



City of Fairfax, Virginia
City Council Work Session

**PRE-APPLICATION
DEVELOPMENT DISCUSSION**

Agenda Item # 1a

City Council Meeting 6/1/2021

TO: Honorable Mayor and Members of City Council

FROM: Robert A. Stalzer, City Manager *RA Stalzer*

SUBJECT: 10251 Main Street (Ratcliffe House Concept)

SUMMARY: Potential development of site with eight (8) townhomes

COMPREHENSIVE PLAN: Townhouse/Single-Family Attached Neighborhood and Green Network - Public

POSSIBLE USES FOR SITE: Eight (8) townhomes

TRAFFIC IMPACT: 4 AM Peak Hour, 6 PM Peak Hour and 59 Daily Trips

REQUESTED HEIGHT: 4 Stories/48 +/- feet

DENSITY (IF APPLICABLE): 3.46 du/acre

ADJACENT PROPERTIES: South of Main Street
North of Sager Avenue
West of the Fairfax Museum & Visitor Center and Ratcliffe Park
East of Providence Square Condominiums

RESPONSIBLE STAFF/POC: Albert Frederick, Senior Planner
Jason Sutphin, Community Development Division Chief
Brooke Hardin, Director of Community Development and Planning

ATTACHMENTS: Briefing Letter
Briefing Concept Plan
Concept Layout and Elevations
Trip Generation Memo
Existing Tree Coverage

Pre-Application Briefing – City Council

SITE DETAILS

Address: 10251 Main Street

Current Zoning: RH Residential High and CR Commercial Retail, Old Town Fairfax Transition Overlay District (TOD)

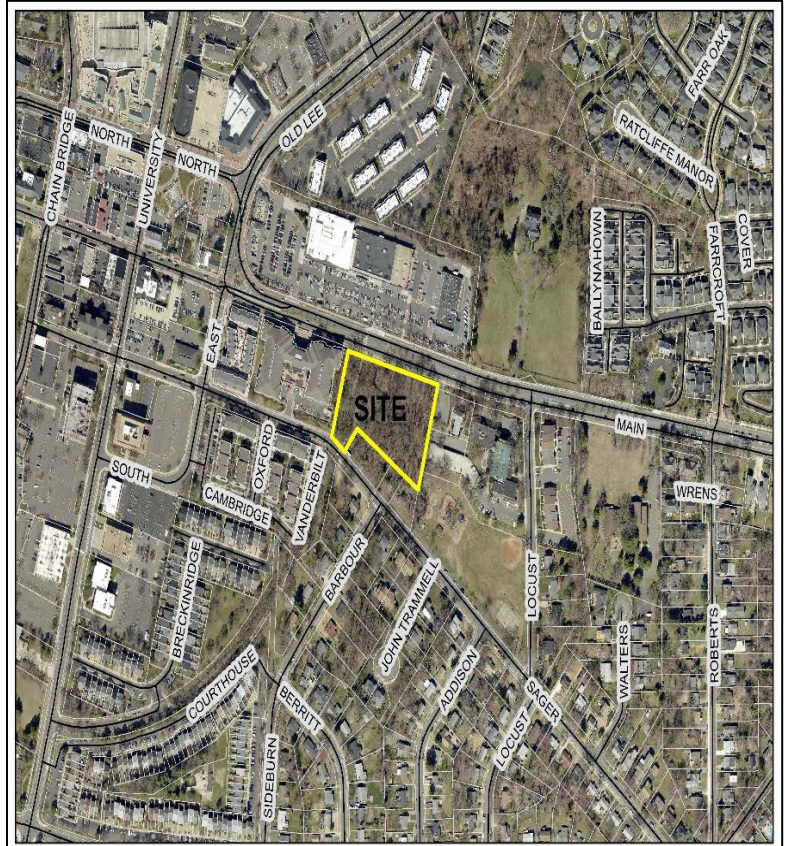
Current Use: Undeveloped

Comprehensive Plan Future Land Use Designation: Townhouse/Single-Family Attached Neighborhood and Green Network – Public

Site Area: 2.3 acres

Number of lots: 1

Property Owners/Potential Applicant: Ali Javad



Development Concept: Develop the site with an eight (8) unit townhome development on the portion of the site adjacent to the museum, park, and off-site single-family detached along Sager Avenue.

Concept Highlights: The concept shows the following elements:

- 8 units (3 rear-loaded units and 5 front-loaded units) with 4 stories and 48 feet in total height
- Single-car garage with tandem parking and ten (10) surface parking spaces (26 total spaces)
- 24-foot wide private streets
- 5-foot sidewalk internal to site with a connection to a 10-foot sidewalk on Main Street
- Vehicular access is from Main Street
- Stormwater management pond

Potential Applications: If an application is submitted, this concept would require land use approvals that could potentially include, but are not limited to:

- Rezoning from RH Residential High and CR Commercial Retail to PD-R Planned Development-Residential and approval of Master Development Plan with modifications

- May require Special Use Permit to City Code Section 110-4.15 for disturbance to floodplain
- May require Special Exception to City Code Section 110-3.7.3.C.3 to the mandatory fifty (50) percent build-to line within the Old Town Fairfax Transition Overlay District
- May require Special Exception to City Code Section 110-3.7.3.C.3 to allow a front yard that exceeds the maximum of 10 feet within the Old Town Fairfax Transition Overlay District
- May require Special Exception to City Code Section 110-3.7.3.D to allow a sidewalk width of less than 10 feet within the Old Town Fairfax Transition Overlay District
- May require Special Exception to Section 110-4.18 for encroachment into Resource Protection Area (RPA) and may require Resource Protection Area Delineation site specific application
- Major Certificate of Appropriateness for architecture and landscaping

Specific applications will be assessed at a future date when a complete application package is ready by the applicant.

Preliminary Feedback: City review agencies have provided the following feedback to the developer. Staff has met with the potential applicant to discuss:

- Consistency with the Comprehensive Plan
 - o Townhouse/Single-Family Attached Neighborhood Place Type supports up to 12 dwelling units per acre
- Consistency with Old Town Fairfax Transition Overlay District
 - o Maximum height of 48-feet and 50% mandatory build-to line
 - o 10-foot wide sidewalks on Main Street and Sager Avenue
 - o Parking requirement (1.5 spaces per unit)
 - o Transitional Yard (TY2 – 10 feet)
 - Fence/Wall Height – 6 feet
 - Canopy trees – 3 per 100 feet
 - Understory trees – 3 per 100 feet
 - Shrubs – not required
- Traffic Impact Statement is required
- Vehicular access, including right-in, right-out to Main Street
- Public Facilities Manual standards for entrance design and spacing from City Museum
- Autoturn analysis include dimensions of emergency vehicles and trash trucks
- Fire and emergency access required or install fire sprinklers in each unit
- Encroachment into the Resource Protection Area
- Stormwater management
- Tree removal

Attachments: Includes submission materials received from the potential applicant

1. Briefing Letter
2. Briefing Concept Plan
3. Concept Layout and Elevations
4. Trip Generation Memo
5. Existing Tree Coverage

Lynne J. Strobel
(703) 528-4700 Ext. 5418
lstrobel@thelandlawyers.com



**WALSH COLUCCI
LUBELEY & WALSH PC**

April 19, 2021
Revised: May 25, 2021

Via E-Mail Only

Brooke Hardin, Director
City of Fairfax
Department of Community Development & Planning
City Hall, Annex Room 207
10455 Armstrong Street
Fairfax, Virginia 22030

Re: Request for a Briefing to the City Council
Ratcliffe House

Dear Mr. Hardin:

Please accept this letter as an update in anticipation of a briefing to be presented to the City Council on June 1, 2021. The proposal was presented to the Planning Commission on May 10, 2021, and the following is an updated narrative.

