop Reconfiguration	PC Hearing:	May 1, 2012
	CC Hearing:	NA
	If approved, DSP Expiration:	May 1, 2015
	Plan Acreage:	5.96 acre
Location: 1900 King St	Zone:	UT/Utility and Transportation
	Existing/Proposed Use:	Transit Facility
	Dwelling Units:	NA
	Gross Floor Area:	NA
Applicant: WMATA and City of Alexandria	Small Area Plan:	King St Metro/Eisenhower Ave
	Historic District:	NA
	Green Building:	NA

Purpose of Application: Consideration of a site plan to reconfigure the King Street Metrorail facility to increase the number of bus bays, improvements the pedestrian and bicycle accommodations with associated subdivision for sidewalk right-of-way.

Special Use Permits and Modifications Requested:

- Request for modification of required percentage of tree canopy coverage, per Zoning Ordinance Section 7-2507

Staff Recommendation: APPROVAL WITH CONDITIONS

Staff Reviewers: Abi Lerner, P.E. Deputy Director, T&ES, abi.lerner@alexandriava.gov
 Jim Maslanka, T&ES, jim.maslanka@alexandriava.gov
 Maya Contreras, P&Z, maya.contreras@alexandriava.gov

PLANNING COMMISSION ACTION, May 1, 2012:

On a motion by Ms. Fossum, seconded by Mr. Robinson, the Planning Commission voted to approve of the reconfiguration of the King Street Metro Station bus loop and parking lot with associated subdivision DSP#2011-0027 and SUB#2011-00007 subject to compliance with all applicable codes, ordinances and conditions. The motion carried on a vote of 7 to 0.

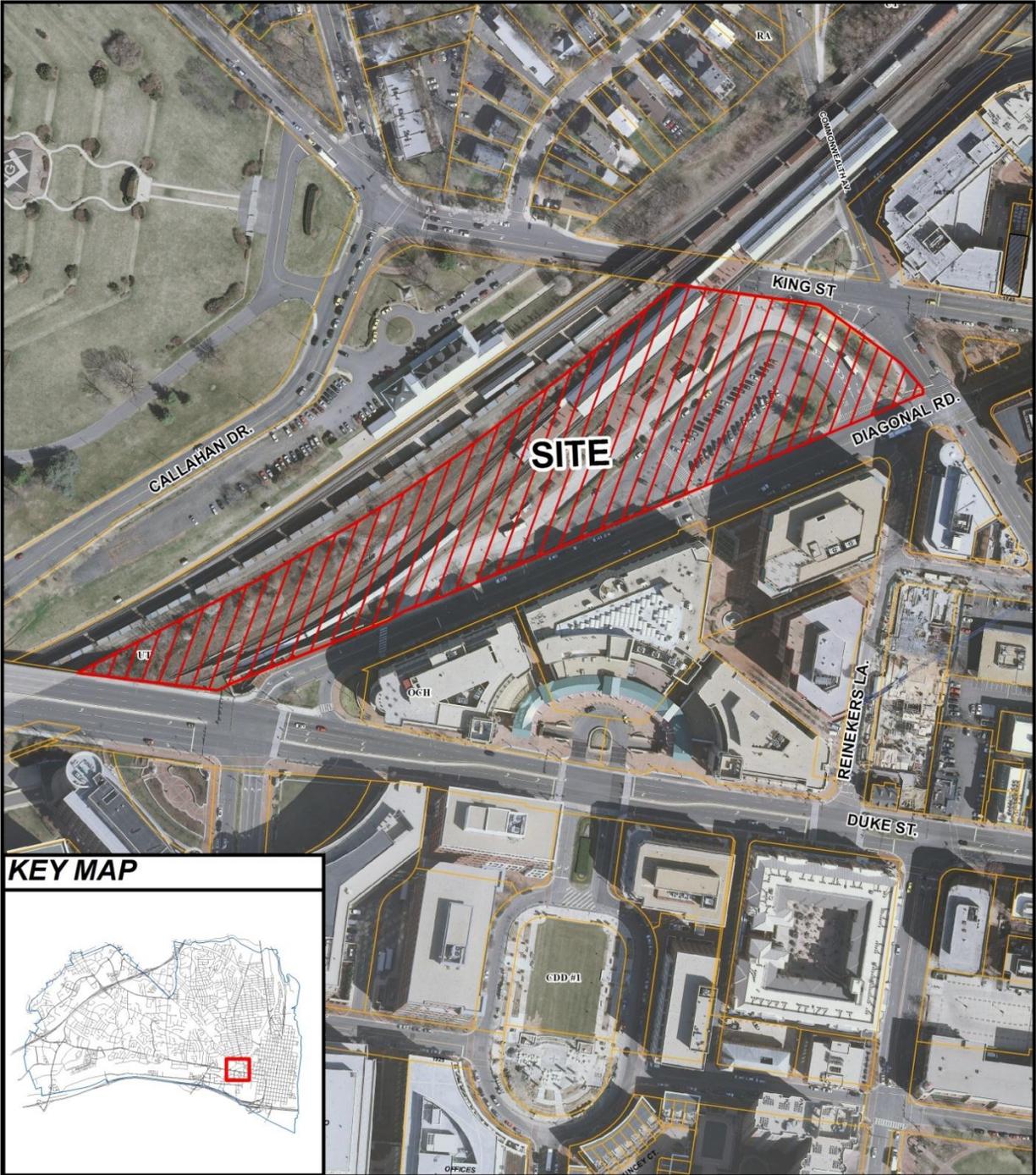
Reason: The Planning Commission agreed with the staff analysis and recommendations.

Speakers:

Poul Hertel, 1217 Michigan Court, requested additional pedestrian improvements and provided a handout to the Planning Commission.

Katy Cannady, citizen from Rosemont, requested inclusion of dynamic signage for real-time arrival information and bus shelters in the plan.

Previous Staff Report



DSUP #2011-0027
SUB #2011-0007

5/1/2012



I. SUMMARY

A. Recommendation & Summary of Issues

Staff recommends *approval* of the proposed Site Plan for the King Street Access Improvement Project. This will reconfigure the existing parking lot area in order to increase the number of bus bays from six to ten and improve the pedestrian environment and bicycle accommodations for this important transit facility. Staff recommendations address the following areas:

- Pedestrian and streetscape improvements;
- Vehicle and bicycle parking;
- Landscaping and environmental review; and,
- Construction phasing.

B. General Project Description

WMATA, in coordination with the City, is requesting approval of a site plan in order to reconfigure the King Street Metro parking facility to provide:

- Four additional bus bays;
- Consolidation of bus traffic ingress to a single curb cut;
- Separation of bus circulation from automobile traffic, including taxis and private shuttles;
- Improved pedestrian circulation through expanded sidewalk connections on Diagonal Road and to the Carlyle Concourse;
- Improved pedestrian navigation through new onsite wayfinding;
- Increased number of bicycle parking spaces;
- Introduction of a Capital Bikeshare station; and
- Consideration for a location for a future on-site Transit Store.

Site construction will be done in two phases, as recommended by the City Council on March 27, 2012, and is projected to take between twelve and fifteen months. The Metrorail facility will remain fully operational, and bus service will be configured with each phase. City staff will coordinate with DASH and WMATA to provide informational updates to the community before, during and after the project.

II. BACKGROUND

The King Street Metro is one of the most important transportation hubs within the City. The station is located between Old Town Alexandria and Carlyle. Since the station opened in December 1983, the site has seen growth in ridership for bus and rail lines. Additional usage of the station includes bicycle facilities, carshare, the King Street Trolley, private shuttle

connections to the station, the introduction of the U.S. Patent and Trade Office (PTO) headquarters and the continued redevelopment within Carlyle and Eisenhower East.

The site is served by the Yellow and Blue Metrorail lines. Overall usage of the station has increased 175% from 1984, the first full year that the station was operational, to present day. The increase of station usage is exceeded only by the Arlington Cemetery, Pentagon City and Gallery Place/Chinatown stations. Five WMATA Metrobus routes and six DASH bus routes, with more than 4,000 combined average daily boardings, utilize this station. The AT2X, a branch of one of the DASH routes, provides express access between King Street Station and the BRAC-133 site at Seminary Road and Beauregard Street. The King Street Trolley picks up an average of 450 people at the King Street station before stopping at several destinations in Old Town on the way to the waterfront.

Pedestrian connections at the site are particularly important, as the King Street Station Access Improvement Study (<http://alexandriava.gov/localmotion/info/default.aspx?id=29706>) found that more than 50% of site users arrive by walking or by bicycle. For many visitors and tourists, the station is their introduction to the City; for daily users, it is their connection between their worksite and their home. This facility update has been designed to accommodate the needs of all of the various users of the site, including:

- **Buses:** all WMATA and DASH bus stops will be located next or near to the station entrance with updated bus shelters
- **King Street Trolley:** will be located immediately outside the station entrance
- **Pedestrians:** signalized crosswalks within the station perimeter, improved sidewalk connections to King Street and Carlyle and new crosswalks at Diagonal Road and King Street
- **Bicycles:** 25 new inverted inverted-u racks to hold 50 bicycles and a 27-dock Capital Bikeshare station
- **Kiss & Ride:** private cars will be physically separated from the bus drive aisles and consolidated along Diagonal Road
- **Private Shuttle pickup/drop-off:** will be located along Diagonal Road
- **Taxis:** will be consolidated along Diagonal Road
- **Carshare:** will be consolidated along Diagonal Road

A. Site Context

The King Street Station is located on a triangular lot of approximately six acres. The site is zoned UT/Utility and Transportation, and is located within the King Street Metro/Eisenhower Avenue Small Area Plan. Union Station, which is served by VRE and Amtrak trains, is located on the west side of the train tracks.

