

SPECIAL USE PERMIT PLAT

TOMMY'S EXPRESS - 9917 FAIRFAX BLVD

TAX MAP #48-3-13-001
9917 FAIRFAX BOULEVARD
FAIRFAX, VA 22031
02/15/2024

RECEIVED

02/27/2024

Community Dev & Planning

NOTES

- THIS APPLICATION IS REQUESTING A SPECIAL USE PERMIT TO ALLOW A CAR WASH INSIDE A COMMERCIAL RETAIL ZONE.
- THIS APPLICATION INCLUDES THE FOLLOWING SPECIAL USE PERMIT AND SPECIAL EXCEPTION APPLICATIONS:
 - SPECIAL USE PERMIT TO ALLOW A CAR WASH SERVICE BAY IN THE CR ZONE.
 - SPECIAL EXCEPTION TO SEC. 3.5.4.J.3 OF THE ZONING ORDINANCE TO ALLOW REPAIR OR SERVICE OPERATIONS, INCLUDING WASHING, TO BE CONDUCTED OUTSIDE OF A FULLY-ENCLOSED BUILDING.
 - SPECIAL EXCEPTION TO SEC. 4.5.6 OF THE ZONING ORDINANCE TO MODIFY THE TY3 REQUIREMENT ALONG THE SOUTHERN AND WESTERN PROPERTY LINES BY WAIVING THE REQUIRED FENCE OR WALL.
 - SPECIAL EXCEPTION TO SEC. 4.5.6 OF THE ZONING ORDINANCE TO ALLOW STREET TREES TO BE PLANTED AT A DISTANCE GREATER THAN 15 FEET FROM THE BACK OF CURB ALONG FAIRFAX BOULEVARD.
- THE SOURCE OF THE BOUNDARY LINES AND EXISTING IMPROVEMENTS IS AN ALTA SURVEY IS PROVIDED BY GRS GROUP, LLC DATED SEPTEMBER 18, 2020 AND MOST RECENTLY REVISED ON JANUARY 29, 2021.
- NOTWITHSTANDING THE IMPROVEMENTS AND TABULATIONS SHOWN ON THIS PLAN, THE APPLICANT RESERVES THE RIGHT TO MAKE MODIFICATIONS TO THE FINAL DESIGN IN CONSIDERATION OF FINAL ENGINEERING AND ANY NEW REGULATIONS ADOPTED BY THE CITY OF FAIRFAX SUBSEQUENT TO THE SUBMISSION OF THIS APPLICATION, PROVIDED THAT SUCH MODIFICATIONS ARE SUBSTANTIALLY CONSISTENT WITH THE APPROVED GDP/SUP PLAT.
- THE PROPOSED BUILDING FOOTPRINTS AND SITE IMPROVEMENTS SHOWN ON THIS GDP/SUP PLAT ARE PRELIMINARY AND SUBJECT TO CHANGE AT THE TIME OF SITE PLAN IN RESPONSE TO FINAL ENGINEERING, PROVIDED THAT THEY ARE SUBSTANTIALLY CONSISTENT WITH THE APPROVED GDP/SUP PLAT.
- SITE LIGHTING WILL BE DETERMINED AT THE TIME OF SITE PLAN AND WILL BE PROVIDED IN ACCORDANCE WITH THE CITY OF FAIRFAX ZONING ORDINANCE AND PUBLIC FACILITIES MANUAL.
- ALL SIGNAGE WILL BE PROVIDED IN ACCORDANCE WITH SECTION 4.6 OF THE ZONING ORDINANCE.
- THE SUBJECT PROPERTY IS SERVED BY PUBLIC WATER AND SEWER.

VICINITY MAP

SCALE: 1" = 2000'



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PROJECT DESCRIPTION

THIS PROJECT PROPOSES TO DEMOLISH THE EXISTING STRUCTURES ONSITE AND CONSTRUCT A 4,553 SF CAR WASH WITH 15 VEHICLE VACUUM SPACES. THIS PROJECT IS LOCATED AT 9917 FAIRFAX BOULEVARD, WHICH IS AT THE SOUTHEAST CORNER OF THE FAIRFAX BOULEVARD & LION RUN INTERSECTION. THIS PROPOSED USE ALIGNS WITH THE CITY OF FAIRFAX FUTURE LAND USE MAP, WHICH IDENTIFIES THE PROPERTY TO BE IN A COMMERCIAL CORRIDOR.

PROJECT TEAM

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Kimley»Horn

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KIM PROJECT	DATE	SCALE	AS SHOWN	DESIGNED BY	CNH	DRAWN BY	EPR	CHECKED BY	CNH
110730001	02/15/2024								

COVER SHEET

TOMMY'S CAR WASH
9917 FAIRFAX BLVD
PREPARED FOR
OLYMPUS PINES

VIRGINIA

CITY OF FAIRFAX

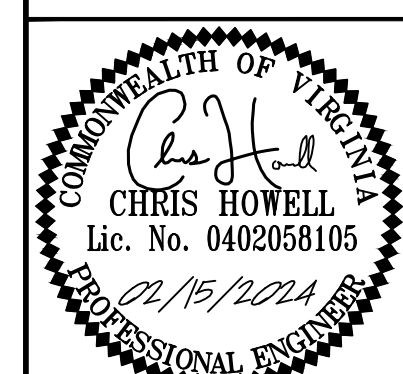
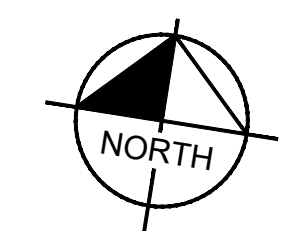
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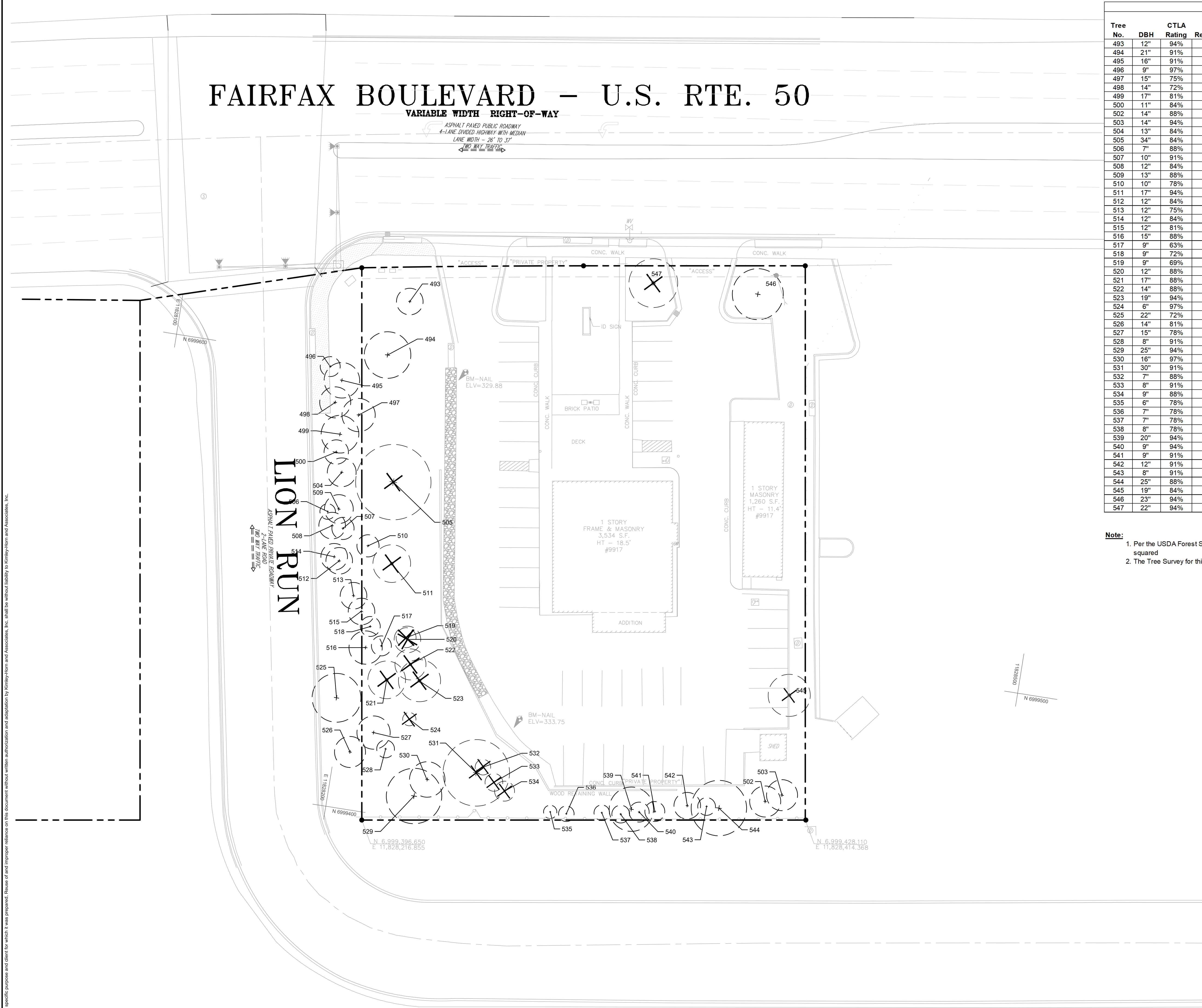