The property that is identified among the City's tax assessment records as 57-4-02-142 (the "Property") consists of approximately 2.31 acres, and is located on Main Street between the City museum and Providence Square Condominiums. A briefing is requested to discuss a proposed rezoning of the Property from the CR (Commercial-Retail) District to the PD-R (Planned Development-Residential) District. The owner of the Property will be the applicant, who proposes a development of eight townhomes consistent with the recommendation of the City's Comprehensive Plan.

I have attached two sheets of a draft Master Development Plan prepared by J2 Engineers. These sheets illustrate the proposed layout of the townhomes and the site grading. As shown on the draft Master Development Plan, the Property will have a single access to Main Street that will allow right-in/right-out movements. The applicant proposes three 20 foot x 40 foot rear loaded townhomes that will front onto Main Street. The remaining five townhomes will be 24 feet x 40 feet and front loaded. Each townhome will have a two car garage, and a minimum driveway length of 20 feet that allows vehicular parking. In addition, 10 surface parking spaces are proposed on-site. As shown on the draft Master Development Plan, a minimum 10 foot transitional screening yard is proposed around the perimeter of the Property as required by the City's Zoning Ordinance.

A large portion of the Property is vegetated with mature trees with a portion defined as a Resource Protection Area ("RPA") under the Chesapeake Bay Preservation Ordinance. The

ATTORNEYS AT LAW

703 528 4700 ■ WWW.THELANDLAWYERS.COM
2200 CLARENDON BLVD. ■ SUITE 1300 ■ ARLINGTON, VA 22201-3359

LOUDOUN 703 737 3633 ■ WOODBRIDGE 703 680 4664

applicant proposes a minor encroachment into the RPA for the private street that provides access into the Property. The layout cannot be adjusted to relocate the private street due to minimum spacing requirements between the Main Street access and the access to the City's museum. The Property also includes floodplain as defined by the City's Zoning Ordinance. The Owner does not propose any encroachment into the floodplain with the exception of a crossing for necessary utility connections. Given the proposed layout and number of dwelling units, the development area includes approximately 45% open space, which is more than double the open space requirement of 20% in the PD-R District. Approximately 60% of the entire property will remain undisturbed.

Improvements contemplated with the proposed development include the following:

- The installation of a concrete sidewalk along the Property's Main Street frontage. The sidewalk will be provided to the maximum width possible up to ten feet in consideration of existing traffic signal poles and easements.
- Stormwater management will be provided in accordance with the City's requirements. Potential stormwater management is shown as an underground facility on the draft Master Development Plan.
- The existing trail and pedestrian access easement located on the Property that extends from Main Street to Sager Avenue will be retained and improvements will be provided to enhance this recreational amenity.
- A majority of existing mature trees located on the Property will be preserved. The applicant's environmental consultant has prepared an existing vegetation map, a tree protection and preservation plan, and a tree inventory list.
- The traffic generated by the proposed development will not adversely impact Main Street. An entrance, designed to meet City standards, will provide adequate access. Sidewalks will be provided on one side of the private street, which is adequate to serve a community of this size. The private street is designed to meet the requirements of emergency vehicles and service vehicles, such as trash trucks. The applicant has retained Gorove Slade as a traffic consultant and I have attached a Trip Generation Comparison for information. An additional traffic study will be prepared with the proposed rezoning application.
- Two retaining walls are proposed on the Property as shown on the draft Master Development Plan. One wall is located along the western side of the private street and will only have a height up to two feet. The second wall extends from Main Street parallel to the east property line to the rear of proposed townhome 6. The wall will have a height up to eight feet.
- LED street lights will be installed as needed on Main Street.

- All on-site utilities will be placed underground. The applicant does not propose locating existing utilities within the Main Street right-of-way underground as the existing right-of-way will not be disturbed by this proposal.

In addition to the exhibits referenced above, I have attached a color rendering of the proposed layout and conceptual elevations. The elevations illustrate the proposed townhome design and building materials. Please note that as the applicant does not propose access to Sager Avenue, no improvements are proposed to Sager Avenue.

In response to inquiries by the Planning Commission at its work session, the owner has preliminarily evaluated the opportunity to provide a shared access with the adjacent City museum. A shared access with the museum would have the benefit of removing a proposed curb cut to Main Street. In addition, the internal street for the proposed townhome lots would be relocated and the new road would not need to be constructed within the RPA. Utilizing a shared access would potentially remove all impervious area from within the RPA.

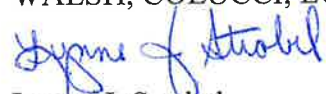
A lot layout could continue to include townhomes that will front on Main Street. The remaining lots would front on an internal street with the backs facing the RPA/floodplain. A minimum of eight visitor parking spaces will be available. While the rear lots of certain townhomes may be partially within the RPA, a revised layout could provide an opportunity to relocate stormwater management facilities and keep them outside of the RPA. A layout as described herein would require cooperation with the City, but the owner is willing to explore this opportunity as recommended by the City Council.

Should you have any questions regarding the above, or require additional information, please do not hesitate to contact me.

As always, I appreciate your assistance.

Very truly yours,

WALSH, COLUCCI, LUBELEY & WALSH, P.C.



Lynne J. Strobel

LJS:kae

Enclosure

cc: Jason Sutphin (w/encl.)
Albert Frederick (w/encl.)
Ali Javad

Avi Sareen
Bob Brown
Chaid Baird

FOR PUBLIC STREET PURPOSES
D.B. 11221 PG. 733



PROVIDENCE SQUARE
CONDOMINIUM
PIN: 057-4-34
ZONE: PD
10328 SAGER AVENUE
FAIRFAX, VA 22030

APPROX. LOCATION OF
100 YEAR FLOODPLAIN
F.I.R.M #5155240002D
(ELEV.=395.00')
ALI JAVAD
PIN: 057-4-02-142
D.B. 22834 PG. 328
ZONE: CR & RH
10251 MAIN STREET
FAIRFAX, VA 22030

J2 Engineers - X:\DRAWINGS\ACTIVE\Mainy Park - Madison Homes\Rezoning Plans\MH1801-06-GEOMETRY.dwg [GEOMETRY] April 18, 2021 - 3:29pm lbrown

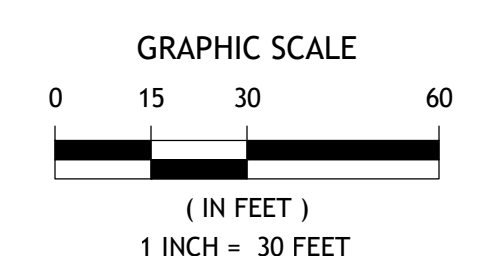
BEARING & DISTANCE TABLE

	BEARING	DISTANCE
L1	N 50° 13' 48"	246.87'
L2	N 50° 10' 26"	192.29'