The site is a multi-modal transit center, with WMATA Metro trains using a raised platform for Blue and Yellow line trains that connect Fairfax County to Washington DC, Arlington County and Maryland. The existing surface lot has six bus bays for WMATA and DASH buses, with an additional space for the King Street Trolley, and spaces used by various private shuttles. The

majority of the lot is comprised of 38 short-term metered parking spaces, with additional spaces for taxi stands, carshare and station employee parking. Sidewalk connections lead to the concourse tunnel below Duke Street to reach Carlyle and the Eisenhower Valley, across Diagonal Road to the King Street Station office and retail complex, underneath the tracks to connect to Union Station and the George Washington Masonic Memorial, and to King Street and Old Town Alexandria.

B. Evolution of the Plan

The King Street Metrorail Station opened December 17, 1983, and was expanded to include the north entrance in 2004. In May 1984, the station had 1,806 average weekday rail passenger boardings; in November of 2011, it had 10,200. The station also ranked 13th in the overall system for bike rack utilization and is forecasted for continued growth. While additional uses have been added over the years to the parking lot, including carshare, the King Street Trolley, and an increased amount of bus, taxi and shuttle traffic, the parking lot has not been updated.

In 2006, WMATA commissioned a King Street Station Access Improvement Study with the goal of developing alternatives for expanding the station bus facilities to accommodate the increase in bus service and to meet additional ridership demands. The result of this study was released in 2008, with alternatives offered for opportunities to improve the pedestrian environment. Staff felt that the initial concept plan did not fully address the concerns of residents and users. In response, WMATA staff has been working cooperatively with the City to refine the design in order to address issues including bus circulation, bus layover spaces, pedestrian circulation, bicycle storage, tree retention, wayfinding, stormwater, and Kiss & Ride circulation.

In March 2012, staff presented several plan options, with associated budgets, to the City Council (Attachment 1). City Council recommended revisions to stay within the \$6.9 million dollar budget. Some of these recommendations included concrete sidewalks instead of brick, an abbreviated construction schedule as a result of fewer construction phases, and revisions to the proposed Kiss & Ride shelters along Diagonal Road. This plan is also designed in a way to not preclude the future installation of message boards at the bus shelters, some wayfinding signage, and a possible public art element.

In a related but separate issue, funding was approved in December 2011 through VDOT from the Federal Highway Administration's Rail Crossing and Rail Safety Program for \$7.4 million dollars to provide a new tunnel connecting Union Station to the King Street Metro. This project has been anticipated since the Metrorail station was constructed, but funds were never secured. This project will be constructed under a separate process and timeline. (Attachment 2)

C. Project Description

Accommodating all of the planned improvements has been challenging. Because of the size and shape of the site, there is no opportunity for site expansion. Additionally, there is a change in grade of approximately fifteen feet across the site. There are steep slopes along the tracks near Duke Street that cannot be impacted, and the area beneath the WMATA tracks at King Street

must be kept clear for pedestrian and maintenance access. There is an extensive network of existing utilities, including a large transformer at the south end of the site that must be retained. There was a strong desire to keep several of the existing large trees after site redevelopment.

Finally, the site is the most heavily used transit center in the City and the “front door” to Old Town, requiring it to function successfully for multiple users. It is a hub of multi-modal transit options, including Metrorail and bus riders, pedestrians, cyclists, private shuttles operating for employees and residential developments, and carshare users. It functions as an important civic space for tourists and regional visitors. To continue to serve all of these users, the site must to maintain all transit operations throughout construction.

When complete, the station will be reconfigured from six to ten bus bays, with additional layover spaces for the buses to wait between their trips. The station currently has two bus entrances: one accessed from King Street and the other from Diagonal Road. These would be consolidated into a single bus entrance accessed from King Street, slightly to the east of the existing entrance. This helps to achieve one of WMATA’s requirements when updating stations, which is to separate automobile traffic from bus circulation. Once inside the station, there will be seven bus bays next to the rail tracks, and three more served from an island at the interior of the site. The bay closest to the primary Metro station entrance will be reserved for the King Street Trolley, in the most visually prominent location for visitors and tourists.

The majority of the buses will be coming either from eastbound or westbound King Street. Exiting buses will leave from a curb cut at the south end of the site, where they will be able to turn right or left on Diagonal Road, as they do at present. A new left turn option will be introduced at Duke Street. Layover locations have been identified within the site for buses waiting at the King Street station longer than a few minutes, and are located on site, nearer to Diagonal Road. These will be accessed by buses dropping their patrons off at the assigned bus stop, turning left on Diagonal, turning left on Daingerfield and reentering into the lot to access the layover spots.

Vehicular traffic will be maintained along Diagonal Road, and moved into a one-way loop. The interior of the loop will be reserved for Kiss & Ride drop-off. Space along the Diagonal Road sidewalk will be dedicated for carshare, a taxi stand and, in a separate section, private shuttle bus pick-up and drop-off.

Clear pedestrian routes from the station entrance and bus bays towards King Street, Carlyle and Reinekers Lane are provided, with new wider sidewalks and wayfinding elements to more clearly direct visitors towards King Street and surrounding neighborhoods. At several locations within the site, signalized crosswalks will be added to improve bus movements and increase pedestrian safety.

As part of long term site improvements, the plan is designed to consider a future Transit Store relocation from its current space on Diagonal Road to a location near or within the main entrance of the Metrorail station. A site has been tentatively planned and is shown as a reserved area on

this site plan. The final location will be determined at a future time in coordination with City staff and WMATA.

D. Funding

This project will be funded by a variety of sources. From the time of the project's inception, the City has been acquiring federal Regional Surface Transportation Program (RSTP) and Congestion Mitigation and Air Quality (CMAQ) funds, for a total of \$2,540,000 of CMAQ funds and \$2,088,000 of RSTP funds. The City has also allocated \$2.2 million of Transportation Expansion Program funds from the 2.2 cent increase in the general property tax for transportation. The final source will be Urban funds already allocated to the project (\$131,000). At the City Council Legislative session on March 27, 2012, City adopted unanimously staff's recommendation to construct the project for \$6.959 million

III. STAFF ANALYSIS

A. Pedestrian and Streetscape Improvements

Dedication of Land

The project includes proposed dedication of land for the perimeter sidewalks along King Street and Diagonal Road to permit the sidewalks along these important pedestrian connection routes to be located within the City right-of-way. The sidewalks, and associated street improvements, can then be designed and constructed to City-standard specifications. These will include Gatsby streetlights and pedestrian shelters at the Kiss & Ride area. Dedication is subject to approval of the WMATA Board, and will be completed prior to release of the final site plan.

Pedestrian Circulation and Improved Sidewalks

The project includes a number of pedestrian streetscape improvements. The materials palette for the pedestrian environment is predominantly concrete hardscape, with coordinated black metal fencing/railings and stone retaining walls.

The sidewalk along Diagonal Road will be widened from four feet to twenty-two feet, with a ten foot walkway. A double row of street trees will replace the current single row. The sidewalk along King Street will be widened from five feet to twelve feet, and realigned to provide more clear access to Old Town, while angling to preserve the roots of two existing large oaks. The sidewalk connecting the station to the Carlyle Concourse is heavily trafficked, and currently very narrow at four and a half feet. Pedestrians have frequently been observed walking within the bus lanes. In the current plan, the sidewalk will be widened to eight to twelve feet.

Wayfinding

Under the existing site layout, wayfinding and the capacity for both visitors and frequent users to navigate towards King Street is challenging. To address this need, wayfinding signage will be

incorporated into the site at strategic locations and in accordance with the City's larger Wayfinding Program. Secondly, by using landscape elements as a guide (such as a hierarchy of pedestrian routes, wide tree-lined walks and through a variation in the paved surfaces), the layout offers a greater degree of pedestrian legibility to access King Street, transit, or the adjoining commercial uses. This will be a benefit to visitors and frequent users alike. In particular, the pedestrian route from the primary Metrorail station entrance has been revised to direct pedestrian towards King Street. As well, a stop has been reserved for the King Street Trolley immediately upon exiting the station.

B. Vehicle and Bicycle Parking

Vehicles

This design removes all vehicle parking spaces from the station, which will reprioritize the way that the station is accessed and used. Parking in Old Town, and throughout the City, is an ongoing discussion and a recommendation for loss of spaces was carefully reviewed as part of the design process. In this instance, however, it was determined that the loss of a small number of parking spaces for improved station functionality was a reasonable trade-off. Rather than devoting a portion of the limited transit-adjacent space to a surface parking lot, the entire site will be taken up by active uses supporting a wide variety of transit users. Parking needs will be shifted to adjacent private underground garages to accommodate the loss of the existing short-term parking spaces. Kiss & Ride pick-up and drop-off space will still be provided, in an improved setting.

As designed, the station use is altered from a short term parking lot to active drop-off and pick-up, with the space formerly occupied by the parking lot being given over to the additional bus bays. In the existing site, there are 38 short-term metered parking spaces. In the new design, a one-way circular pickup and drop off area allows for more efficient use of space, consolidating carshare, Kiss & Ride and taxi stands. A 250' portion of the new interior lane will be reserved for Kiss & Ride which allows ample space for approximately eleven cars waiting at any one time. The 250' exterior lane along Diagonal Road will function as a taxi stand. Two 75' areas will be reserved for carshare, with a final area along Diagonal Road reserved for shuttle buses.

The King Street Metro station and its associated parking demand were thoroughly discussed as part of the 2009 Old Town Parking Study. Staff presented the Final Recommendations of the Old Town Area Parking Study Work Group to City Council during a Council Work Session on October 12, 2010, and continues to work on implementation. The study differentiates between the King Street Metro parking lot which contains 45 metered spaces and the 19 short-term metered parking spaces along Diagonal Road. There are also a number of un-striped taxi-stands that are currently being used by up to 10 cabs and five Zipcar spaces on site. All on-site metered spaces at the King Street lot will be removed as a result of the new design.