CURVE TABLE						
CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C1	5690.00'	100.00'	S80°27'02"W	100.00'	1°00'25"	50.00'

- GRAPHIC SCALE IN FEET
-
- A horizontal scale bar with tick marks at 0, 10, 20, and 40 feet. The bar is divided into alternating black and white segments: a black segment from 0 to 10, a white segment from 10 to 20, a black segment from 20 to 30, and a white segment from 30 to 40.



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Existing Tree Condition Inventory & Analysis									
Tree No.	DBH	CTLA Rating	To Be Removed?	Located within Property	Botanical Name	Common Name	Existing Canopy Coverage on Property	Tree Preservation Area	Notes
483	12"	94%		✓	Tilia cordata	Little Leaf Linden	452 SF		
484	21"	91%		✓	Tilia cordata	Little Leaf Linden	1,385 SF	1,385 SF	
495	16"	91%			Pinus virginiana	Virginia Pine			
496	9"	97%			Acer palmatum	Japanese Maple			
497	15"	75%			Quercus rubra	Northern Red Oak			
498	14"	72%			Quercus rubra	Northern Red Oak			
499	17"	81%			Quercus rubra	Northern Red Oak			
500	11"	84%			Quercus rubra	Northern Red Oak			
502	14"	88%		✓	Celtis occidentalis	Hackberry	615 SF	615 SF	
503	14"	94%		✓	Ulmus rubra	Slippery Elm	615 SF	615 SF	
504	13"	84%			Quercus rubra	Northern Red Oak			
505	34"	84%	✗	✓	Liriodendron tulipifera	Tulip Poplar	3,564 SF		
506	7"	88%			Gleditsia triacanthos	Honey Locust			
507	10"	91%			Pinus virginiana	Virginia Pine			
508	12"	84%			Gleditsia triacanthos	Honey Locust			
509	13"	88%			Pinus virginiana	Virginia Pine			
510	10"	78%			Acer rubrum	Red Maple			
511	17"	94%	✗	✓	Liriodendron tulipifera	Tulip Poplar	314 SF	314 SF	
512	12"	84%			Pinus virginiana	Virginia Pine	907 SF		
513	12"	75%			Gleditsia triacanthos	Honey Locust			
514	12"	84%			Pinus virginiana	Virginia Pine			
515	12"	81%		✓	Gleditsia triacanthos	Honey Locust	452 SF	452 SF	
516	15"	88%		✓	Gleditsia triacanthos	Honey Locust	707 SF	707 SF	
517	9"	63%		✓	Gleditsia triacanthos	Honey Locust	254 SF	254 SF	
518	9"	72%		✓	Gleditsia triacanthos	Honey Locust	254 SF	254 SF	
519	9"	69%	✗	✓	Gleditsia triacanthos	Honey Locust	254 SF		
520	12"	88%	✗	✓	Liriodendron tulipifera	Tulip Poplar	452 SF		
521	17"	88%	✗	✓	Liriodendron tulipifera	Tulip Poplar	907 SF		
522	14"	88%	✗	✓	Gleditsia triacanthos	Honey Locust	615 SF		
523	19"	94%	✗	✓	Liriodendron tulipifera	Tulip Poplar	1,134 SF		
524	6"	97%	✗	✓	Fagus grandiflora	American Beech	113 SF		
525	22"	72%			Gleditsia triacanthos	Honey Locust			
526	14"	81%			Gleditsia triacanthos	Honey Locust			
527	15"	78%		✓	Liriodendron tulipifera	Tulip Poplar	732 SF	732 SF	
528	8"	91%		✓	Fagus grandiflora	American Beech	201 SF	201 SF	
529	25"	94%		✓	Fagus grandiflora	American Beech	1,963 SF		
530	16"	97%		✓	Fagus grandiflora	American Beech	804 SF		
531	30"	91%	✗	✓	Fagus grandiflora	American Beech	2,826 SF		
532	7"	88%	✗	✓	Tsuga canadensis	Eastern Hemlock	-		
533	8"	91%	✗	✓	Tsuga canadensis	Eastern Hemlock	-		
534	9"	88%	✗	✓	Tsuga canadensis	Eastern Hemlock	-		
535	6"	78%		✓	Tsuga canadensis	Eastern Hemlock	-		Hemlock Woolly Adelgid
536	7"	78%		✓	Tsuga canadensis	Eastern Hemlock	-		Hemlock Woolly Adelgid
537	7"	78%		✓	Tsuga canadensis	Eastern Hemlock	-		Hemlock Woolly Adelgid
538	8"	78%		✓	Tsuga canadensis	Eastern Hemlock	-		Hemlock Woolly Adelgid
539	20"	94%		✓	Liriodendron tulipifera	Tulip Poplar	1,256 SF	1,256 SF	
540	9"	94%		✓	Tsuga canadensis	Eastern Hemlock	-		Hemlock Woolly Adelgid
541	9"	91%		✓	Tsuga canadensis	Eastern Hemlock	-		Hemlock Woolly Adelgid
542	12"	91%		✓	Tsuga canadensis	Eastern Hemlock	-		Hemlock Woolly Adelgid
543	8"	91%		✓	Tsuga canadensis	Eastern Hemlock	-		Hemlock Woolly Adelgid
544	25"	88%		✓	Carya alba	Mockernut Hickory	1,963 SF	1,963 SF	
545	19"	84%	✗	✓	Morus rubra	Red Mulberry	1,134 SF		
546	23"	94%		✓	Tilia cordata	Little Leaf Linden	1,661 SF	1,661 SF	
547	22"	94%	✗	✓	Tilia cordata	Little Leaf Linden	1,520 SF		
Total Existing Canopy Coverage on Property:							27,054 SF		
Tree preservation provided onsite:							10,409 SF		

- Note:**
- Per the USDA Forest Service's Forest Inventory and Analysis program manual, the overall DBH for multi-stem trees shall be the square root of the sum of all individual stems DBH's squared
 - The Tree Survey for this site was conducted by Landscape Architect & Arborist W. Davis Walker, PLA, ISA-CA (MA-6373A) on April 26, 2023.