LEGEND

- ASPHALT PAVING
- CONCRETE SIDEWALK
- PROPOSED UNDERGROUND DETENTION AREA
(SIZE & TYPE TO BE FINALIZED WITH FUTURE DESIGN PLANS)
- PROPERTY LINE
- RPA LIMITS
- EXISTING OVERHEAD UTILITY LINE
- EXISTING EASEMENT (SEE PLAN VIEW FOR CALLOUT)
- ROAD CENTERLINE
- EXISTING WATER LINE
- LIMITS OF DISTURBANCE
- EXISTING SANITARY LINE

- NOTES:**
- SEE SHEET 04 FOR PROPOSED GRADING AND SHEET 05 UTILITY LAYOUT.
 - ALL HVAC AND TRANSFORMERS SHALL BE SCREENED PER Z.O. SECTION 4.5.8. FINAL TRANSFORMER LOCATIONS TO BE DETERMINED WITH FINAL SITE PLAN.



J2 Engineers, Inc.
4080 Lafayette Center Drive
Suite 330
Chantilly, Va. 20151
703.361.1550 (office)
703.956.6845 (fax)
www.j2engineers.com

COMMONWEALTH OF VIRGINIA
Robert W. Brown
ROBERT W. BROWN
Lic. No. 037041
4/19/2021
PROFESSIONAL ENGINEER

PLAN# MH1801
DATE: APRIL, 2021
CONTOUR INT. = 2'
SCALE: AS NOTED

PLAN DATE
4/19/2021

MASTER DEVELOPMENT PLAN
**MASTER DEVELOPMENT PLAN
RADCLIFFE HOUSE**
CITY OF FAIRFAX, VIRGINIA

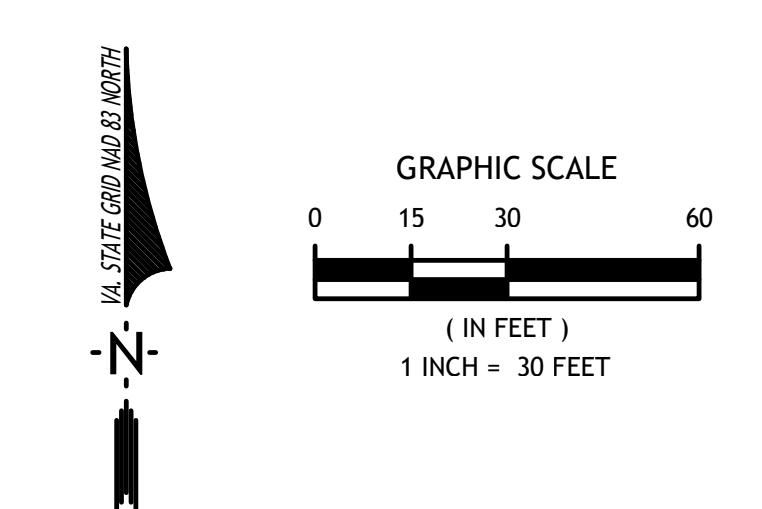
No.	DATE	DESCRIPTION	REVISIONS

SHEET
03
OF
13



LEGEND

	CONCRETE SIDEWALK
	PROPOSED UNDERGROUND DETENTION AREA (SIZE & TYPE TO BE FINALIZED WITH FUTURE DESIGN PLANS)



J2 Engineers, Inc.
 4080 Lafayette Center Drive
 Suite 330
 Chantilly, Va. 20151
 703.361.1550 (office)
 703.956.6845 (fax)
 www.j2engineers.com

COMMONWEALTH OF VIRGINIA
Robert Brown
 ROBERT W. BROWN
 Lic. No. 037041
 4/19/2021
 PROFESSIONAL ENGINEER

PLAN# MH11901
 DATE: APRIL, 2021
 CONTOUR INT. = 2'
 SCALE: 1"=30'

PLAN DATE
 4/19/2021

GRADING PLAN
**MASTER DEVELOPMENT PLAN
 RADCLIFFE HOUSE**
 CITY OF FAIRFAX, VIRGINIA

No.	DATE	DESCRIPTION	REVISIONS

SHEET
04
 OF
13

J2 Engineering - X:\DRAWINGS\ACTIVE\Wahny Park - Madison Homes\Rezoning Plans\MH11901-07-GRADING.dwg (GRADING PLAN) April 18, 2021 - 3:25pm lbrown





ALI JAVAD

APRIL 19, 2021
© 2021 - Bonstra | Haresign Architects

RENDER

NTS

RATCLIFFE HOUSE

02 Bonstra | Haresign
ARCHITECTS

TECHNICAL MEMORANDUM

To: Ali Javad District Properties
 From: Shashwat Anant Gorove Slade Associates
 Steven Matthew Dauterman, EIT, RSP1 Gorove Slade Associates
 Chad Baird Gorove Slade Associates
 Date: April 15, 2021
 Subject: **Ratcliffe House Development - Trip Generation Comparison**

Introduction

This memorandum presents the finding of a trip generation comparison assessment conducted for the proposed Ratcliffe House development, located at 10251 Main Street within the City of Fairfax, Virginia. The assessment was conducted to evaluate a proposed change in development program intensity as compared to a previously submitted traffic impact study for Mathy Park (a former development planned at the location) and to discuss the main point of site access.

Development Program

The Ratcliffe House development will be situated on one parcel of land, Tax Map Number 57-4-02-142. Based on current plans, the development program is anticipated consist of 8 townhomes. Per discussions between the Applicant and the City, primarily access to the development would come from a partial movement (right-in/right-out [RIRO]) entrance along Main Street.

The previous development, Mathy Park, was planned to reside on four parcels of land (which included Parcels: 57-4-02-142 [same as Ratcliffe House], 57-4-02-141, 57-4-02-140, and 57-4-02-139). Under the previous application, Mathy Park was to comprise of 21 townhomes with access to the site proposed via a full-movement entrance along Sager Avenue across from existing Barbour Drive. Previously, a traffic impact study (TIS) was conducted for the Mathy Park development. The TIS was conducted by Gorove Slade and titled *Traffic Impact Study – Mathy Park* (dated April 19, 2019).

Site Trip Generation Comparison

In order to calculate the trips generated by the applications and compare the two developments, the Institute of Transportation Engineers' (ITE) Trip Generation Manual (10th Edition) publication was used to determine the trips going into and out of the development during the AM and PM peak hours, as well as, the typical number of weekday daily trips.

Table 1 illustrates the trip generation for the development program proposed under the Mathy Park application (21 townhomes with access on Sager Avenue); **Table 2** illustrates the trip generation for the proposed under the current Ratcliffe House application (8 townhomes with access on Main Street).

A comparison of the development programs is illustrated in **Table 3**.