Loss of the parking spaces at the metro station can be off-set by better public outreach with regards to the multiple public parking garages in the immediate vicinity. The 2009 Old Town Parking Study references three parking garages within a ¼ mile radius of the King Street Station:

PNC Bank Garage (102 spaces); King Street Station/Embassy Suites Garage (831 spaces); and, the Hilton Hotel Garage (288 spaces). Since the study was completed, one additional garage has been constructed at Edmonson Plaza, 1701 Duke Street (179 spaces). This is a combined total of 1,400 parking spaces in extremely close proximity to the station.

These garages are privately owned and operated, but parking spaces are available to the public. These lots are generally open until midnight. The study indicated that the existing King Street Metro Lot reaches its peak parking utilization on Friday and Saturday afternoons, which is in opposition of the peak parking demand at privately owned but publicly available garages in surrounding areas (see Table 1).

As such, the existing parking demand at the metro station could be satisfied by surrounding privately-owned but publicly-available parking facilities which are located within a ¼ mile radius of the King Street Station. Additionally, short-term metered parking spaces along Diagonal Road will be re-designated as taxi-stand and “carshare” spaces. The new plan calls for 5 taxi stands and 5 carshare spaces. Staff will continue monitoring the parking situation and will work with taxi cabs in order to satisfy the future demand.

	Available Spaces	Weekday Afternoon (12:00 to 1:00 PM)	Weekday Afternoon (1:00 to 2:00 PM)	Weekday Evening (6:00 to 7:00 PM)	Weekday Evening (7:00 to 8:00 PM)	Friday Afternoon (12:00 to 1:00 PM)	Friday Afternoon (1:00 to 2:00 PM)	Friday Evening (6:00 to 7:00 PM)	Friday Evening (7:00 to 8:00 PM)	Saturday Afternoon (12:00 to 1:00 PM)	Saturday Afternoon (1:00 to 2:00 PM)	Saturday Evening (6:00 to 7:00 PM)	Saturday Evening (7:00 to 8:00 PM)
King Street Lot	45	31 69%	28 62%	32 71%	21 47%	38 84%	36 80%	27 60%	26 58%	41 91%	40 89%	41 91%	34 76%
PNC Bank	102	68 67%	66 65%	- -	- -	70 69%	69 68%	93 91%	- -	- -	- -	- -	- -
King Street Station Garages	831	675 81%	593 71%	240 29%	157 19%	630 76%	628 76%	211 25%	128 15%	62 7%	65 8%	87 10%	92 11%
Hilton Hotel Garage	288	151 52%	152 53%	125 43%	127 44%	131 45%	129 45%	110 38%	104 36%	133 46%	146 51%	136 47%	140 49%

Table 1: 2009 Peak Parking Occupancy

Bicycles

Bicycle parking options will be improved significantly with this proposal, increasing the number of both short and long term bicycle parking spaces. Long term bicycle parking spaces will be moved closer to the main entrance of the station in view of the station attendant, to provide a higher level of security. Short-term parking, currently located far from the station entrances, will be relocated next to the main station entrance to improve security. All bicycle parking in the King Street Metro Station Bus Facility Expansion will be in addition to the existing covered bicycle parking currently located at the main entrance, underneath the tracks, by the escalators, and at the north entrance.

To meet the bicycle parking recommendations of the Metrorail Bicycle and Pedestrian Access Improvements Study, the City is coordinating with WMATA to utilize additional area underneath the metro tracks by the main entrance, but outside the scope of this project, to provide covered bicycle parking. In addition, an area for a Capital Bikeshare station will be provided, improving the current network of proposed stations across the City.

C. Landscaping and Environmental Review

Tree Canopy

The site today has minimal landscaping, with scattered street trees and a patchy tree canopy. While the plan as designed will not meet the strictest definition of the City Landscape Guideline condition for a 25% tree canopy coverage, it will provide a significant amount of landscaping, including a small bosque area with seating as a major design feature. Of the site's existing trees, the prominent grouping of three large oaks on King Street is proposed to be retained.

The principle reason that the site will not meet the 25% canopy coverage requirement is because, as described earlier, the sidewalk areas along King Street and Diagonal Road will be transferred to the City. Street trees in the City Right-of-Way may not be included in the on-site canopy coverage totals. If this land area was not being transferred, and these trees were included, the site would meet the requirement. WMATA has agreed to continue to look for additional opportunities to maximize opportunities for landscaping and trees as the site design is finalized.

Environmental Features and Mitigation

The primary landscape feature within the site will be a bosque of trees set in 0.12 acres of pervious pavers. This will provide a visible green landmark to the site, while providing some shaded seating for transit users and will further the Eco-City green infrastructure goal. The Environmental Management Ordinance water quality requirements will be met through two ultra-urban BMPs.

Preliminary investigation revealed petroleum-related contaminants on one portion of the site. Applicant will complete a Phase II investigation prior to submitting the Final Site Plan and provide information as to the type, extent, and mitigation measures, if necessary. In addition, a portion of the site is located within the 100 year floodplain, and the design is required to conform to the Zoning Ordinance section 6-300 updated June, 2011.

D. Construction Phasing

Because this is the most active transit center in the City, management of the construction phasing will be crucial to providing and maintaining transit services throughout the duration of the project. The conditions of approval require safe and accessible pedestrian pathways be maintained at all times during construction. During peak travel times, site users will be given priority, to the greatest extent possible.

Coordination between the multiple agencies involved and the community will be crucial to a successful project. The conditions of approval acknowledge that need by requiring on-going inter-agency meetings as well as informational community meetings prior to the start of each phase of construction. City staff is working with the engineers, WMATA and the City's Communications Team to plan a strategy for management of the project and outreach.

IV. COMMUNITY

City staff has met with the Rosemont Civic Association, the Federation of Civic Associations, and the King Street Implementation Group regarding this project. The project has also been discussed at four Transportation Commission meetings, and at four other meetings for the general public. Concerns were raised by the general public about maintaining planting strips and green space throughout the site, pedestrian and bicycle connections to the station, and the loss of short-term parking from the site. This project was also placed before the City Council on March 27, 2012, and was endorsed by City Council.

V. CONCLUSION

Staff recommends **approval** of the development site plan, with associated modification requests, subject to compliance with all applicable codes and the staff recommendations and conditions found under section VIII of the staff report.

Previous Staff Report

VII. STAFF RECOMMENDATIONS:

1. The Final Site shall be in substantial conformance with the completeness plan dated April 9, 2012 and comply with the following conditions of approval:

PEDESTRIAN/STREETSCAPE:

2. Provide the following pedestrian improvements to the satisfaction of the Directors of P&Z, RP&CA and T&ES:
 - a. Complete all pedestrian improvements prior to project completion, pursuant to the phasing plan approved by the City.
 - b. Install ADA accessible pedestrian crossings serving the site.
 - c. Construct all sidewalks within the right-of-way to City standards. The minimum unobstructed width of newly constructed sidewalks shall be 6' in commercial, mixed-use or other high-density areas Sidewalk widths and alignment shall be in general compliance with the Site Plan submitted to the City 11/29/11.
 - d. All sidewalks within the public right-of-way shall be concrete and shall generally comply with the City's Memo to Industry 05-08.
 - e. Sidewalks shall be flush across all driveway crossings.
 - f. All newly constructed curb ramps in Alexandria shall be concrete with detectable warning and shall conform to current VDOT standards.
 - g. Provide separate curb ramps for each direction of crossing (i.e., two ramps per corner). Curb ramps shall be perpendicular to the street to minimize crossing distances. Any changes must be approved by the Director of T&ES.
 - h. Provide thermoplastic pedestrian crosswalks at all crossings within the proposed development, which must be designed to the satisfaction of the Director of T&ES.
 - i. All crosswalks shall be standard, 6" wide, white thermoplastic parallel lines with reflective material, with 10' in width between interior lines. High-visibility crosswalks (white, thermoplastic ladder crosswalks as shown in the Manual on Uniform Traffic Control Devices (MUTCD)) may be required as directed by staff at Final Site Plan. All other crosswalk treatments must be approved by the Director of T&ES.
 - j. Install pedestrian countdown signals with matte black finish and pedestrian activated push-buttons in accordance with City Standards. All pedestrian-activated push buttons shall be accessible per ADA Accessibility Guidelines (ADAAG).
 - k. Coordinate with City staff on the proposed materials for all hardscape areas and wall materials, to the satisfaction of the Director of P&Z. Provide the following modifications to the proposed hardscape and wall details:
 - i. Delineate the pedestrian paths (including those on WMATA property) with an edge treatment (soldier course or banding, or an appropriate alternative) and provide each path with a surface treatment distinct from adjoining paths so that they read as individual entities, with joint coursing or patterning running either perpendicular or parallel to the course of the individual path.