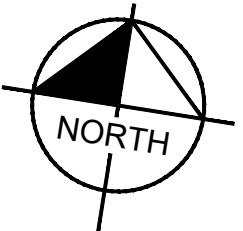
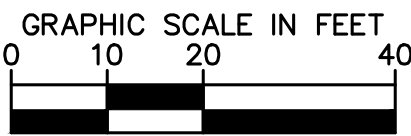
LEGEND

EXISTING TREE
REFER TO TABLE

EXISTING TREE
TO BE REMOVED



W. DAVIS WALKER
CERTIFIED ARBORIST
ISA-CA #MA6373A



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COMMONWEALTH OF VIRGINIA
CHRIS HOWELL
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04/15/2024
PROFESSIONAL ENGINEER

KHA PROJECT
110730001
DATE
02/15/2024
SCALE
AS SHOWN
DESIGNED BY
CNH
DRAWN BY
EPR
CHECKED BY
CNH

TREE SURVEY

VIRGINIA

TOMMY'S CAR WASH
9917 FAIRFAX BLVD
PREPARED FOR
OLYMPUS PINES

CITY OF FAIRFAX

SHEET NUMBER
3

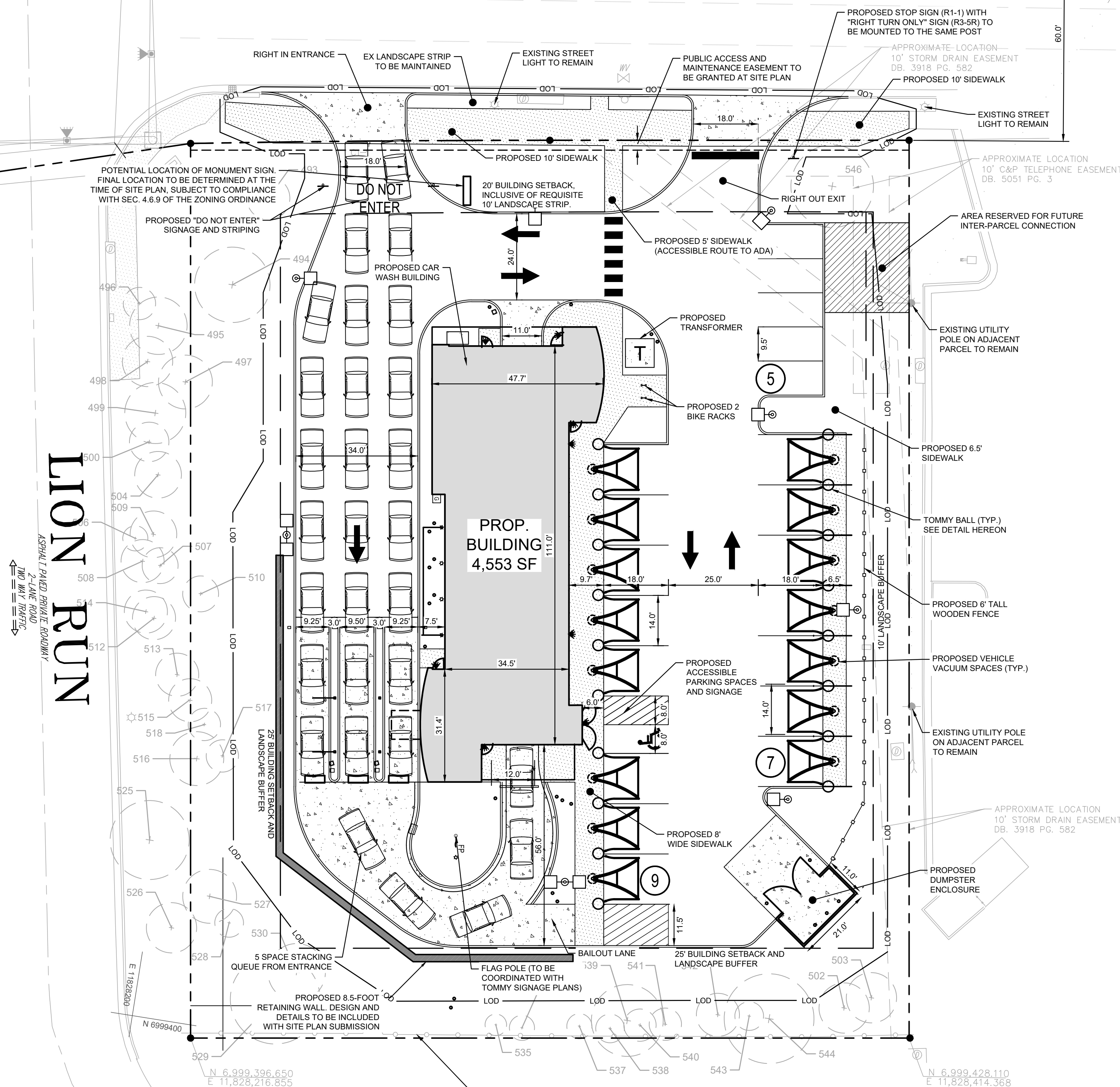
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FAIRFAX BOULEVARD – U.S. RTE. 50

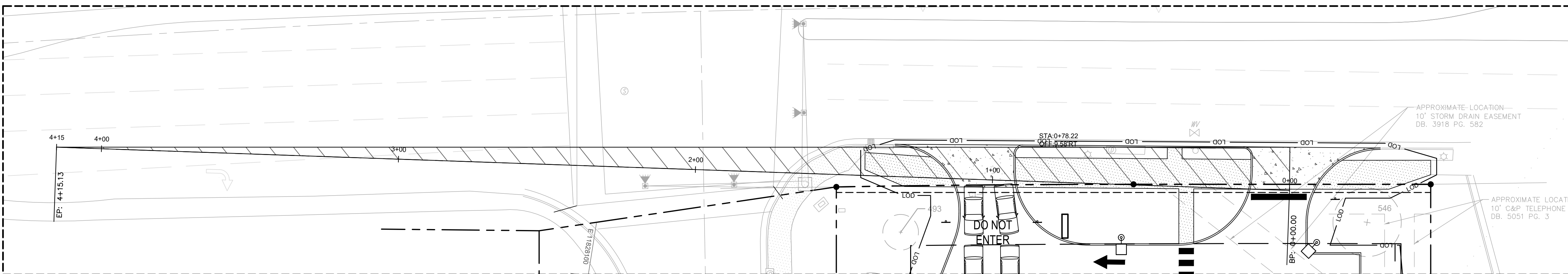
VARIABLE WIDTH RIGHT-OF-WAY

ASPHALT PAVED PUBLIC ROADWAY
4-LANE DIVIDED HIGHWAY WITH MEDIAN
LANE WIDTH – 26' TO 31'
TWO WAY TRAFFIC

CENTERLINE



SIGHT DISTANCE TRIANGLE



SITE LEGEND

- PROPERTY LINE
- BUILDING SETBACK LINE
- LANDSCAPE BUFFER LINE
- LOD LIMITS OF DISTURBANCE
- PROPOSED CURB
- PROPOSED PARKING SPACE COUNTER
- PROPOSED SIGN