Table 1: Site Trip Generation – Mathy Park Development Program (Previous Application; No Longer Being Pursued)

Land Use	ITE Code	Size	Weekday						
			AM Peak Hour			PM Peak Hour			Daily Total
			In	Out	Total	In	Out	Total	
Residential									
Multifamily Housing (Low-Rise) (Apartments, Townhomes, Condo; max 2 floors)	220	21 DU	3	8	11	9	6	15	118
Total Development Trips			3	8	11	9	6	15	118

* ITE 10 does not differentiate between apartment, condo, and townhome.

Table 2: Site Trip Generation – Ratcliffe House Development Program (Current Application)

Land Use	ITE Code	Size	----- W e e k d a y -----						Daily Total
			AM Peak Hour			PM Peak Hour			
			In	Out	Total	In	Out	Total	
Residential									
Multifamily Housing (Low-Rise) (Apartments, Townhomes, Condo; max 2 floors)	220	8 DU	1	3	4	4	2	6	59
Total Development Trips			1	3	4	4	2	6	59

* ITE 10 does not differentiate between apartment, condo, and townhome.

Table 3: Comparison of Development Programs

	----- W e e k d a y -----						Daily Total
	AM Peak Hour			PM Peak Hour			
	In	Out	Total	In	Out	Total	
Difference (Current - Previous Application)	-2	-5	-7	-5	-4	-9	-59

Based on the [Trip Generation Manual](#), the Ratcliffe House development program that is currently under consideration is anticipated to generate approximately 7 fewer trips during AM peak hour, 9 fewer trips during the PM peak hour, and approximately 59 fewer trips during a typical weekday, as compared to the previous Mathy Park development program.

Main Street Site Access

Previously, under the Mathy Park development (application no longer being pursued), the 21-townhome program was planned to be accessed via a full-movement entrance along Sager Avenue across from existing Barbour Drive.

After discussion with City staff, the current application for the Ratcliffe House plans to have a partial-movement (right-in/right-out [RIRO]) entrance along Main Street (of note, an entrance along Sager Avenue is no longer be pursued as part of the new application). The assignment of weekday morning (AM) and weekday afternoon (PM) peak hour site trips onto the road network is illustrated below in Figure 1.



Figure 1: Assignment of Ratcliffe House Site Trips onto the Road Network

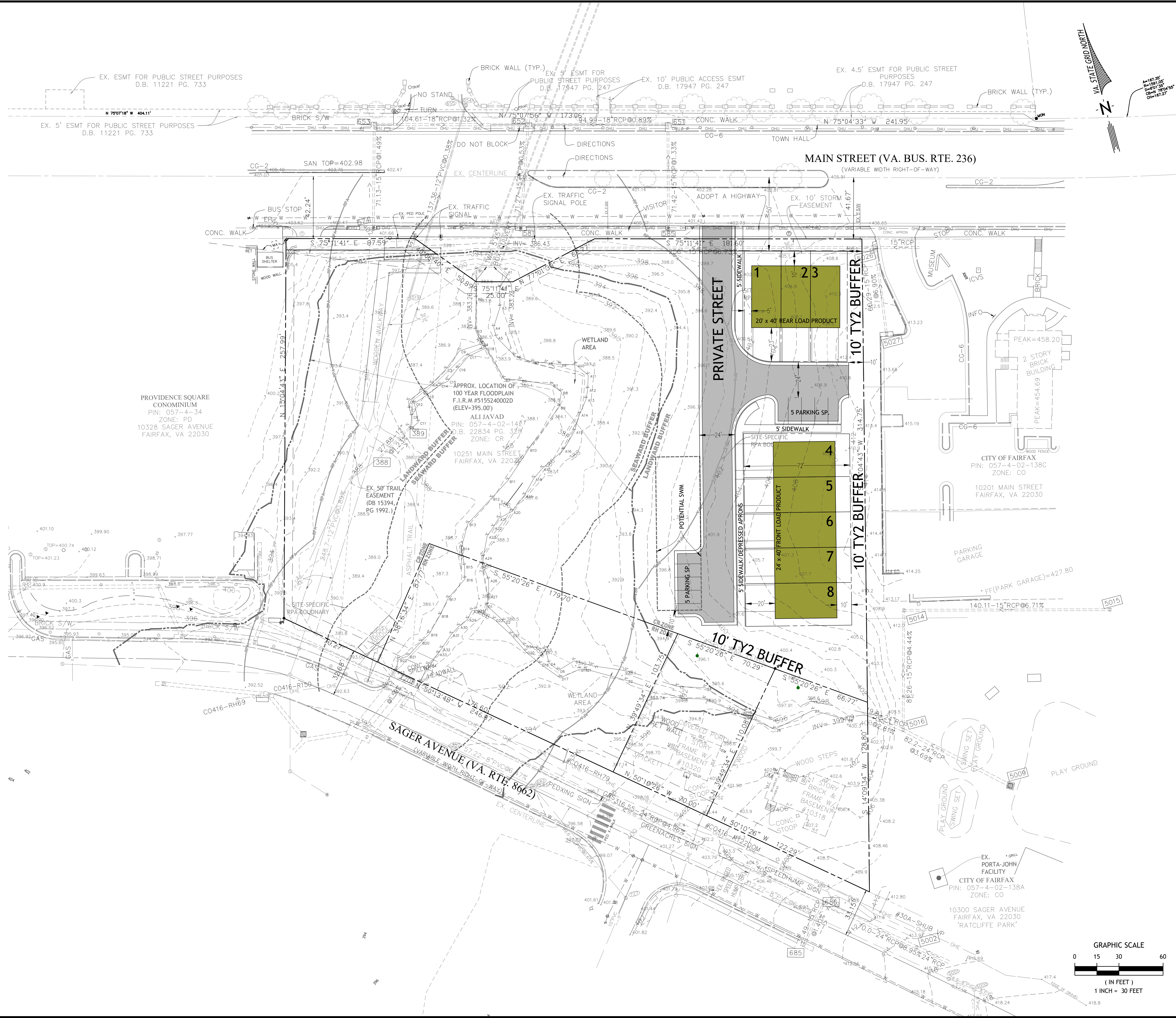
Conclusion

This memorandum presents the finding of a trip generation comparison assessment conducted for the proposed Ratcliffe House development, located within the City of Fairfax, Virginia. Based on current plans, the development program is anticipated consist of 8 townhomes (as compared to 21 townhomes previously proposed under the Mathy Park application). The change in development program between the two applications would yield a reduction in site generated trips (between 7-9 fewer trips during weekday peak hours and 59 fewer daily trips).

Furthermore, under the current application, the Ratcliffe House development is planned to be accessed via a partial-movement entrance along Main Street (an entrance along Sager Avenue is not being pursued).