- ii. Provide large scale details of the edge treatment for all paths and transitions where two or more paths intersect (including intersections with existing sidewalks).
 - iii. The stamped concrete shall be a minimum unit size of 2' by 3'.
 - iv. Replace the proposed 12" x 4" stamped concrete finish with broom finished concrete or, concrete with aggregate finish.
 - v. Concrete paving which is installed in panels shall have the panel size coordinated with any required surface control joints.
 - vi. At the retaining wall between the bus bays and Kiss & Ride, provide a stone veneer finish. Planting medium shall extend a minimum 6" above the bottom of the veneer on the front, rear and end facades of the wall with appropriate waterproofing material screened entirely by adjacent planting.
 - vii. Railings for all walls shall be a black metal picket.
 - viii. The new fence that runs parallel to the sidewalk, leading to the entrance to the Duke Street pedestrian tunnel, shall be limited to 6 feet in height and should be black metal pickets. This fence shall be placed between the existing chain link fence and the back of the new sidewalk. Provide a return at the end of the picket fence line that ties into the adjacent existing Duke St pedestrian tunnel wall at an appropriate architectural location (e.g. the end of the wall, at the base of a pier etc.). If, during the final site plan process, a decorative metal fence design is determined to meet both WMATA and City standards, it may be used in lieu of the proposed chain link fence and black metal pickets, subject to the approval of the Directors of P&Z and T&ES.
- l. Provide section detail(s) through the proposed staircase and ramp east of the main station entrance to indicate the transitions between the steps, ramp, railings, grading and planting for this area.
 - m. Provide the actual footprint for the various proposed bicycle facilities together with a proposed integration into the surrounding hardscape and landscape elements.
 - n. Explore the provision of seating within the tree bosque area. Seating shall be selectively located to allow clear pedestrian passage through the paved areas of the bosque.
 - o. Amend the size of the proposed tree wells between Diagonal Road and the Kiss & Ride to allow better pedestrian connection from parked vehicles to the sidewalk. Tree wells shall be a maximum 15 ft in length. If necessary, adjust the spacing of the street trees (between a range of 30-35ft on center).

OPEN SPACE/LANDSCAPING:

- 3. Develop, provide, install and maintain an integrated Landscape Plan with the final site plan that is coordinated with other associated site conditions to the satisfaction of the Directors of P&Z and/or RP&CA.
 - a. At a minimum, the Landscape Plan shall:

- i. Provide an enhanced level of detail plantings throughout the site (in addition to street trees). Plantings shall include a simple mixture of seasonally variable, evergreen and deciduous shrubs, ornamental and shade trees, groundcovers and perennials that are horticulturally acclimatized to the Mid-Atlantic and Washington, DC National Capital Region. In addition, make the following changes to the proposed plantings: Replace the *Lagestromia indica* at all curbside locations for a taller tree with greater clear stem to avoid damage from buses. Species selection shall be extremely tolerant of urban conditions including salt spray and pollution.
 - ii. Replace the *Lagestromia indica* on Diagonal Road, east of the main station entrance for a taller species which will serve to denote this area as a key gateway to the site.
 - iii. Replace the *Prunus yeodensis* in the double row along the pedestrian path north of the main station entrance with *Ulmus parvifolia* cv of a min 2.5” caliper.
 - iv. Replace *Ilex glabra* for alternate specie(s) with less rangy growth characteristics.
 - v. Replace the *Forsythia intermedia* for a combination of tree and groundcover planting. Clearly distinguish the extents of the sod and other planting for this area to ensure complete planted cover between the pedestrian path and the existing fenceline.
 - vi. Interplant the areas of *Hemerocallis* spp. with at least one additional species which offers evergreen seasonal interest
- b. Ensure positive drainage in all planted areas.
 - c. Provide detail, section and plan drawings of tree wells showing proposed plantings and associated materials, irrigation, adjacent curb/pavement construction, including edge restraint system, dimensions, drainage, and coordination with site utilities.
 - i. Provide a separate, dimensioned section detail for each type/size of tree well proposed, which includes an accurately dimensioned rootball.
 - ii. Continuous tree trenches shall be provided along streets where there are street trees and the trench outline shall be indicated on the site plan and landscape plan.
 - iii. Provide an exhibit that demonstrates all street tree planting meets the minimum soil volume requirement from the *Landscape Guidelines* (300 cu. ft per tree).
 - iv. Provide the maximum possible soil volume for all other tree planting, in coordination with P&Z staff.
 - v. Provide dimensioned sections for proposed tree wells which indicate how the edges of the well and adjacent sidewalk are structurally supported. It is unacceptable to propose uncompacted growing medium as structural support for sidewalks.
 - vi. Provide longitudinal section details through typical tree trenches which include underdrains.

Previous Staff Report

- d. Provide planting details for all proposed conditions including street trees, multi-trunk trees, shrubs, perennials, and groundcovers.
 - e. Provide information in the planting schedule to indicate:
 - i. The clear stem height of all material at a curbside location or adjacent to pedestrian areas. Trees in these locations shall have suitably high clear stems to prevent damage from vehicles and pedestrians.
 - ii. The proposed plant spacing on center dimension for all planting except trees. (P&Z)(RP&CA)
4. Provide the following modifications to the landscape plan and supporting drawings:
- a. Provide a Landscape Plan and associated drawings per the City's *Landscape Guidelines*:
http://alexandriava.gov/uploadedFiles/recreation/info/040907_land_guidelines.pdf
. Standards and Requirements for all Landscape Drawings are Documents are provided on p.2-4, in particular:
 - i. Existing vegetation to-be-saved and associated tree protection area
 - ii. Proposed and existing to-be-saved utilities (in grayscale linework)
 - iii. Building entrances
 - iv. Extents of retaining wall veneer
 - v. A planting plan with clearly identifiable vegetation symbols, or labels
 - vi. On and off-site lighting locations
 - vii. Site features such as all wayfinding and signage
 - viii. Proposed benches and site furniture
 - b. On the Landscape sheets, provide the tabulations for the required existing and proposed crown coverage per the City's *Landscape Guidelines*.
 - c. On the landscape details sheet, provide information and cut sheets at a large scale for all proposed landscape elements such as
 - i. Proposed benches and site furniture
 - ii. Bus shelters
 - iii. Railings (railings shall be black in color and of the same material /style as the fence proposed for the retaining walls).
 - iv. Tree grates for any tree wells adjacent to the Kiss & Ride and shuttle bus/carshare/taxi parking and bus bay areas.
 - d. Proposed plantings shall be coordinated with on-site utilities. Horizontal and vertical location of all site utilities including storm and sanitary sewer, water, electrical, gas and associated appurtenances shall be adjusted to maximize accommodation of street and on-site plantings. (P&Z)
 - e. Project elements associated with pedestrian areas including sidewalks, crosswalks, depressed curbs, street and site lighting, site lighting and site furnishings, signals and signs shall be located and coordinated so as maximize accommodation of street and on-site plantings. Horizontal and vertical locations

Previous Staff Report

- of all associate service, footings and foundations shall be adjusted to maximize accommodation of street and on-site plantings. (P&Z)
- f. Provide verification from WMATA that the standard depths of concrete and aggregate shown on sheet M-70 and which are proposed to support the pedestrian walkways are sufficient for any likely overrun by maintenance vehicles. Adjust the section details to meet any conditions required by WMATA. (P&Z)
 - g. Provide all future landscape documents, drawings submissions, specifications and as-built documents in compliance with the City's Landscape Guidelines. All such documents shall be prepared, sealed and dated by a Landscape Architect certified to practice in the Commonwealth of Virginia. (P&Z)
5. Provide a site water management plan developed installed and maintained to the satisfaction of the Directors of RP&CA, P&Z and Code Administration.
 - a. Provide an exhibit or narrative that demonstrates that all parts of the site can be accessed by a combination of building mounted hose bibs, ground set hose connections or alternative (specify)_irrigation equipment. The narrative shall clarify any distinctions for irrigation provision on City-owned and WMATA-owned property and shall include any limits of provision (e.g. if irrigation is proposed for any time-limited periods).
 - b. Hose bibs, ground set water connections and FDCs must be fully accessible and not blocked by plantings, site utilities or other obstructions.
 - c. Install all lines beneath paved surfaces as sleeved connections.
 - d. Locate water sources and hose bibs in coordination with City Staff.
 6. Develop a palette of site furnishings using City Standards, to the satisfaction of the Directors of P&Z and T&ES.
 - a. Provide location and specification for site furnishings that depicts the scale, massing and character of site furnishings to the satisfaction of the Directors of P&Z and T&ES.
 - b. Site furnishings shall include benches, bicycle racks, trash receptacles, and other associated features. (P&Z)(T&ES)
 7. Provide material, finishes, and architectural details for all retaining walls, seat walls, decorative walls, and screen walls. Indicate methods for grade transitions, handrails- if required by code, directional changes, above and below grade conditions. Coordinate with adjacent conditions. Design and construction of all walls shall be to the satisfaction of the Directors of P&Z, and T&ES. (P&Z)(T&ES)
 8. Prior to commencement of landscape installation/planting operations, a pre-installation/construction meeting will be scheduled with the City's Landscape Architects to review the scope of installation procedures and processes. (P&Z)

TREE PROTECTION AND PRESERVATION:

9. Provide, implement and follow a tree conservation and protection program that is developed per the City of Alexandria *Landscape Guidelines* and to the satisfaction of the Directors of P&Z, and/or RP&CA and the City Arborist. (P&Z)(RP&CA)
10. The area of the limits of disturbance and clearing for the site shall be limited to the areas as generally depicted on the preliminary landscape plan submitted to the City 11/29/11 and reduced if possible to retain existing trees and grades. In particular:
 - a. Re-route the stormwater connection labeled as ‘ 97’ 15 RCP’ which runs in close proximity /through the critical root zone of the 20” oak to a minimum 8 ft outside the drip line. (P&Z)(RP&CA)
11. On the demolition plans clearly label each tree as either ‘to-be-saved’ or ‘to-be-removed’. For all trees identified as ‘to-be-saved’ provide tree protection as required by the City’s *Landscape Guidelines*. Areas to be demolished and areas of construction shall be carefully selected to limit the potential damage to existing trees. The label for tree protection currently shown on the demolition plan is insufficient. . (P&Z)(RP&CA)
12. Amend the ‘Limit of demolition’ hatching to exclude the tree protection areas. (P&Z)(RP&CA)
13. On the demolition plans, grading plans and landscape plans please provide:
 - a. Areas of tree protection. The areas shall be broadly in conformance as those depicted on the 11.29.11 Landscape Plan submitted to the City, and amended to be to the maximum possible extent.
 - b. Depiction of the actual canopy of all existing vegetation to be saved (P&Z)(RP&CA)
14. Per Zoning Ordinance section 11-410, a crown coverage equal to at least 25% of the site’s total area is required. Although a modification has been requested, the applicant shall continue to work with the City during the final site plan to find locations for trees in order to provide crown coverage to the greatest extent possible. (P&Z)(RP&CA)