PAVEMENT LEGEND

- STANDARD DUTY ASPHALT
- STANDARD DUTY CONCRETE FOR SIDEWALKS
- HEAVY DUTY CONCRETE

ZONING TABULATIONS

TAX MAP NUMBER:	48-3-13-001
PROPERTY AREA:	±1.15 ACRES
EXISTING ZONING:	CR (COMMERCIAL RETAIL)
PROPOSED ZONING:	CR (COMMERCIAL RETAIL) WITH SUP (SPECIAL USE PERMIT)
EXISTING USE:	RESTAURANT/RETAIL
PROPOSED USE:	CAR WASH
COMP PLAN LAND USE:	CC (COMMERCIAL CORRIDOR)
BUILDING AREA:	4,553 SF
PARKING REQUIRED:	1 SPACE PER EMPLOYEE = 5 SPACES
PARKING PROPOSED:	21 SPACES WITH 1 ADA
LOADING REQUIRED:	NONE FOR BUILDINGS UNDER 10,000 SF
LOADING PROVIDED:	NONE
STACKING REQUIRED:	4 SPACES MEASURED FROM ENTRANCE TO WASH BAY
STACKING PROVIDED:	30 SPACES

ZONING COMPLIANCE

	REQUIRED	PROPOSED
BUILDING YARDS		
FRONT (FAIRFAX BLVD)	20 FT	52.1 FT
SIDE STREET (LION RUN)	25 FT	65.2 FT
SIDE INTERIOR (EAST)	10 FT	82.0 FT
SIDE INTERIOR (SOUTH)	25 FT	69.7 FT
LANDSCAPE BUFFERS		
RIGHT-OF-WAY (FAIRFAX BLVD)	20 FT	25 FT
RIGHT-OF-WAY (LION RUN, WEST)	25 FT	25 FT
RIGHT-OF-WAY (LION RUN, SOUTH)	25 FT	25 FT
COMMERCIAL (EAST)	0 FT	10 FT
BULK REQUIREMENTS		
MINIMUM LOT AREA	20,000 SF	49,971
MAXIMUM BUILDING COVERAGE	60%	9.1% (4,553 / 49,971)
MAXIMUM LOT COVERAGE	85%	60.0% (29,770 / 49,971)
MAXIMUM BUILDING HEIGHT	60 FT	26.8 FT

STORMWATER NARRATIVE

IN THE EXISTING CONDITION, THE PROPERTY IS PREDOMINANTLY IMPERVIOUS WITH APPROXIMATELY 28,075 SF OF THE 49,971 SF PROPERTY COVERED BY PAVEMENT OR BUILDINGS (56.2%). GENERALLY THE PROPERTY SLOPES SOUTH TO NORTH OF THE SITE AS LARGE PORTIONS OF THE PARKING LOT SHEET FLOW INTO FAIRFAX BOULEVARD. ULTIMATELY ALL RUNOFF FROM THE PROPERTY IS COLLECTED IN STORM DRAIN INLETS AND CONVEYED WEST ALONG FAIRFAX BOULEVARD.

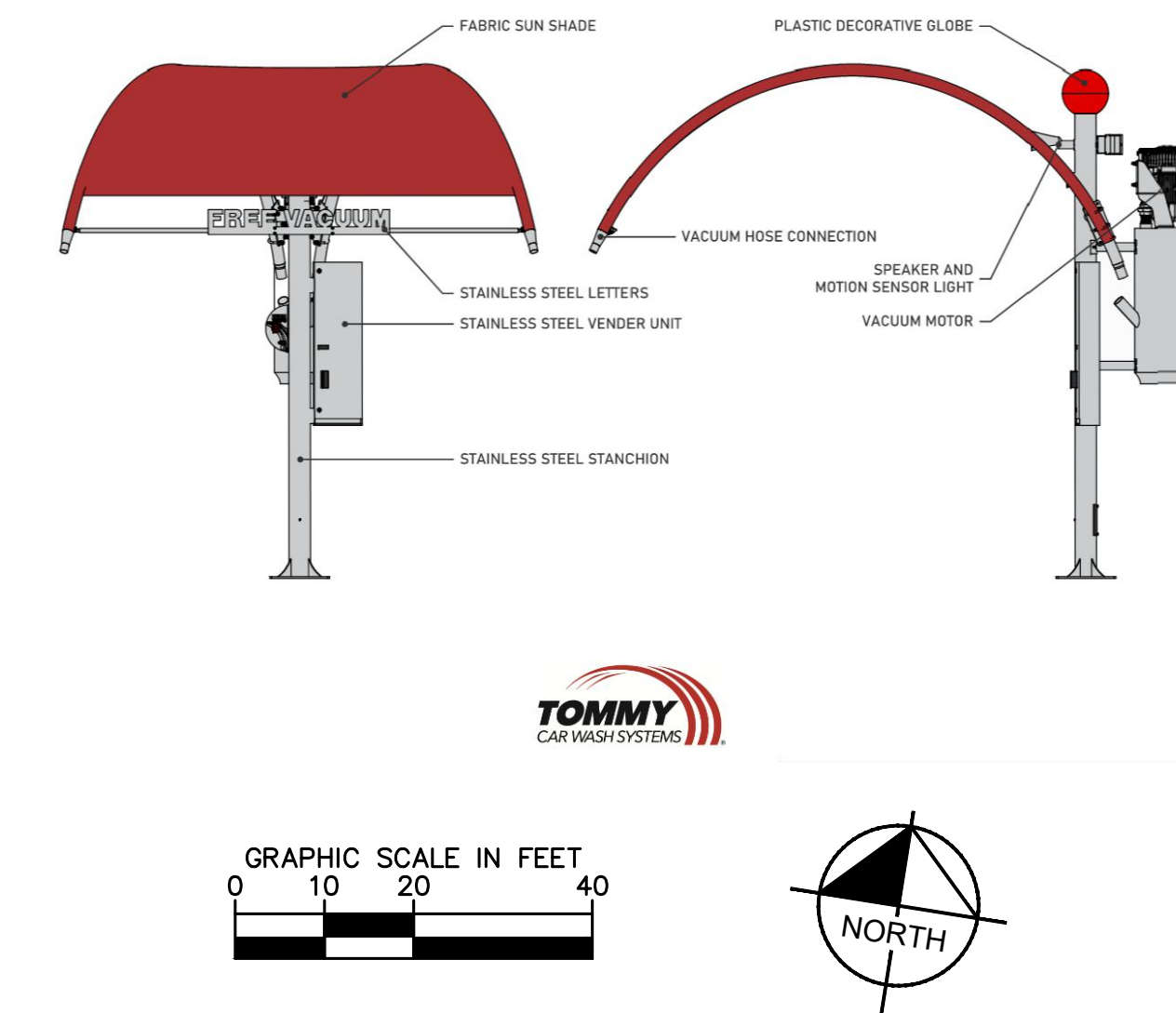
IN THE PROPOSED CONDITION, APPROXIMATELY 875 SF OF IMPERVIOUS COVER WILL BE ADDED, RESULTING IN A PROPOSED LOT COVERAGE OF 60.0%. SITE TOPOGRAPHY WILL REMAIN THE SAME AS THE SITE WILL CONTINUE TO SLOPE TOWARDS FAIRFAX BOULEVARD. A DRAINAGE NETWORK IS PROPOSED ON SITE AND STORMWATER MANAGEMENT WILL BE PROVIDED VIA A PROPOSED UNDERGROUND DETENTION FACILITY.