Appendix:

Concept Plan

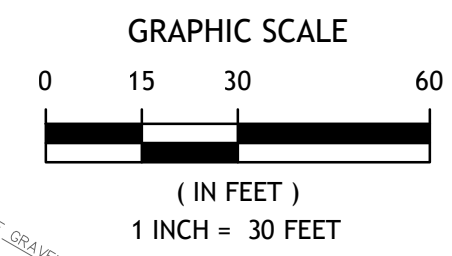


PROVIDENCE SQUARE
CONDOMINIUM
PIN: 057-4-34
ZONE: PD
10328 SAGER AVENUE
FAIRFAX, VA 22030

APPROX. LOCATION OF
100 YEAR FLOODPLAIN
F.I.R.M.#155240002D
(ELEV=395.00)
ALI JAVAD
PIN: 057-4-02-142
D.B. 22834 PG. 328
ZONE: CR
10251 MAIN STREET
FAIRFAX, VA 22030

CITY OF FAIRFAX
PIN: 057-4-02-138C
ZONE: CO
10201 MAIN STREET
FAIRFAX, VA 22030

EX. PORTA-JOHN
FACILITY
CITY OF FAIRFAX
PIN: 057-4-02-138A
ZONE: CO
10300 SAGER AVENUE
FAIRFAX, VA 22030
"RATCLIFFE PARK"



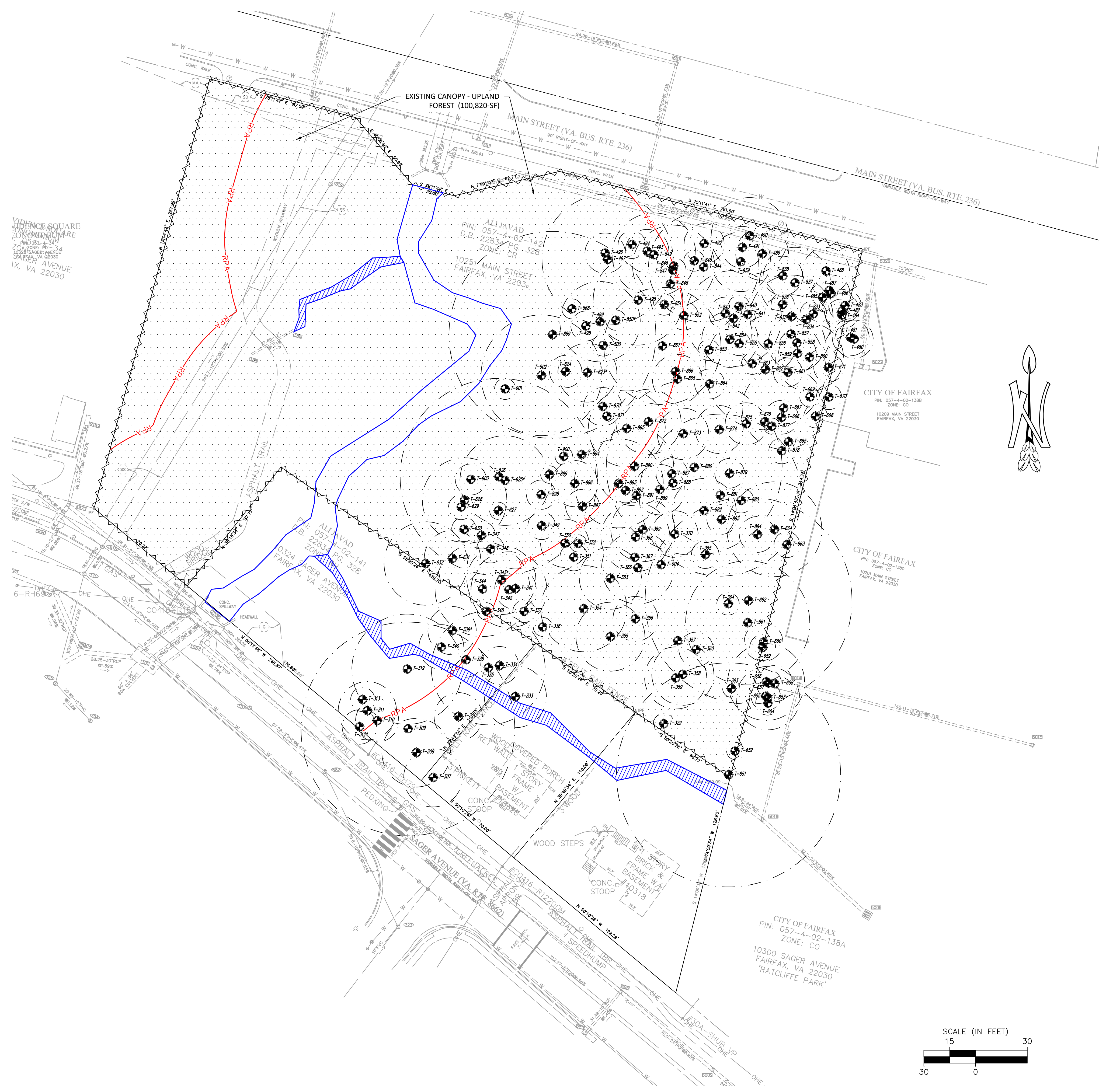
J2 Engineers, Inc.
4080 Lafayette Center Drive
Suite 330
Chantilly, VA 20151
703.361.1550 (office)
703.361.1566 (fax)
www.j2engineers.com

PLAN# M111901
DATE: MARCH 2019
CONTOUR INT. = 2'
SCALE: AS NOTED
PLAN DATE: 04-05-19

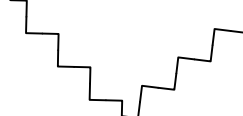
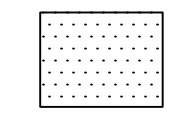
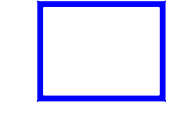
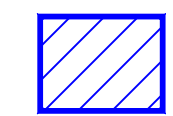
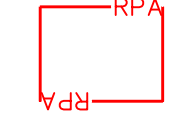
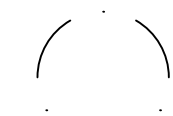
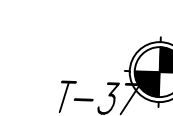
CONCEPT LAYOUT
MATHY PARK
FAIRFAX CITY, VIRGINIA

No.	DATE	DESCRIPTION

SHEET
02
OF
01

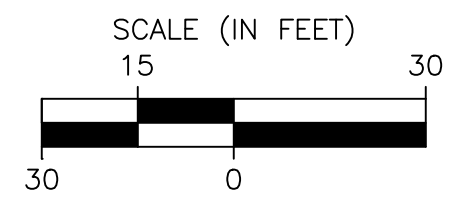



LEGEND

-  TREELINE
-  EXISTING CANOPY UPLAND FOREST (100,820-SF) LONGTERM SUCCESSIONAL FOREST
-  PERENNIAL WATERS
-  INTERMITTENT WATERS
-  SITE SPECIFIC RESOURCE PROTECTION AREA (RPA)
-  CRITICAL ROOT ZONE (CRZ)
-  TREE LOCATION

- NOTES:
1. THE PROPERTY DELINEATED HEREON IS LOCATED AT 10255 MAIN STREET AND IS ZONED CR (COMMERCIAL RETAIL).
 2. BOUNDARY AND TOPOGRAPHIC INFORMATION FROM FIELD SURVEY BY J2 ENGINEERS, 2019.
 3. PROPOSED DEVELOPMENT PLAN BY J2 ENGINEERS, APRIL 2021
 4. TREE EVALUATIONS AND COMPUTATIONS BY TNT ENVIRONMENTAL, INC., APRIL 2019 AND MAY 2020 (MR. AVI M. SAREEN, CERTIFICATION #: MA-4727A).
 5. CRZ MEASUREMENTS IN RADIUS.
 6. TOTAL CANOPY COVER: 100,820-SQUARE FEET.
 7. TOTAL SITE AREA: 100,820-SQUARE FEET.
 8. PERCENT OF SITE COVERED: 100%
 9. PERCENT COVER REQUIRED BY ZONING: 10%
 10. CANOPY TO BE PRESERVED: 60,042-SQUARE FEET (59.6%)
 11. CANOPY AREA TO BE PLANTED TO MEET REQUIREMENT: 0-SF (0%)

CANOPY COVER REQUIREMENTS:
 THE PROPERTY IS ZONED CR. PER THE CITY CODE, THE PROPERTY MUST MAINTAIN A 10% CANOPY COVER POST-CONSTRUCTION. THE PROJECT PROPOSES A CANOPY PRESERVATION OF 60,042-SF, WHICH IS 59.6% OF THE SITE.