BUILDING:

15. The applicant shall work with the City for recycling and/or reuse of the existing site materials as part of the demolition process, including leftover, unused, and/or discarded building materials. *** (T&ES)(P&Z)
16. Within 90 days after receipt of written request from the City, WMATA shall permit construction of a transit facility as generally depicted on the plans dated April 9, 2012. The final location and building plans will be designed in coordination with WMATA, and to the satisfaction of the Directors of P&Z, T&ES and DASH. (P&Z)(TES)(DASH)

SIGNAGE:

17. Within 90 days after receipt of written request from the City, WMATA shall permit the City to install wayfinding signage in the locations as generally depicted on the plans dated April 9, 2012. The City shall be responsible for the design, acquisition and installation of the signage. (P&Z) (T&ES)
18. Install a temporary informational sign on the site prior to the approval of the final site plan for the project. The sign shall be displayed until construction is complete or replaced with a contractor or real estate sign incorporating the required information; the sign shall notify the public of the nature of the upcoming project and shall provide a phone number for public questions regarding the project.* (P&Z)(T&ES)

PARKING:

19. For long-term enclosed bicycle parking, provide an area with minimum dimension of 20' by 46' immediately adjacent to the main entrance. *(T&ES)
20. Provide a clear, unobstructed space for a Capital Bikeshare station with 27 docks and 14 bicycles adjacent to the long-term enclosed bicycle parking. Location should be clear and unobstructed to provide 4 hours of sunlight each day for station's solar panel. Minimum dimensions for the Capital Bikeshare station area shall be 20' by 72'. *(T&ES)
21. For short term bicycle parking, provide 25 spaces for 50 bicycles, each rack holding two bicycles, adjacent to the Capital Bikeshare station with inverted U racks. Minimum dimensions for short-term bicycle parking area shall be 20' by 60'. *(T&ES)
22. All on-street parking controls and restrictions within the project area shall be determined by the City. Any such controls and restrictions which the applicant desires shall be shown on the final site plan. (P&Z)(T&ES)

BUS STOPS AND BUS SHELTERS:

23. Show all existing and proposed bus stops on the final site plan with associated features, to include shelters and benches in the vicinity of the site. Any proposed features shall be ADA compliant; all bus shelters shall include a bench, illumination (solar or electric), and the ability to accommodate future real time bus information LED screens and connections to the satisfaction of the Director of T&ES. The final bus shelter and bus stop bench design shall meet City standards and the approval of the Director of T&ES. (T&ES)
24. Continue to coordinate with staff to refine the turning movement required by buses to enter the first bus bay. A revised design shall be provided with the first final site plan submittal. (P&Z)(T&ES)(DASH)

25. The pedestrian shelters on Diagonal Road shall be generally as located on the plans dated April 9, 2012. The final design should be completed prior to release of the final site plan and shall meet City standards and the approval of the Directors of P&Z and T&ES. (P&Z)(T&ES)
26. Make bus stops at the project site ADA compliant. ADA compliance includes:
 - a. Install an unobstructed bus stop passenger loading pad that is thirty-five (35) feet wide parallel to the roadway, by eight (8) feet wide perpendicular to the curb,
 - b. The loading pad shall be at the same grade as the sidewalk, connect the curb to the sidewalk, and the pad's surface material shall match the sidewalk. The exiting width of the sidewalk may be counted towards the 8 foot wide perpendicular to the curb area.
 - c. Passenger loading pads shall never be placed on storm drain inlets, catch basins, and other obstacles that would make the bus stop and bus stop loading pad inaccessible (P&Z)(T&ES)(DASH)
27. Each bus bay must include standard U-channel pole or other approved structure to be made available for transit operators to mount bus stop signage at each bus bay. (T&ES)

SITE PLAN:

28. Coordinate location of site utilities with other site conditions to the satisfaction of the Directors of P&Z and/or RP&CA, and T&ES. These items include:
 - a. Location of site utilities including above grade service openings and required clearances for items such as transformers, telephone, HVAC units and cable boxes.
 - b. Minimize conflicts with plantings, pedestrian areas and major view sheds.
 - c. Do not locate above grade utilities in dedicated open space areas. (RP&CA)(P&Z)(T&ES)
29. Provide a lighting plan with the final site plan to verify that lighting meets City standards. The plan shall be to the satisfaction of the Directors of T&ES, P&Z, and/or RP&CA in consultation with the Chief of Police and shall include the following:
 - a. Clearly show location of all existing and proposed street lights and site lights, shading back less relevant information.
 - b. A lighting schedule that identifies each type and number of all fixtures, mounting height, and strength of fixture in Lumens or Watts.
 - c. Manufacturer's specifications and details for all proposed fixtures including site, landscape, pedestrian, sign(s) and security lighting.
 - d. A photometric plan with lighting calculations that include all existing and proposed light fixtures, including any existing street lights located on the opposite side(s) of all adjacent streets. Photometric calculations must extend from proposed building face(s) to property line and from property line to the opposite side(s) of all adjacent streets and/or 20 feet beyond the property line on all

- adjacent properties and rights-of-way. Show existing and proposed street lights and site lights.
- e. Photometric site lighting plan shall be coordinated with architectural/building mounted lights, site lighting, street trees and street lights to minimize light spill into adjacent residential areas.
 - f. Provide location of conduit routing between site lighting fixtures so as to avoid conflicts with street trees.
 - g. Detail information indicating proposed light pole and footing in relationship to adjacent grade or pavement. All light pole foundations shall be concealed from view.
 - h. The lighting for the areas not covered by the City of Alexandria' standards shall be designed to the satisfaction of Directors of T&ES and P&Z.
 - i. Gadsby Light fixtures are required along the King St and Diagonal Rd frontages. Coordinate with staff from P&Z and T&ES for the provision of these fixtures, as shown on sheet M-78 of the approved planset.
 - j. Provide numeric summary for various areas (i.e., roadway, walkway/ sidewalk, alley, and parking lot, etc.) in the proposed development.
 - k. Full cut-off lighting shall be used at the development site to prevent light spill onto adjacent properties. (P&Z)(T&ES)(RP&CA)(Police)
30. Submit the final as-built per City guidelines and requirements immediately upon completion of site work, prior to reopening the site for public use. Prior to commencing the final phase of construction, the applicant and engineer shall meet with staff to develop a schedule for submission and review of the final as-built, to include landscaping per the City's *Landscape Guidelines*. ***(P&Z)(T&ES)
31. Verify that the north arrow shown on all sheets is at the correct orientation.

DEDICATION:

32. A plat of dedication delineating the new right-of-way property, as generally shown in the plan dated April 9, 2012, shall be submitted to the City. The dedication and all applicable documents shall be approved by the City prior to the release of the final site plan. The final approved plat and restriction language shall be recorded among the land records.
(P&Z)(TES)(City Attorney)

CONSTRUCTION:

33. Submit a construction phasing plan to the satisfaction of the Director of T&ES, for review, approval and partial release of Erosion and Sediment Control for the final site plan. In addition, building and construction permits required for site preconstruction shall be permitted prior to release of the final site plan to the satisfaction of the Director of T&ES. * (T&ES)

34. Submit a construction management/phasing plan for review and approval by the Directors of P&Z, T&ES, Code Administration and DASH prior to final site plan release. The plan shall be included in the Final Site Plan submission and:
- a. Include a plan for temporary pedestrian and vehicular circulation for each project phase. ADA accessibility shall be maintained between the Metro station, all active bus bays, and the public rights of way at all times;
 - b. Develop an interim parking plan to determine the parking needs for taxis, Kiss & Ride, shuttles, and other uses, for each phase of construction.
 - c. All temporary bus stops shall be ADA compliant;
 - d. All temporary bus bays should allow for a transit bus to pull the first step of the front door within a maximum of 4” of the loading platform.
 - e. To the greatest extent possible, the applicant shall provide and maintain ADA accessible shelters for bus patrons throughout construction. Final design and location of temporary shelters (if needed) shall be determined during the Final Site Plan process.
 - f. Provide and maintain a bus stop wayfinding information signage, visible from the main station entrance for the duration of all phases of construction. This wayfinding information signage shall be updated with up-to-date bus bay assignments, provided by WMATA and DASH for each construction phase.
 - g. Provide and maintain a WMATA standard pole to be made available to WMATA and DASH to install bus stop signage at each active bus bay during construction.
 - h. During all phases of construction, provide lighting during the evening/night hours for pedestrians accessing the station from Diagonal Road, Daingerfield Road, and King Street and for bus patrons at each bus bay within the station. The lighting shall not interfere with accessibility along pedestrian pathways or at bus stops within the station;
 - i. For any area where a bus will be parked (layover or bus bay), demonstrate that a second bus can pass the parked bus safely, assuming every bus bay and layover space is occupied.
 - j. Indicate number of bus layover spaces available in each phase on the plan. The buses must be able to exit the layover area without encroaching in the construction zone or adjacent layover spaces, assuming every bus bay and layover space is occupied.
 - k. Minimize impact to pedestrian pathways during peak travel times. Short term sidewalk closures shall be scheduled during off peak hours.
 - l. Require the contractor to attend a community meeting with City, WMATA and DASH staff to be held prior to each project phase to determine any field changes or modifications needed to this plan to ensure safe and efficient operations;
 - m. Require the contractor to meet with the community and adjacent property owners prior to each project phase to provide information on construction phasing and changes to the street network and sidewalks;
 - n. Require the contractor to designate a direct point of contact with City, WMATA and DASH staff for any issues requiring immediate attention.