THE PROPOSED DETENTION BASIN WITH ISOLATOR ROW IS DESIGNED TO MEET CHANNEL PROTECTION, FLOOD PROTECTION, AND WATER QUALITY REQUIREMENTS ESTABLISHED BY VIRGINIA DEQ.

NOTE

ALL PORTIONS OF EXISTING OR PROPOSED SIDEWALKS ON PRIVATE PROPERTY WILL BE SUBJECT TO A PUBLIC ACCESS EASEMENT.

TOMMY CAR WASH SYSTEMS - VACCUM ELEVATIONS



TOMMY'S CAR WASH
9917 FAIRFAX BLVD
PREPARED FOR
OLYMPUS PINES

CITY OF FAIRFAX

SHEET NUMBER
4

SPECIAL USE PERMIT PLAT

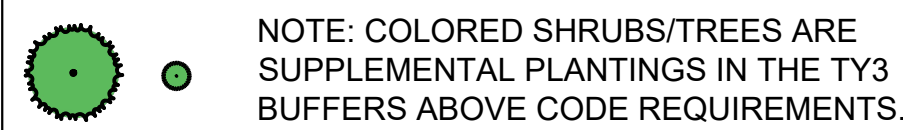
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REVISIONS
No.
DATE
BY

VARIABLE WIDTH RIGHT-OF-WAY

ASPHALT PAVED PUBLIC ROADWAY
4-LANE DIVIDED HIGHWAY WITH MEDIAN
LANE WIDTH - 26' TO 37'
TWO WAY TRAFFIC



LANDSCAPE SCHEDULE

Qty.	Key	Botanical Name	Common Name	Size	Type	10 Yr. Canopy
Canopy Tree						
4	GB	<i>Quercus biloba</i> 'Princeton Sentry'	Princeton Sentry Ginkgo	3.5" Cal	B & B	75
4	QP	<i>Quercus phellos</i>	Willow Oak	3.5" Cal	B & B	250
4	UV	<i>Ulmus americana</i> 'Valley Forge'	American Elm	3.5" Cal	B & B	250
Canopy Trees Subtotal:						2,000
Understory Trees						
6	CV	<i>Chonanthus virginicus</i>	White Fringetree	3.5" Cal	B & B	125
6	CM	<i>Cornus mas</i>	Common Cherry Dogwood	3.5" Cal	B & B	125
7	OV	<i>Ostrya virginiana</i>	Eastern Hophornbeam	3.5" Cal	B & B	125
Understory Trees Subtotal:						2,375
Evergreen Trees						
1	IN2	<i>Ilex x 'Nellie R. Stevens'</i>	Nellie R. Steven Holly	6 FL. Ht.	B & B	135
Evergreen Tree Subtotal:						135
						Total (s.f.) 4,510
Shrubs						
35	CH2	<i>Cephalotaxus harringtonii</i> 'Fastigiata'	Upright Japanese Plum Yew	30" Ht.	Cont.	
23	EKM	<i>Eucynotus katuschovicus</i> 'Manhattan'	Manhattan Euonymus	30" Ht.	Cont.	
39	ICC2	<i>Ilex crenata</i> 'Compacta'	Dwarf Japanese Holly	30" Ht.	Cont.	
24	IGL	<i>Ilex glabra</i>	Ikberry Holly	30" Ht.	Cont.	
11	IV2	<i>Ilex virginica</i> 'Little Henry'	Little Henry Virginia Sweetpire	30" Ht.	Cont.	
27	NCE	<i>Nerola cerifera</i> 'Fairfax'	Fairfax Wax Myrtle	30" Ht.	Cont.	
26	PYS2	<i>Panicum virgatum</i> 'Shenandoah'	Shenandoah Switchgrass	30" Ht.	Cont.	
30	RDV	<i>Rhododendron x 'Delaware Valley White'</i>	Delaware Valley White Azalea	30" Ht.	Cont.	
Groundcover						
334	LMV	<i>Liriope muscari</i> 'Variegata'	Variegated Lily Turf	1 gal.	Cont.	

Note

1. Any changes to the Landscape Schedule is subject to approval by the City of Fairfax's Urban Forester

TREE CANOPY TABULATIONS

Per Zoning Code 4.5.6.A

Site Area	50,094 S
Development District: Commerical Retail	
Existing Tree Canopy	27,054 S
Tree Canopy Required (10% required)	5,009 S
Tree Canopy Provided through Tree Preservation	10,409 S
Tree Canopy Provided through Planting	4,510 S
Total Canopy Provided	14,919 S

TRANSITIONAL YARDS

Per Zoning Code 4.5.5

Proposed Development District: **Commercial Retail**

<u>Location</u>	<u>Adjacent Development District</u>	<u>Width</u>	<u>Transitional Yard Required</u>
North Boundary	Commercial Retail		None
East Boundary	Commercial Retail		None
South Boundary	Residential Medium (RM)	15 LF	Transitional Yard 3
West Boundary	Residential Medium (RM)	15 LF	Transitional Yard 3

Buffer Tabulations

Per Zoning Code 4.5.5

South Boundary		Length = 189 LF
Buffer Type:	Transitional Yard 3	
<u>Plant Material Type</u>	<u>Quantity Required</u>	<u>Quantity Provided</u>
Canopy Tree	(4/100 LF) = 8	4
Existing Trees		4
Understory Tree	(4/100 LF) = 8	8
Shrubs	(4/100 LF) = 8	8

West Boundary		Length = 240 LF
Buffer Type:	Transitional Yard 3	
<u>Plant Material Type</u>	<u>Quantity Required</u>	<u>Quantity Provided</u>
Canopy Tree	(4/100 LF) = 10	2
Existing Trees		8
Understory Tree	(4/100 LF) = 10	10
Shrubs	(4/100 LF) = 10	10

STREET TREES

Per Zoning Code 4.5.6.B

Number of Street Trees Required (1 per 40 LF)		Length	Trees
Fairfax Boulevard	150 LF		4
Lion Run	248 LF		7
Trees Provided			Trees
Fairfax Boulevard			4 (Note
Lion Run			0 (Note

Note

1. Street trees along Fairfax Boulevard are located behind the 10' shared use path to maintain safe sight triangles per Sec. 4.5.6.B.2.
2. Existing Trees along Lion Run to remain undisturbed, therefore Street trees are not provided.