 **Vinash M. Sareen**
 Certified Arborist
 Certification # MA-4727A

REVISIONS	
DATE	COMMENTS
12-15-19	REV PER PBASE REV (JSM)
8-19-20	REV PER CITY COMMENTS (JSM)
4-21-21	REV PER PLAN CHANGES (JSM)
4-28-21	REV PER PLAN CHANGES (JSM)

SHEET	10	OF	13
SCALE:	1" = 30'		
PROJECT DATE:	5/7/19		
DRAFT:	JSM	CHECK:	AMS
FILE NUMBER:	1378		



LEGEND

- TREELINE
- EXISTING CANOPY UPLAND FOREST (100,820-SF) LONGTERM SUCCESSIONAL FOREST
- PERENNIAL WATERS
- INTERMITTENT WATERS
- SITE SPECIFIC RESOURCE PROTECTION AREA (RPA)
- TREE PRESERVATION AREA UPLAND FOREST (60,042 -SF) LONGTERM SUCCESSIONAL FOREST
- CRITICAL ROOT ZONE (CRZ)
- TREE LOCATION
- TREE TO BE REMOVED
- ROOT PRUNING AND TREE PROTECTION FENCING
- LIMITS OF CLEARING

- NOTES:**
1. THE PROPERTY DELINEATED HEREON IS LOCATED AT 10255 MAIN STREET AND IS ZONED CR (COMMERCIAL RETAIL).
 2. BOUNDARY AND TOPOGRAPHIC INFORMATION FROM FIELD SURVEY BY J2 ENGINEERS, 2019.
 3. PROPOSED DEVELOPMENT PLAN BY J2 ENGINEERS, APRIL 2021
 4. TREE EVALUATIONS AND COMPUTATIONS BY TNT ENVIRONMENTAL, INC., APRIL 2019 AND MAY 2020 (MR. AVI M. SAREEN, CERTIFICATION #: MA-4727A).
 5. CRZ MEASUREMENTS IN RADIUS.
 6. TOTAL CANOPY COVER: 100,820-SQUARE FEET.
 7. TOTAL SITE AREA: 100,820-SQUARE FEET.
 8. PERCENT OF SITE COVERED: 100%
 9. PERCENT COVER REQUIRED BY ZONING: 10%
 10. CANOPY TO BE PRESERVED: 60,042-SQUARE FEET (59.6%)
 11. CANOPY AREA TO BE PLANTED TO MEET REQUIREMENT: 0-SF (0%)

CANOPY COVER REQUIREMENTS:
 THE PROPERTY IS ZONED CR. PER THE CITY CODE, THE PROPERTY MUST MAINTAIN A 10% CANOPY COVER POST-CONSTRUCTION. THE PROJECT PROPOSES A CANOPY PRESERVATION OF 60,042-SF, WHICH IS 59.6% OF THE SITE.

REVISIONS	
DATE	COMMENTS
12-19-19	REV PER PBASE REV (JSM)
8-19-20	REV PER CITY COMMENTS (JSM)
4-21-21	REV PER PLAN CHANGES (JSM)
4-28-21	REV PER PLAN CHANGES (JSM)