- o. Contractor(s) will designate a procedure for notifying transit operators of any unscheduled/unplanned closures in and around project area. Notifications should be given to the City, WMATA and DASH with maximum possible notice.
 - p. Construction interference with transit bus operations should be minimized during or kept outside of peak periods, designated as 6-9 am and 3-7 pm Mondays-Fridays.
 - q. Any area designated for exclusive bus use, including but not limited to any bus stop, layover area or access road shall not be used at any time for equipment and personnel parking, staging, and storage.
 - r. Include the overall schedule for construction and the hauling route;
 - s. Existing-to-remain and proposed planting which is installed in an earlier construction phase shall be fully protected from damage during later construction phases. Appropriate plan and details for planting protection shall be included in the construction phasing plan.
 - t. Copies of the plan shall be posted in the construction trailer and given to each subcontractor before they commence work;
 - u. If the plan is found to be violated during the course of construction, citations will be issued for each infraction and a correction notice will be forwarded to the applicant. If the violation is not corrected within five (5) calendar days, a "stop work order" will be issued, with construction halted until the violation has been corrected. * (P&Z)(T&ES)(Code) (DASH)
35. Provide off-street parking for all construction workers without charge to the construction workers. For the construction workers who use Metro, DASH, or another form of mass transit to the site, the applicant shall subsidize ~~a minimum of 50~~ 100% of the fees for mass transit. Compliance with this condition shall be a component of the construction management plan, which shall be submitted to the Department of P&Z and T&ES prior to final site plan release. This plan shall:
- a. Establish the location of the parking to be provided at various stages of construction, how many spaces will be provided, how many construction workers will be assigned to the work site, and mechanisms which will be used to encourage the use of mass transit.
 - b. Provide for the location on the construction site at which information will be posted regarding Metro schedules and routes, bus schedules and routes.
 - c. If the plan is found to be violated during the course of construction, a correction notice will be issued to the developer. If the violation is not corrected within five (5) days, a "stop work order" will be issued, with construction halted until the violation has been corrected. * (P&Z)(T&ES)
36. The sidewalks shall remain open during construction or pedestrian access shall be maintained to the satisfaction of the Director of T&ES throughout the construction of the project. (T&ES)
37. No major construction staging shall be allowed within the public right-of-way on King Street, Diagonal Road, Daingerfield Road or Commonwealth Avenue. The applicant

- shall meet with T&ES to discuss construction staging activities prior to release of any permits for ground disturbing activities. ** (T&ES)
38. A “Certified Land Disturber” (CLD) shall be named in a letter to the Division Chief of Construction & Inspection prior to any land disturbing activities. If the CLD changes during the project, that change must be noted in a letter to the Division Chief. A note to this effect shall be placed on the Phase I Erosion and Sediment Control sheets on the site plan. (T&ES)
 39. Prior to commencing clearing and grading of the site, the applicant shall hold a meeting with notice to all adjoining property owners and civic associations to review the location of construction worker parking, plan for temporary pedestrian and vehicular circulation, and hours and overall schedule for construction. The Departments of P&Z and T&ES, and DASH shall be notified of the date of the meeting before the permit is issued. (P&Z)(T&ES)
 40. Identify a person who will serve as a liaison to the community throughout the duration of construction. The name and telephone number, including an emergency contact number, of this individual shall be provided in writing to residents, property managers and business owners whose property abuts the site and shall be placed on the project sign, to the satisfaction of the Directors of P&Z, and/or RP&CA and T&ES. (P&Z)(RP&CA)(T&ES)
 41. Implement a waste and refuse control program during the construction phase of this development. This program shall control wastes such as discarded building materials, concrete truck washout, chemicals, litter or trash, trash generated by construction workers or mobile food vendor businesses serving them, and all sanitary waste at the construction site and prevent offsite migration that may cause adverse impacts to neighboring properties or to the environment to the satisfaction of Directors of T&ES and Code Administration. All wastes shall be properly disposed offsite in accordance with all applicable federal, state and local laws. (T&ES)
 42. Contractors shall not cause or permit vehicles to idle for more than 10 minutes when parked. (T&ES)

STORMWATER:

43. Demonstrate compliance with flood plain ordinance Section 6-300 to Section 6-311 of Article VI Special and Overlay Zones. No final plan shall be released until full compliance with flood plain ordinance has been demonstrated. *(T&ES)
44. Furnish specific engineering data and information, in addition to Zoning Ordinance Requirements, as to the effect of the proposed construction on future flood heights. No final site plan shall be released until the applicant has demonstrated that no increase in water surface elevation for the 100-year flood will result due to implementation of this

- project. Computations are to include backwater calculations starting at a downstream cross section to an upstream cross section. Computations shall be made by modifying the existing HEC-RAS model, as prepared by the U.S. Army Corps of Engineers, Baltimore District. * (T&ES)
45. All prepared storm water calculations shall utilize the City's standard rainfall intensities for the 2 year and 10 year rain fall event (5 minute time of concentration) $I_2 = 6.2$ in/hr and $I_{10} = 9.0$ in/hr. *(T&ES)
 46. The proposed storm easements shall extend to an existing or proposed right of way line. *(T&ES)

SOLID WASTE:

47. Provide and install four (4) Iron Site Bethesda Series, Model SD-42 decorative black metal trash cans with domed lid by Victor Stanley. The receptacle(s) shall be placed in the public right-of-way along Diagonal Road and at strategic locations in the vicinity of the site as approved by the Director of T&ES. *** (T&ES)

STREETS / TRAFFIC:

48. If the City's existing public infrastructure is damaged during construction, or patch work required for utility installation then the applicant shall be responsible for construction/ installation or repair of the same as per the City of Alexandria standards and specifications and to the satisfaction of Director, Transportation and Environmental Services. *** (T&ES)
49. A pre-construction walk/survey of the site shall occur with Transportation and Environmental Services Construction and Inspection staff to document existing conditions prior to any land disturbing activities. (T&ES)
50. Submit a Traffic Control Plan as part of the final site plan, for construction detailing proposed controls to traffic movement, lane closures, construction entrances, haul routes, and storage and staging shall be provided for informational purposes. In addition, the Traffic Control Plan shall be amended as necessary and submitted to the Director of T&ES along with the Building and other Permit Applications as required. The Final Site Plan shall include a statement "FOR INFORMATION ONLY" on the Traffic Control Plan Sheets. * (T&ES)
51. All Traffic Control Device design plans, Work Zone Traffic Control plans, and Traffic Studies shall be signed and sealed by a professional engineer, registered in the Commonwealth of Virginia. * (T&ES)
52. Show turning movements of standard vehicles (passenger, DASH and WMATA buses and fire trucks) turning into and maneuvering through the site. Turning movements shall

meet AASHTO vehicular guidelines and shall be to the satisfaction of the Director of T&ES. * (T&ES)

UTILITIES:

53. Locate all private utilities outside of the public right-of-way and public utility easements. (T&ES)

SOILS:

54. Provide a geotechnical report, including recommendations from a geotechnical professional for proposed cut slopes and embankments. * (T&ES)

WATERSHED, WETLANDS, & RPAs:

55. The storm water collection system is located within the Timber Branch watershed. All on-site storm water curb inlets and public curb inlets within 50 feet of the property line shall be duly marked using standard City markers, or to the satisfaction of the Director of T&ES. *** (T&ES)

BMP FACILITIES:

56. The City of Alexandria's storm water management regulations regarding water quality are two-fold: first, phosphorus removal requirement and second, water quality volume default. Compliance with the phosphorus requirement does not relieve the applicant from the water quality default requirement. The water quality volume determined by the site's proposed impervious area shall be treated in a Best Management Practice (BMP) facility. * (T&ES)
57. Provide BMP narrative and complete pre and post development drainage maps that include areas outside that contribute surface runoff from beyond project boundaries to include adequate topographic information, locations of existing and proposed storm drainage systems affected by the development, all proposed BMPs and a completed Worksheet A or B and Worksheet C, as applicable. * (T&ES)
58. The storm water Best Management Practices (BMPs) required for this project shall be constructed and installed under the direct supervision of the design professional or his designated representative. Prior to project completion, the design professional shall submit a written certification to the Director of T&ES that the BMPs are:
 - a. Constructed and installed as designed and in accordance with the approved Final Site Plan.
 - b. Clean and free of debris, soil, and litter by either having been installed or brought into service after the site was stabilized. *** (T&ES)

59. Submit two originals of the storm water quality BMP Maintenance Agreement with the City to be reviewed as part of the Final #2 Plan. The agreement must be executed and recorded with the Land Records Division of Alexandria Circuit Court prior to approval of the final site plan.* (T&ES)
60. The Applicant/Owner shall be responsible for installing and maintaining storm water Best Management Practices (BMPs). The Applicant/Owner shall execute a maintenance service contract with a qualified private contractor for a minimum of three years and develop an Owner's Operation and Maintenance Manual for all Best Management Practices (BMPs) on the project. The manual shall include at a minimum: an explanation of the functions and operations of the BMP(s); drawings and diagrams of the BMP(s) and any supporting utilities; catalog cuts on maintenance requirements including mechanical or electrical equipment; manufacturer contact names and phone numbers; a copy of the executed maintenance service contract; and a copy of the maintenance agreement with the City. A copy of the contract shall also be placed in the BMP Operation and Maintenance Manual. Prior to project completion, a copy of the maintenance contract shall be submitted to the City. ***(T&ES)
61. Submit a copy of the BMP Operation and Maintenance Manual to the Office of Environmental Quality on digital media prior to project completion. *** (T&ES)
62. Prior to project completion, the Applicant is required to submit a certification by a qualified professional to the satisfaction of the Director of T&ES that any existing storm water management facilities adjacent to the project and associated conveyance systems were not adversely affected by construction operations. If maintenance of the facility or systems were required in order to make this certification, provide a description of the maintenance measures performed. *** (T&ES)

CONTAMINATED LAND:

63. Should any unanticipated contamination, underground storage tanks, drums or containers be encountered at the site, the Applicant must immediately notify the City of Alexandria Department of Transportation and Environmental Services, Office of Environmental Quality. *** (T&ES)
64. The final site plan shall not be released, and no construction activity shall take place until the following has been submitted and approved by the Director of T&ES:
 - a. Submit a Site Characterization Report/Extent of Contamination Study detailing the location, applicable contaminants, and the estimated quantity of any contaminated soils and/or groundwater at or in the immediate vicinity of the site.
 - b. Submit a Risk Assessment indicating any risks associated with the contamination.
 - c. Submit a Remediation Plan detailing how any contaminated soils and/or groundwater will be dealt with, including plans to remediate utility corridors.