INTERIOR PARKING LANDSCAPING

Per Zoning Code 4.5.7.D

Number of Parking Spaces Provided	2
Trees Required (1 per 10 parking spaces)	
Proposed Trees Provided:	
Existing Trees to Remain	

Note

1. All portions with frontage along a public right of way shall be screened with a continuous hedge, 30" min at time of planting per Zoning Code 4.5.7.C.1

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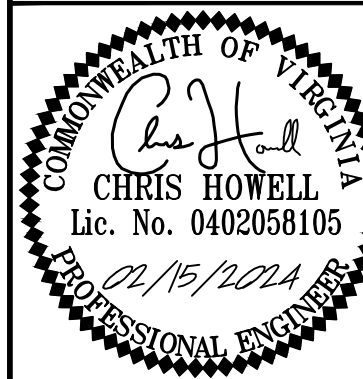
CITY OF FAIRFAX

SHEET NUMBER

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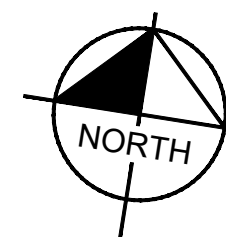
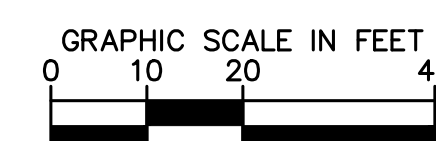
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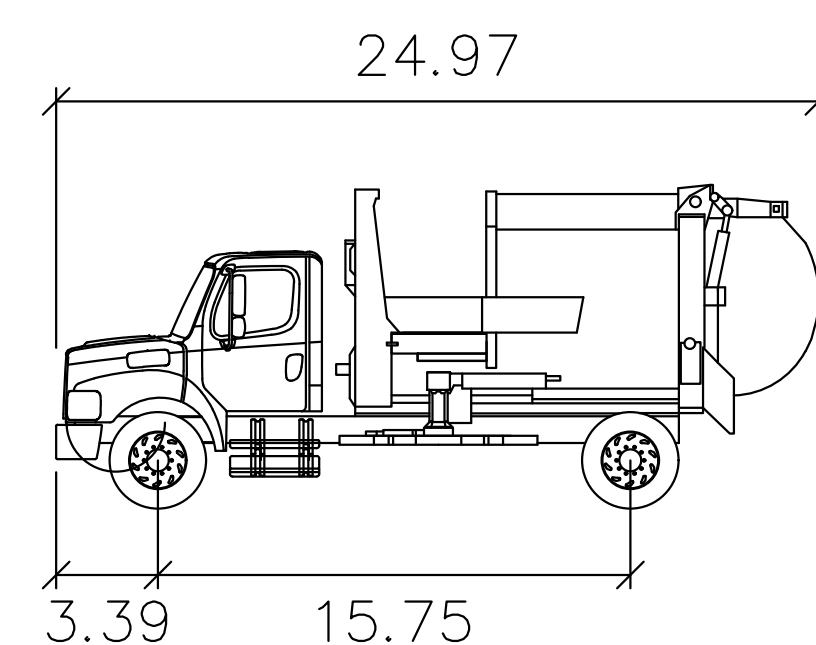
KHA PROJECT	DATE
110790001	02/15/2024

CONCEPTUAL LANDSCAPE PLAN

VIRGINIA



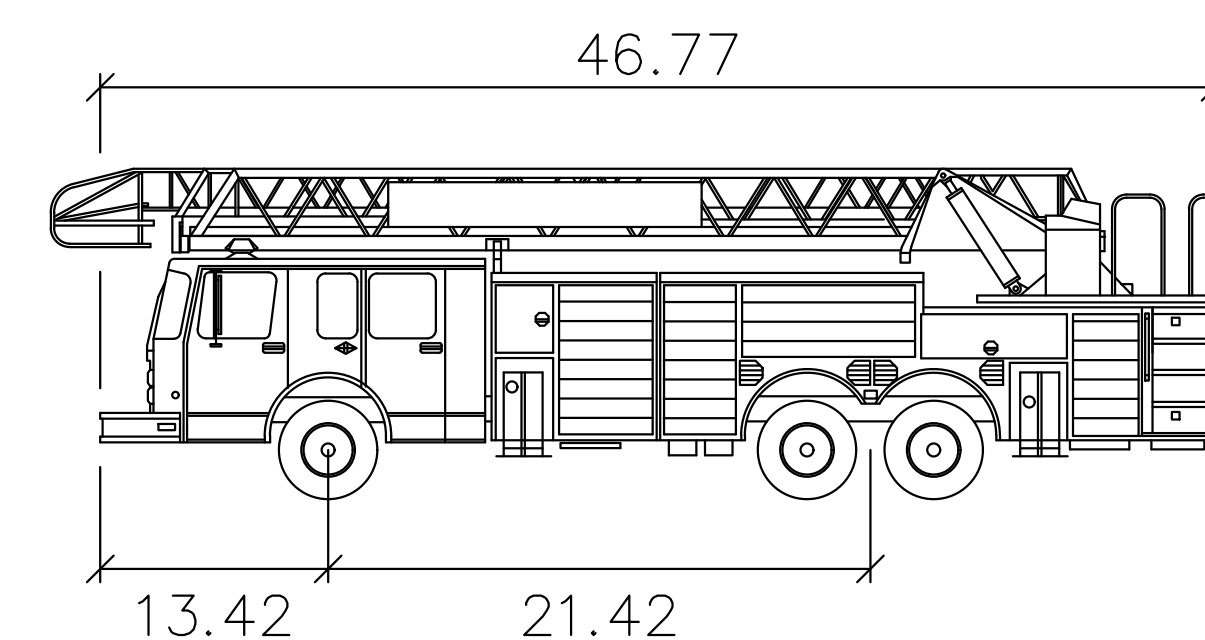
FAIRFAX BOULEVARD — U.S. RTE. 50
VARIABLE WIDTH RIGHT-OF-WAY



Wayne AutoCat

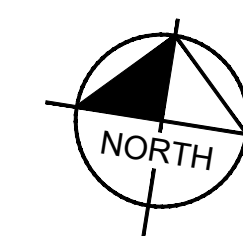
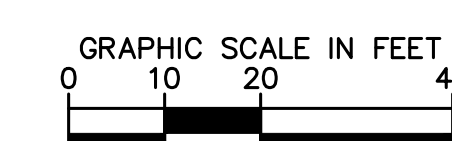
	feet
Width	: 8.17
Track	: 7.97
Lock to Lock Time	: 6.0
Steering Angle	: 47.1