SHEET 11 OF 13

SCALE: 1" = 30'
 PROJECT DATE: 5/7/19
 DRAFT: JSM CHECK: AMS
 FILE NUMBER: 1378

Avinash M. Sareen
 Certified Arborist
 Certification # MA-4727A

TREE INVENTORY

Tree Number	Common Name	Scientific Name	Size (inches DBH)	Critical Root Zone (feet)	Condition	Remove	Offsite or Shared	Notes & Tree Preservation Recommendations
307	Black Cherry	<i>Prunus serotina</i>	17.0	17.0	Fair		Offsite	Ivy, over pruned
308	Black Cherry	<i>Prunus serotina</i>	19.9	19.9	Fair	X	Offsite	Dead limbs, ivy
309	Tulip Poplar	<i>Liriodendron tulipifera</i>	62.0	62.0	Poor	X	Offsite	Dead limbs, ivy, rot at base
310	Black Walnut	<i>Juglans nigra</i>	12.5	12.5	Fair		Offsite	Dead limbs, ivy
311	Black Walnut	<i>Juglans nigra</i>	16.9	16.9	Fair		Offsite	Dead limbs, ivy
312	Black Cherry	<i>Prunus serotina</i>	10.0	10.0	Poor	X*	Offsite	Poorly pruned, topped
313	American Elm	<i>Ulmus americana</i>	7.0	7.0	Fair		Offsite	
318	American Sycamore	<i>Platanus occidentalis</i>	5.0	5.0	Fair			Watersprouts, ivy; Prune to ANSI A-300 Standards, cut/remove vines
319	American Sycamore	<i>Platanus occidentalis</i>	32.0	32.0	Good		Offsite	Ivy
320	American Holly	<i>Ilex opaca</i>	14.0	8.0	Fair		Offsite	Ivy, small cavities
327	American Sycamore	<i>Platanus occidentalis</i>	19	19.0	Fair			Vines
329	Tulip Poplar	<i>Liriodendron tulipifera</i>	6	6.0	Good	X		Some small broken limbs
333	Red Maple	<i>Acer rubrum</i>	18	18.0	Fair		Offsite	Some dead limbs
334	Red Maple	<i>Acer rubrum</i>	11	11.0	Fair	X	Offsite	Watersprouts, some small cavities
335	American Sycamore	<i>Platanus occidentalis</i>	33	33.0	Good	X	Offsite	Ivy
336	Black Cherry	<i>Prunus serotina</i>	5.5	5.5	Fair	X		Ivy
337	Red Maple	<i>Acer rubrum</i>	6.5	6.5	Good	X		Ivy
338	Red Maple	<i>Acer rubrum</i>	10	10.0	Fair	X	Offsite	Watersprouts
339	Red Maple	<i>Acer rubrum</i>	14	14.0	Poor	X*	Offsite	Hollow, dead wood, ivy
340	Red Maple	<i>Acer rubrum</i>	13	13.0	Fair		Offsite	Ivy, dead limbs
341	Red Maple	<i>Acer rubrum</i>	12	12.0	Poor	X		Watersprouts, dead limbs, lean
342	Red Maple	<i>Acer rubrum</i>	22	22.0	Fair	X		Watersprouts, dead limbs
343	Red Maple	<i>Acer rubrum</i>	20	20.0	Fair	X*		Watersprouts, ivy
344	Black Gum	<i>Nyssa sylvatica</i>	27.5	27.5	Good			Double-trunk
345	Black Cherry	<i>Prunus serotina</i>	5	5.0	Good		Shared	
347	Tulip Poplar	<i>Liriodendron tulipifera</i>	8	8.0	Good			Watersprouts
348	Tulip Poplar	<i>Liriodendron tulipifera</i>	8	8.0	Good			Watersprouts
349	Tulip Poplar	<i>Liriodendron tulipifera</i>	8	8.0	Good	X		
350	Red Maple	<i>Acer rubrum</i>	14	14.0	Poor	X		Mostly Watersprouts
351	Tulip Poplar	<i>Liriodendron tulipifera</i>	8	8.0	Poor	X		Topped
352	Tulip Poplar	<i>Liriodendron tulipifera</i>	5	5.0	Poor	X		Topped
353	Red Maple	<i>Acer rubrum</i>	18	18.0	Fair	X		Watersprouts, lean in growth
354	Tulip Poplar	<i>Liriodendron tulipifera</i>	25	25.0	Good	X		Ivy
355	Red Maple	<i>Acer rubrum</i>	20	20.0	Fair	X		Watersprouts, dead second stem
356	Tulip Poplar	<i>Liriodendron tulipifera</i>	13	13.0	Poor	X		Ivy, dead limbs, dead wood
357	Dead							Ivy tower
358	Red Maple	<i>Acer rubrum</i>	18	18.0	Poor	X		Mostly dead
359	Red Maple	<i>Acer rubrum</i>	18	18.0	Fair	X		Watersprouts, many vines
360	Green Ash	<i>Fraxinus pennsylvanica</i>	10	10.0	Fair	X		Dead wood, vines
361	White Mulberry	<i>Morus alba</i>	5	5.0	Poor	X		Ivy tower, invasive
362	Tree of Heaven	<i>Ailanthus altissima</i>	5	5.0	Poor	X		Ivy tower, invasive
363	Tree of Heaven	<i>Ailanthus altissima</i>	5	5.0	Poor	X		Ivy tower, invasive
364	American Linden	<i>Tilia americana</i>	6.5	6.5	Good	X		Some ivy in canopy
365	Red Maple	<i>Acer rubrum</i>	8	8	Fair	X		Vines
366	White Oak	<i>Quercus alba</i>	21	21	Fair	X		Ivy, some dead limbs
367	Dead							
368	Red Maple	<i>Acer rubrum</i>	20	20	Poor	X		Watersprouts, cavity at base, dead wood/limbs
369	Black Cherry	<i>Prunus serotina</i>	18.5	18.5	Poor	X		Large cavity at base, ivy
370	Tulip Poplar	<i>Liriodendron tulipifera</i>	13.5	13.5	Fair	X		Watersprouts
480	Tree of Heaven	<i>Ailanthus altissima</i>	11.1	11.1	Poor		Offsite	Thick ivy vines, few branches, invasive
481	Black Walnut	<i>Juglans nigra</i>	10.7	10.7	Fair		Offsite	Ivy at base, one-sided
482	Tree of Heaven	<i>Ailanthus altissima</i>	10.2	10.2	Fair	X		Tartarian honeysuckle at base, one-sided, invasive
483	Tree of Heaven	<i>Ailanthus altissima</i>	9.4	9.4	Fair	X		Tartarian honeysuckle at base, one-sided, invasive
484	Tree of Heaven	<i>Ailanthus altissima</i>	9.4	9.4	Poor	X		Invasive, multi-flora rose at base
485	Tree of Heaven	<i>Ailanthus altissima</i>	7.9	7.9	Poor	X		Invasive, crooked trunk, dead limbs
486	Tree of Heaven	<i>Ailanthus altissima</i>	11.2	11.2	Poor	X		Tartarian honeysuckle at base, invasive
487	Dead							
488	Tree of Heaven	<i>Ailanthus altissima</i>	13.6	13.6	Poor	X		Invasive, vines up trunk
489	Tree of Heaven	<i>Ailanthus altissima</i>	15.3	15.3	Poor	X		Invasive, English ivy up trunk, dead limbs
490	Blackjack Oak	<i>Quercus marilandica</i>	22.3	22.3	Fair	X		One-sided canopy, English ivy up tree, water sprouts on base
491	American Sycamore	<i>Platanus occidentalis</i>	12.1	12.1	Fair	X		English ivy up trunk
492	Green Ash	<i>Fraxinus pennsylvanica</i>	11.6	11.6	Poor	X		Ash borer
493	American Sycamore	<i>Platanus occidentalis</i>	12.6	12.6	Fair	X		English ivy at base, one-sided
494	American Elm	<i>Ulmus americana</i>	8.0	8.0	Fair	X		Few water sprouts, English ivy/periwinkle at base, lean in canopy
495	Red Maple	<i>Acer rubrum</i>	26.0	26.0	Fair	X		Small topped leader, multi-trunk, some dead limbs, English ivy/periwinkle at base
496	Boxelder	<i>Acer negundo</i>	11.7	11.7	Fair			Vines up trunk, lean in canopy, periwinkle at base; Prune to ANSI A-300 Standards
497	Eastern Cottonwood	<i>Populus deltoides</i>	38.0	38.0	Fair			Lean canopy, periwinkle at base; Prune to ANSI A-300 Standards
498	Red Maple	<i>Acer rubrum</i>	8.7	8.7	Fair			Vines (recently cut) on trunk
499	Red Maple	<i>Acer rubrum</i>	23.3	23.3	Fair			English ivy, periwinkle, and multi-flora rose at base, some bulbous areas on trunk
500	Black Gum	<i>Nyssa sylvatica</i>	6.3	6.3	Fair			Crooked trunk, English ivy on tree, cut ivy at base of tree.
623	Red Maple	<i>Acer rubrum</i>	17.1	17.1	Fair	X*		Vines on trunk, some dieback
624	Red Maple	<i>Acer rubrum</i>	9.4	9.4	Fair			Vines at base, cut/remove vines
625	Tulip Poplar	<i>Liriodendron tulipifera</i>	26	26.0	Poor	X*		Significant lean
626	Red Maple	<i>Acer rubrum</i>	57.2	57.2	Fair			Large dead trunk, Double trunk, weak crotch
627	Tulip Poplar	<i>Liriodendron tulipifera</i>	5	5.0	Fair			Vines on the trunk, small water sprouts
628	White Oak	<i>Quercus alba</i>	24.5	24.5	Fair			Vines on trunk
629	Tulip Poplar	<i>Liriodendron tulipifera</i>	7.2	7.2	Fair			One-sided
630	Black Cherry	<i>Prunus serotina</i>	7.1	7.1	Fair			Vines at base, small dead limbs
631	Red Maple	<i>Acer rubrum</i>	16.3	16.3	Fair			Codominant leads, English ivy up trunk, one topped leader
632	Red Maple	<i>Acer rubrum</i>	24.2	24.2	Poor			Deadwood up trunk; no target, leave as snag
651	American Sycamore	<i>Platanus occidentalis</i>	65	65.0	Fair	X		Thick ivy on trunk, codominant leaders
652	White Mulberry	<i>Morus alba</i>	5.3	5.3	Poor	X	Shared	Invasive, covered in vines
653	Black Walnut	<i>Juglans nigra</i>	18.4	18.4	Fair		Offsite	Woody debris at base
654	Boxelder	<i>Acer negundo</i>	6.9	6.9	Poor		Offsite	Crooked trunk, cavities
655	Boxelder	<i>Acer negundo</i>	8.5	8.5	Fair		Offsite	Water sprouts
656	Black Walnut	<i>Juglans nigra</i>	22.3	22.3	Fair		Offsite	Vines on trunk, somewhat one-sided
657	Black Walnut	<i>Juglans nigra</i>	7.5	7.5	Poor		Offsite	dieback, Tartarian Honeysuckle at base
658	Tree of Heaven	<i>Ailanthus altissima</i>	10.5	10.5	Poor	X	Offsite	Dieback, invasive
659	Boxelder	<i>Acer negundo</i>	7.5	7.5	Fair	X	Shared	Many dead limbs, water sprouts
660	Green Ash	<i>Fraxinus pennsylvanica</i>	11.2	11.2	Poor	X	Shared	Dieback, ash borer
661	Eastern Cottonwood	<i>Populus deltoides</i>	36	36.0	Fair	X		Multi-trunk, suckers
662	American Sycamore	<i>Platanus occidentalis</i>	60	60.0	Good	X		Codominant leaders, English ivy up trunk
663	Boxelder	<i>Acer negundo</i>	7.5	7.5	Fair	X	Shared	Water sprouts
664	White Oak	<i>Quercus alba</i>	27.5	27.5	Fair	X		Water sprouts in upper canopy
665	Dead							
666	Tulip Poplar	<i>Liriodendron tulipifera</i>	9.8	9.8	Poor	X		Poor form, crooked trunk
667	Black Locust	<i>Robinia pseudoacacia</i>	24	24.0	Poor	X		Significant deadwood
668	Black Cherry	<i>Prunus serotina</i>	6.8	6.8	Fair	X		Codominant leaders, vines, on canopy
669	Tree of Heaven	<i>Ailanthus altissima</i>	5.8	5.8	Poor	X		Invasive, vines on tree
670	Tree of Heaven	<i>Ailanthus altissima</i>	7.3	7.3	Poor	X	Offsite	Invasive, vines on tree
671	White Mulberry	<i>Morus alba</i>						
833	Tree of Heaven	<i>Ailanthus altissima</i>	7.7	7.7	Poor	X		Crooked trunk, vines, Poison Ivy, many dead limbs, broken limbs
834	Dead							
835	Northern Red Oak	<i>Quercus rubra</i>	24.1	24.1	Poor	X		Crooked trunk, vines, many dead limbs,
836	Boxelder	<i>Acer negundo</i>	6.7	6.7	Poor	X		Covered in vines, poor form, dead/broken limbs
837	Pignut Hickory	<i>Carya glabra</i>	20.6	20.6	Poor	X		Vines, fungus on limbs, dead/broken limbs, rot at base
838	Norway Maple	<i>Acer platanoides</i>	11.4	11.4	Fair	X		One sided, dead/broken limbs, vines on trunk
839	Pignut Hickory	<i>Carya glabra</i>	17.3	17.3	Fair	X		Thin canopy, several dead/broken limbs, vines on trunk
840	White Oak	<i>Quercus alba</i>	6.2	6.2	Fair	X		Some dead limbs
841	Dead							Topped
842	Northern Red Oak	<i>Quercus rubra</i>	27.8	27.8	Poor	X		Thin canopy, several dead/broken limbs, vines on trunk
843	Boxelder	<i>Acer negundo</i>	9.4	9.4	Poor	X		Some dead limbs
844	American Beech	<i>Fagus grandifolia</i>	32	32	Poor	X		Watersprouts, dead/broken limbs, small cavities throughout
845	American Linden	<i>Tilia americana</i>	6	6	Poor	X		One-sided, rot at base, dead/broken limbs