Utility corridors in contaminated soil shall be over excavated by 2 feet and backfilled with “clean” soil.

- d. Submit a Health and Safety Plan indicating measures to be taken during remediation and/or construction activities to minimize the potential risks to workers, the neighborhood, and the environment.
- e. Applicant shall submit 3 hard copies and 2 electronic copies of the above. The remediation plan must be included in the Final Site Plan. * (T&ES)

NOISE:

- 65. All exterior loudspeakers shall be prohibited and no amplified sound shall be audible at the property line. External speakers as integral to the Real Time Bus Information panels at bus bays shall be exempt. (T&ES)

Previous Staff Report

CITY DEPARTMENT CODE COMMENTS

Legend: C - Code Requirement R - Recommendation S - Suggestion F – Finding

Transportation and Environmental Services

- F - 1. Sheets M-51 – M-53; increase text size within the profile to ensure readability. Ensure the material and class of pipe is labeled within the profile. (T&ES- Engineering)
- F - 2. Demolition plan shall have E&SC information (add inlet protection). (OEQ)
- F - 3. Any plan that shows E&SC shall have contours. (OEQ)
- F - 4. Planter boxes under pavement shall have a continuous soil channel running under pavement. (OEQ)
- F - 5. M-54 and M-55 do not match with WM 45 and WM46. (OEQ)
- F - 6. For long term bicycle parking, WMATA uses Dero Decker, most recently at the College Park Metro Station and eventually at Franconia Springfield (description here <http://fabb-bikes.blogspot.com/2011/11/bike-station-at-franconia-springfield.html>). Bikes are stored horizontally in each tray. Each Dero Decker uses 80” of depth per bike. Minimum ceiling height is 108”. Recommended access aisle between occupied Dero Deckers is 60”. Minimum aisle is 48”. Dero’s website: <http://www.dero.com/products/dero-decker/> For WMATA’s other enclosed bike parking, access is done through Bike Link <http://www.bikelink.org/> (T&ES- Transportation)
- F - 7. For Capital Bikeshare Stations, boom truck access is needed for station installation. Station configuration for a station with 27 docks and 14 bicycles would be 20’ by 72’. Final station configuration shall be made to the satisfaction of the Director, Transportation and Environmental Services. (T&ES)
- F - 8. An increased level of detail for the traffic signal plans must be submitted with the first final site plan submission to ensure construction of the proposed signal installations and signal modifications meet both MUTCD and City standards. (T&ES- Transportation)
- F - 9. Sheet M-39 – With the final site plan submission, show a stop sign on the Cameron Street approach at King Street (signal is being removed from this location so the stop sign is necessary). (T&ES- Transportation)
- F - 10. Provide minimum 25’ overlap for match lines on all sheets. (T&ES- Transit, DASH)
- F - 11. Sheet M-38-39: Stripe bus layby area to match layby striping at Van Dorn and Braddock Metro stations. (T&ES- Transit, DASH)

- F - 12. Since the record drawings, maps, and other documents of the City of Alexandria, State, and Federal agencies show the true north pointing upwards, therefore, the Site Plan shall show the true north arrow pointing upward as is customary; however, for the sake of putting the plan together and/or ease of understanding, the project north arrow pointing upward, preferably east, or west may be shown provided it is consistently shown in the same direction on all the sheets with no exception at all. The north arrow shall show the source of meridian. The project north arrow pointing downward will not be acceptable even if, it is shown consistently on all the sheets. (T&ES)
- F - 13. The Final Site Plan must be prepared per the requirements of Memorandum to Industry 02-09 dated December 3, 2009, Design Guidelines for Site Plan Preparation, which is available at the City's following web address:
- <http://alexandriava.gov/uploadedFiles/tes/info/Memo%20to%20Industry%20No.%2002-09%20December%203,%202009.pdf>
- F - 14. The plan shall show sanitary and storm sewer, and water line in plan and profile in the first final submission and cross reference the sheets on which the plan and profile is shown, if plan and profile is not shown on the same sheet. Clearly label the sanitary and storm sewer, or water line plans and profiles. Provide existing and proposed grade elevations along with the rim and invert elevations of all the existing and proposed sanitary and storm sewer at manholes, and water line piping at gate wells on the respective profiles. Use distinctive stationing for various sanitary and storm sewers (if applicable or required by the plan), and water line in plan and use the corresponding stationing in respective profiles. (T&ES)
- F - 15. The Plan shall include a dimension plan with all proposed features fully dimensioned and the property line clearly shown. (T&ES)
- F - 16. Include all symbols, abbreviations, and line types in the legend. (T&ES)
- F - 17. All storm sewers shall be constructed to the City of Alexandria standards and specifications. Minimum diameter for storm sewers shall be 18" in the public Right of Way (ROW) and the minimum size storm sewer catch basin lead is 15". The acceptable pipe materials will be AWWA C-151 (ANSI A21.51) Class 52 or Reinforced Concrete Pipe (RCP) ASTM C-76 Class IV. For roof drainage system, Polyvinyl Chloride (PVC) ASTM D-3034-77 SDR 26 and ASTM 1785-76 Schedule 40 pipes will be acceptable. The acceptable minimum and maximum velocities will be 2.0 fps and 15 fps, respectively. The storm sewers immediately upstream of the first manhole in the public Right of Way shall be owned and maintained privately (i.e., all storm drains not shown within an easement or in a public Right of Way shall be owned and maintained privately). (T&ES)

- F - 18. All sanitary sewers shall be constructed to the City of Alexandria standards and specifications. Minimum diameter of sanitary sewers shall be 10" in the public Right of Way and sanitary lateral 6" for all commercial and institutional developments; however, a 4" sanitary lateral will be acceptable for single family residences. The acceptable pipe materials will be Polyvinyl Chloride (PVC) ASTM D-3034-77 SDR 26, ASTM 1785-76 Schedule 40, Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52, or reinforced concrete pipe ASTM C-76 Class IV (For 12" or larger diameters); Class III may be acceptable on private properties. The acceptable minimum and maximum velocities will be 2.5 fps and 10 fps, respectively. Laterals shall be connected to the sanitary sewer through a manufactured "Y" or "T" or approved sewer saddle. Where the laterals are being connected to existing Terracotta pipes, replace the section of main and provide manufactured "Y" or "T", or else install a manhole. (T&ES)
- F - 19. Lateral Separation of Sewers and Water Mains: A horizontal separation of 10' (edge to edge) shall be provided between a storm or sanitary sewer and a water line; however, if this horizontal separation cannot be achieved then the sewer and water main shall be installed in separate trenches and the bottom of the water main shall be at least 18" above of the top of the sewer. If both the horizontal and vertical separations cannot be achieved then the sewer pipe material shall be Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52 and pressure tested in place without leakage prior to installation.(T&ES)
- F - 20. Crossing Water Main Over and Under a Sanitary or Storm Sewer: When a water main over crosses or under crosses a sanitary / storm sewer then the vertical separation between the bottom of one (i.e., sanitary / storm sewer or water main) to the top of the other (water main or sanitary / storm sewer) shall be at least 18" for sanitary sewer and 12" for storm sewer; however, if this cannot be achieved then both the water main and the sanitary / storm sewer shall be constructed of Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52 with joints that are equivalent to water main standards for a distance of 10 feet on each side of the point of crossing. A section of water main pipe shall be centered at the point of crossing and the pipes shall be pressure tested in place without leakage prior to installation. Sewers crossing over the water main shall have adequate structural support (concrete pier support and/or concrete encasement) to prevent damage to the water main. Sanitary sewers under creeks and storm sewer pipe crossings with less than 6" clearance shall be encased in concrete. (T&ES)
- F - 21. No water main pipe shall pass through or come in contact with any part of sanitary / storm sewer manhole. Manholes shall be placed at least 10 feet horizontally from the water main whenever possible. When local conditions prohibit this horizontal separation, the manhole shall be of watertight construction and tested in place. (T&ES)
- F - 22. Crossing Existing or Proposed Utilities: Underground telephone, cable T.V., gas, and electrical duct banks shall be crossed maintaining a minimum of 12" of separation or clearance with water main, sanitary, or storm sewers. If this separation cannot be achieved then the sewer pipe material shall be Ductile Iron Pipe (DIP) AWWA C-151