FAIRFAX BOULEVARD — U.S. RTE. 50
VARIABLE WIDTH RIGHT-OF-WAY



City of Fairfax Tower Ladder 403

	feet
Width	: 10.17
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 39.1



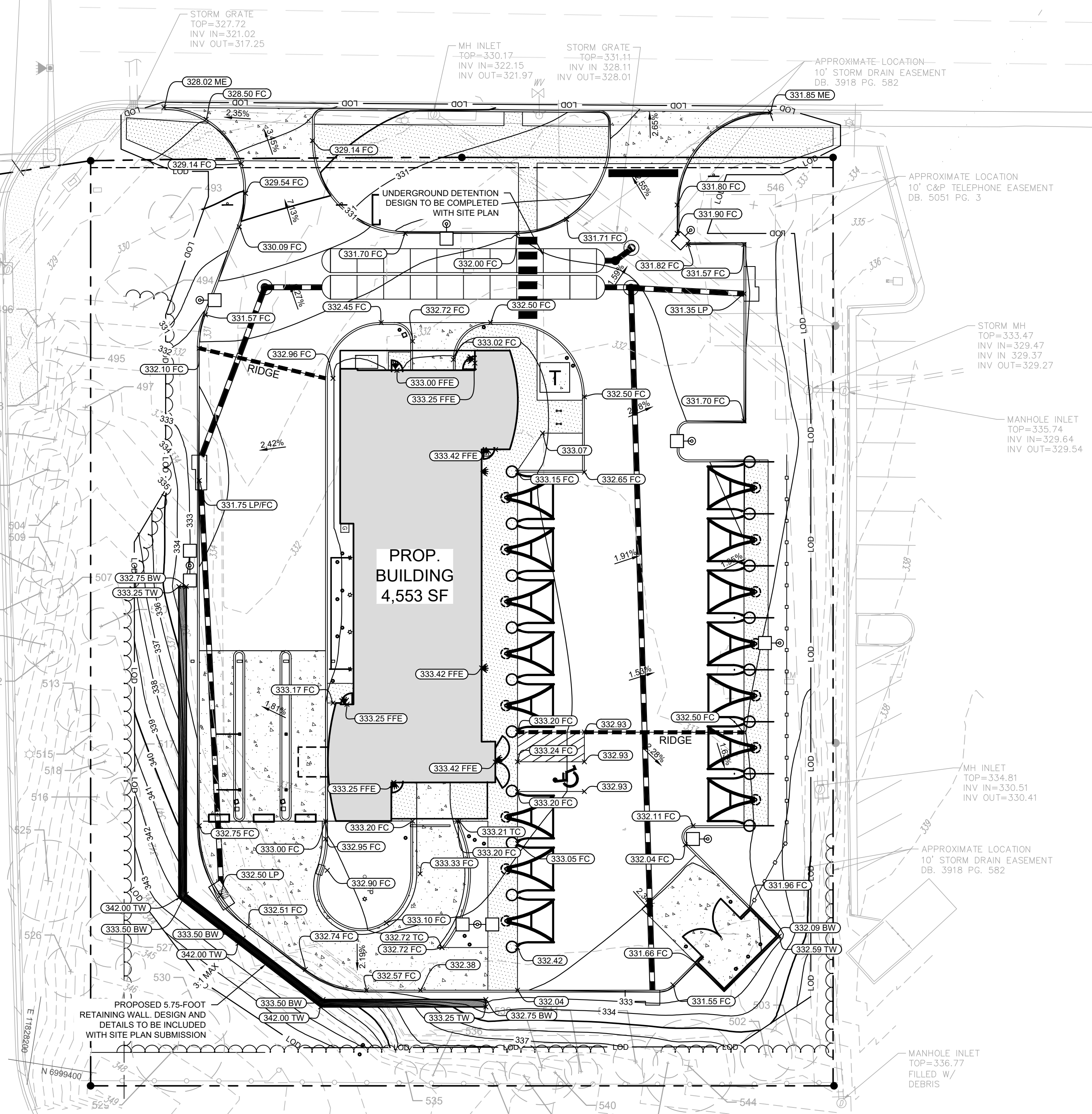
FAIRFAX BOULEVARD – U.S. RTE. 50

VARIABLE WIDTH RIGHT-OF-WAY

ASPHALT PAVED PUBLIC ROADWAY
4-LANE DIVIDED HIGHWAY WITH MEDIAN
LANE WIDTH - 26' TO 31'
LEFT WAY TRAFFIC

LION RUN

ASPHALT PAVED PRIVATE ROADWAY
2-LANE ROAD
LANE WIDTH - 26' TO 31'



GRADING LEGEND

- PROPERTY LINE
- BUILDING SETBACK LINE
- LANDSCAPE BUFFER LINE
- LOD LIMITS OF DISTURBANCE (79,600 SF OR 1.83 ACRES)
- XXX EXISTING CONTOUR
- XXX PROPOSED CONTOUR
- XXX.XX PROPOSED SLOPE
- XXX.XX PROPOSED SPOT ELEVATION

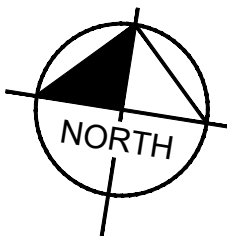
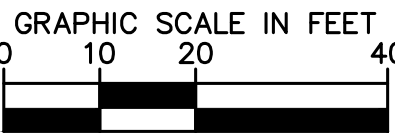
SPOT ELEVATION LEGEND

- ME MATCH EXISTING
- LP LOW POINT
- TC TOP OF CURB
- FC FACE OF CURB
- FFE FINISHED FLOOR ELEVATION

(UNLABELED SPOT ELEVATIONS ARE ASSUMED TO BE AT THE FLOWLINE)

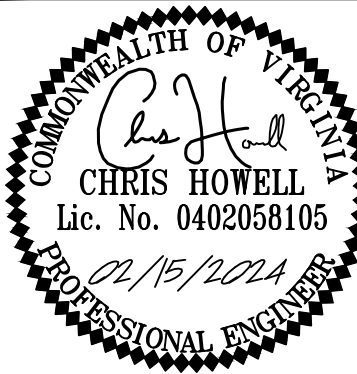
NOTE

THIS PRELIMINARY GRADING PLAN REFLECTS THE PROPOSED ROUGH GRADED CONDITIONS FOR THE SITE. IT IS INTENDED TO GIVE A GENERAL INDICATION OF HOW THE SITE WILL INTERACT WITH THE ADJACENT TOPOGRAPHY. IT IS NOT INTENDED TO DEMONSTRATE COMPLIANCE WITH ADA REGULATIONS.



Kimley»Horn

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11400 COMMERCE PARK DR., SUITE 400, RESTON, VA 20191
PHONE 703-674-1300 FAX 703-674-1350
WWW.KIMLEY-HORN.COM