Tree Number	Common Name	Scientific Name	Size (inches DBH)	Critical Root Zone (feet)	Condition	Remove	Offsite or Shared	Notes & Tree Preservation Recommendations
846	American Sycamore	<i>Platanus occidentalis</i>	23.8	23.8	Poor	X		Rot and cavity at base, dead/broken limbs, crooked base
847	White Oak	<i>Quercus alba</i>	7.4	7.4	Poor	X		Vines, thin canopy, dead/broken limbs
848	Dead							
849	Red Maple	<i>Acer rubrum</i>	24.3	24.3	Poor	X		Poor form, leaning, dead/broken limbs, dieback
850	Tulip Poplar	<i>Liriodendron tulipifera</i>	5.9	5.9	Fair	X*		Dead/broken limbs, vines up trunk
851	Black Cherry	<i>Prunus serotina</i>	6.3	6.3	Fair	X		Dead/broken limbs, poor form, covered in vines
852	Sweetgum	<i>Liquidambar styraciflua</i>	8.3	8.3	Fair	X		Vines up trunk, dead/broken limbs
853	Mockernut Hickory	<i>Carya tomentosa</i>	6.1	6.1	Poor	X		Dieback, dead limbs, covered in dense vines
854	Northern Red Oak	<i>Quercus rubra</i>	16.3	16.3	Fair	X		Thin canopy, dead/broken limbs
855	Mockernut Hickory	<i>Carya tomentosa</i>	6.8	6.8	Fair	X		Crooked trunk, vines, dead/broken limbs
856	Red Maple	<i>Acer rubrum</i>	16.4	16.4	Poor	X		Dead/broken limbs, watersprouts, covered in vines
857	White Oak	<i>Quercus alba</i>	22.8	22.8	Fair	X		Dead co-leader, dead/broken limbs, vines
858	Pignut Hickory	<i>Carya glabra</i>	16.5	16.5	Fair	X		Covered in vines, Poison Ivy
859	White Oak	<i>Quercus alba</i>	10.9	10.9	Fair	X		Covered in vines, some dead/broken limbs
860	Black Locust	<i>Robinia pseudoacacia</i>	19.8	19.8	Poor	X		Phototrophic growth, thin canopy, dead/broken limbs
861	Black Cherry	<i>Prunus serotina</i>	8.4	8.4	Fair	X		Crooked trunk, vines, dead/broken limbs
862	Southern Red Oak	<i>Quercus falcata</i>	35	35	Fair	X		Some dead limbs, some dieback, covered in vines
863	Mockernut Hickory	<i>Carya tomentosa</i>	6.2	6.2	Fair	X		Some dead/broken limbs
864	Red Maple	<i>Acer rubrum</i>	8.7	8.7	Fair	X		Some dead/broken limbs, vines on trunk
865	Mockernut Hickory	<i>Carya tomentosa</i>	14.4	14.4	Fair	X		Some dead/broken limbs
866	Dead							
867	Sweetgum	<i>Liquidambar styraciflua</i>	34	34	Fair	X		Double trunk, vines, dead/broken limbs
868	Norway Maple	<i>Acer platanoides</i>	5.8	5.8	Fair			Narrow rooting, Some dead/broken limbs; Prune to ANSI A-300 Standards