- (ANSI A21.51) Class 52 for a distance of 10 feet on each side of the point of crossing and pressure tested in place without leakage prior to installation. Sanitary / storm sewers and water main crossing over the utilities shall have adequate structural support (pier support and/or concrete encasement) to prevent damage to the utilities. (T&ES)
- F - 23. Dimensions of parking spaces, aisle widths, etc. shall be provided on the plan. (T&ES)
- F - 24. Show the drainage divide areas on the grading plan or on a sheet showing reasonable information on topography along with the structures where each sub-area drains. (T&ES)
- F - 25. Provide proposed elevations (contours and spot shots) in sufficient details on grading plan to clearly show the drainage patterns. (T&ES)
- F - 26. All the existing and proposed public and private utilities and easements shall be shown on the plan and a descriptive narration of various utilities shall be provided. (T&ES)
- F - 27. The Traffic Control Plan shall replicate the existing vehicular and pedestrian routes as nearly as practical and the pedestrian pathway shall not be severed or moved for non-construction activities such as parking for vehicles or the storage of materials or equipment. Proposed traffic control plans shall provide continual, safe and accessible pedestrian pathways for the duration of the project. (T&ES)
- F - 28. Sheets M-30-M32; provide the data used to determine the T_c (time of concentration). The data appears to be missing from the provided tables. (Engineering)
- F - 29. Sheets M-34-M-36; improve the readability of the profiles. The text is small. Include the specific pipe material information within the profiles. (RCP CL XX) (Engineering)
- F - 30. Correct Sheet M-33 with appropriate BMP calculations. (OEQ)
- C - 1 Per the requirements of the City of Alexandria Zoning Ordinance Article XI, the applicant shall complete a drainage study and adequate outfall analysis for the total drainage area to the receiving sewer that serves the site. If the existing storm system is determined to be inadequate then the applicant shall design and build on-site or off-site improvements to discharge to an adequate outfall; even if the post development storm water flow from the site is reduced from the pre-development flow. The Plan shall demonstrate to the satisfaction of the Director of T&ES that a non-erosive stormwater outfall is present. (T&ES)
- C - 2 Per the requirements of the City of Alexandria Zoning Ordinance (AZO) Article XIII, the applicant shall comply with the peak flow requirements and prepare a Stormwater Management Plan so that from the site, the post-development peak runoff rate from a two-year storm and a ten-year storm, considered individually, shall not exceed their respective predevelopment rates. If combined uncontrolled and controlled stormwater outfall is proposed, the peak flow requirements of the Zoning Ordinance shall be met. If

- the project site lies within the Braddock-West watershed then the applicant shall provide an additional 10% storage of the pre-development flows in this watershed to meet detention requirements. (T&ES)
- C - 3 Per the requirements of Article 13-113 (d) of the AZO, all stormwater designs that require analysis of pressure hydraulic systems, including but not limited to the design of flow control structures and storm water flow conveyance systems shall be signed and sealed by a professional engineer, registered in the Commonwealth of Virginia. The design of storm sewer shall include the adequate outfall, inlet, and hydraulic grade line (HGL) analyses that shall be completed to the satisfaction of the Director of T&ES. Provide appropriate reference and/or source used to complete these analyses. (T&ES)
- C - 4 The proposed development shall conform to all requirements and restrictions set forth in Section 6-300 (Flood plain District) of Article VI (Special and Overlay Zones) of the City of Alexandria Zoning Ordinance. (T&ES)
- C - 5 Location of customer utility services and installation of transmission, distribution and main lines in the public rights of way by any public service company shall be governed by franchise agreement with the City in accordance with Title 5, Chapter 3, Section 5-3-2 and Section 5-3-3, respectively. The transformers, switch gears, and boxes shall be located outside of the public right of way. (T&ES)
- C - 6 (a) Per the requirements of Section 5-3-2, Article A, Chapter 3 of the City of Alexandria Code, all new customer utility services, extensions of existing customer utility services and existing overhead customer utility services supplied by any existing overhead facilities which are relocated underground shall, after October 15, 1971 be installed below the surface of the ground except otherwise exempted by the City Code and to the satisfaction of the Director, Department of Transportation and Environmental Services.
(b) Per the requirements of Section 5-3-3, Article A, Chapter 3 of the City of Alexandria Code, all new installation or relocation of poles, towers, wires, lines, cables, conduits, pipes, mains, and appurtenances used or intended to be used to transmit or distribute any service such as electric current, telephone, telegraph, cable television, traffic control, fire alarm, police communication, gas, water, steam or petroleum, whether or not on the streets, alleys, or other public places of the City shall, after October 15, 1971, be installed below the surface of the ground or below the surface in the case of bridges and elevated highways except otherwise exempted by the City Code and to the satisfaction of Director, Department of Transportation and Environmental Services. (T&ES)
- C - 7 In compliance with the City of Alexandria Zoning Ordinance Article XI, the applicant shall complete a sanitary sewer adequate outfall analysis as per the requirements of Memorandum to Industry No. 02-07 New Sanitary Sewer Connection and Adequate Outfall Analysis dated June 1, 2007. The memorandum is available at the following web address of the City of Alexandria (T&ES)

[http://alexandriava.gov/uploadedFiles/tes/info/New%20Sanitary%20Sewer%20Connecti%20and%20Adequate%20Outfall%20Analysis%20\(02-07\).pdf](http://alexandriava.gov/uploadedFiles/tes/info/New%20Sanitary%20Sewer%20Connecti%20and%20Adequate%20Outfall%20Analysis%20(02-07).pdf)

- C - 8 Per the requirements of Title 4, Chapter 2, Article B, Section 4-2-21, Appendix A, Section A 106(6), Figure A 106.1 Minimum Standards for Emergency Vehicle Access: provide a total turning radius of 25 feet to the satisfaction of Directors of T&ES and Office of Building and Fire Code Administration and show turning movements of standard vehicles in the parking lot as per the latest AASHTO vehicular guidelines. (T&ES)
- C - 9 The applicant shall provide storage space for solid waste and recyclable materials containers as outlined in the City's "Solid Waste and Recyclable Materials Storage Space Guidelines", or to the satisfaction of the Director of Transportation & Environmental Services. The City's storage space guidelines and required Recycling Implementation Plan forms are available at: www.alexandriava.gov or contact the City's Solid Waste Division at 703-746-4410, or via email at commercialrecycling@alexandriava.gov, for information about completing this form. (T&ES)
- C - 10 The applicants will be required to submit a Recycling Implementation Plan form to the Solid Waste Division, as outlined in Article H to Title 5 (Ordinance Number 4438), which requires all commercial properties to recycle. (T&ES)
- C - 11 All easements and/or dedications must be recorded prior to release of the site plan.* (T&ES)
- C - 12 Plans and profiles of utilities and roads in public easements and/or public Right of Way must be approved prior to release of the plan.* (T&ES)
- C - 13 Provide a phased erosion and sediment control plan consistent with grading and construction plan. (T&ES)
- C - 14 Per the Memorandum to Industry, dated July 20, 2005, the applicant is advised regarding a requirement that applicants provide as-built sewer data as part of the final as-built process. Upon consultation with engineering firms, it has been determined that initial site survey work and plans will need to be prepared using Virginia State Plane (North Zone) coordinates based on NAD 83 and NAVD 88. Control points/Benchmarks which were used to establish these coordinates should be referenced on the plans. To insure that this requirement is achieved, the applicant is requested to prepare plans in this format including initial site survey work if necessary. (T&ES)
- C - 15 The thickness of sub-base, base, and wearing course shall be designed using "California Method" as set forth on page 3-76 of the second edition of a book entitled, "Data Book for Civil Engineers, Volume One, Design" written by Elwyn E. Seelye. Values of California Bearing Ratios used in the design shall be determined by field and/or

- laboratory tests. An alternate pavement section for Emergency Vehicle Easements (EVE) to support H-20 loading designed using California Bearing Ratio (CBR) determined through geotechnical investigation and using Virginia Department of Transportation (VDOT) method (Vaswani Method) and standard material specifications designed to the satisfaction of the Director of Transportation and Environmental Services (T&ES) will be acceptable. (T&ES)
- C - 16 All pedestrian, traffic, and way finding signage shall be provided in accordance with the Manual of Uniform Traffic Control Devices (MUTCD), latest edition to the satisfaction of the Director of T&ES. (T&ES)
- C - 17 All driveway entrances, curbing, etc. in the public ROW or abutting public ROW shall meet City design standards. (T&ES)
- C - 18 All sanitary laterals and/or sewers not shown in the easements shall be owned and maintained privately. (T&ES)
- C - 19 The applicant shall comply with the City of Alexandria's Noise Control Code, Title 11, Chapter 5, which sets the maximum permissible noise level as measured at the property line. (T&ES)
- C - 20 The applicant shall comply with the Article XIII of the City of Alexandria Zoning Ordinance, which includes requirements for stormwater pollutant load reduction, treatment of the water quality volume default and stormwater quantity management. (T&ES)
- C - 21 The applicant shall comply with the City of Alexandria, Erosion and Sediment Control Code, Section 5, Chapter 4. (T&ES)
- C - 22 All required permits from Virginia Department of Environmental Quality, Environmental Protection Agency, Army Corps of Engineers, Virginia Marine Resources shall be in place for all project construction and mitigation work prior to release of the final site plan. This includes the state requirement for a VSMP permit for land disturbing activities greater than 2500 SF. * (T&ES)

VAWC Comments

1. Revise City Standard General Notes #28 on Sheet M04 as follows: All water facility constructions shall conform to Virginia American Water (VAW) standards and specifications. No work can be completed on existing and proposed water facilities until all easements and agreements with VAW are finalized, executed and recorded. Developer or contractor shall contact VAW at 703-706-3889 to obtain an approved proposal and pay all required fees, prior to the start of construction, demolition and inspection of water facilities, including, but not limit to, water mains, fire hydrants, domestic and fire service lines. All the proposed wet taps on an existing water main shall be constructed by VAW.

2. Properly label the existing water facilities (e.g. hydrant, meter, valve).
3. Indicate whether the proposed grade will reduce the existing water line cover to less than 3.5 feet.
4. Show the existing and proposed water facilities (e.g. water line, hydrant, valve, meter) on Site Plan (Sheet M33 & M34).

ASA Comments:

1. No comments received from ASA on the Preliminary submission.

Fire Department:

Code Administration (Building Code):

Police

Archaeology

Asterisks denote the following:

- * Condition must be fulfilled prior to release of the final site plan
- ** Condition must be fulfilled prior to release of the building permit (or commencing construction?)
- *** Condition must be fulfilled prior to project completion

Previous Staff Report