KHA PROJECT	DATE	SCALE	AS SHOWN	DESIGNED BY	CHECKED BY
110730001	02/15/2024	SCALE	AS SHOWN	CMH	CMH
		DRAWN BY	EPR		

PRELIMINARY GRADING PLAN

TOMMY'S CAR WASH
9917 FAIRFAX BLVD
PREPARED FOR
OLYMPUS PINES

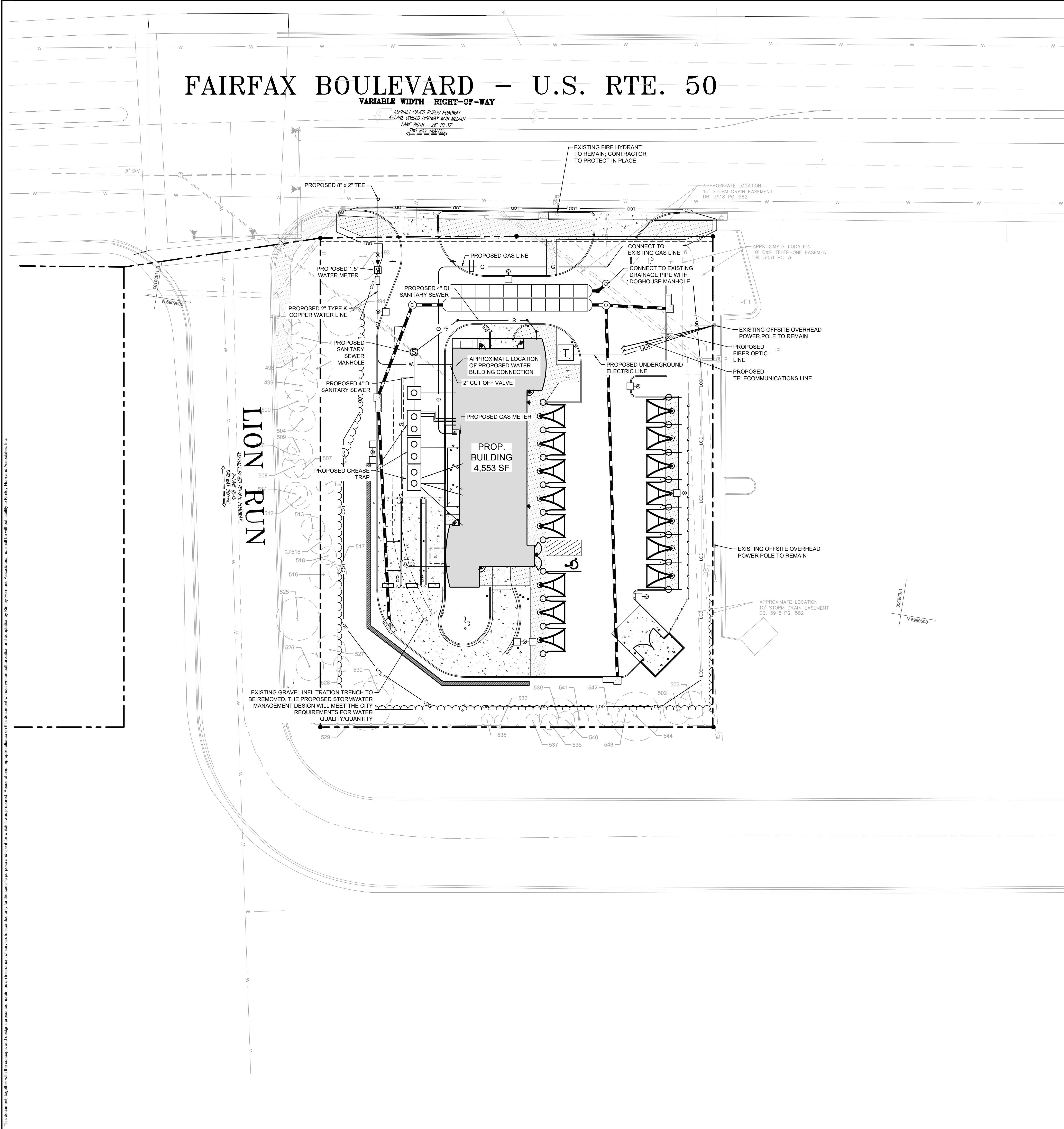
VIRGINIA

CITY OF FAIRFAX

SHEET NUMBER

7

This document, together with the contracts and designs referenced herein, is an instrument of service. It is intended only for the specific purpose and client for which it was prepared. Plans of and/or portions thereof are not to be used for any other purpose without the written authorization and signature of Kimley-Horn and Associates, Inc. It shall be without liability to Kimley-Horn and Associates, Inc.

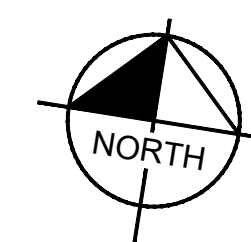
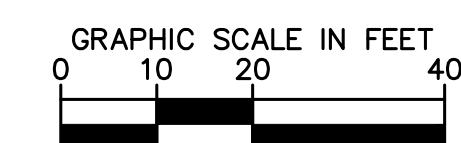


SITE LEGEND

- PROPERTY LINE
- W — WATER LINE
- S — SANITARY SEWER LINE
- UGE — ELECTRIC
- FO — FIBER OPTIC
- G — GAS
- T — TELECOMMUNICATION
- ☆ LIGHT POLE
- M WATER METER
- SANITARY SEWER CLEANOUT (SSCO)
- ⊙ SANITARY SEWER MANHOLE (SSMH)

NOTE

THIS PRELIMINARY UTILITY PLAN REFLECTS THE PROPOSED SCHEMATIC UTILITY DESIGN FOR THE SITE. UTILITY ROUTING AND CONNECTIONS ARE SUBJECT TO CHANGE DURING FINAL ENGINEERING DESIGN.

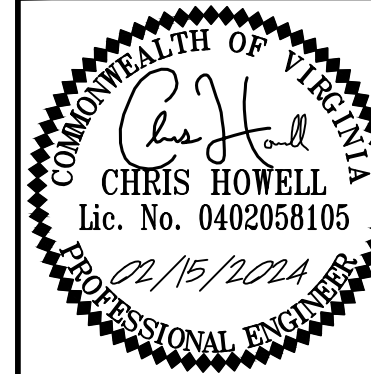


TOMMY'S CAR WASH
9917 FAIRFAX BLVD
PREPARED FOR
OLYMPUS PINES

CITY OF FAIRFAX

PRELIMINARY UTILITY PLAN

KHA PROJECT	DATE	SCALE	AS SHOWN	DESIGNED BY	CMH	CHECKED BY	CMH
110730001	02/15/2024	SCALE	AS SHOWN	DESIGNED BY	CMH	CHECKED BY	CMH



Kimley»Horn
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REVISIONS

No.

By

Date

FAIRFAX BOULEVARD – U.S. RTE. 50

VARIABLE WIDTH RIGHT-OF-WAY

ASPHALT PAVED PUBLIC ROADWAY
4-LANE DIVIDED HIGHWAY WITH MEDIAN
LANE WIDTH - 26' TO 31'
40' R/W PLATING

LION RUN

ASPHALT PAVED PRIVATE ROADWAY

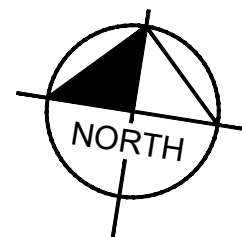
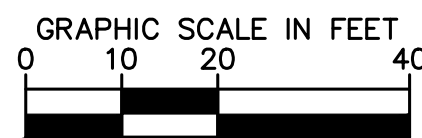
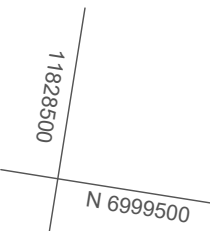
LANE WIDTH - 26' TO 31'

40' R/W PLATING

PROP.
BUILDING
4,553 SF

LINE TABLE		
LINE	LENGTH	BEARING

CURVE TABLE				
CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD
C1	5690.00'	100.00'	S80°2'7"02"W	100.0



AREA LIGHTS ON NEW 17 FT. POLES MOUNTED ON 3 FT. CONCRETE BASES

FOOTCANDLE LEVELS CALCULATED AT GRADE USING INITIAL LUMEN VALUES

LABEL	AVG	MAX	MIN	AVG/MIN	MAX/MIN
PAVED AREA	3.41	22.0	0.7	4.87	31.43
UNDEFINED	0.87	20.6	0.0	N.A.	N.A.
UNDER CANOPY	51.75	65	34	1.52	1.91

LUMINAIRE SCHEDULE

SYMBOL	QTY	LABEL	ARRANGEMENT	LUMENS	LLF	BUG RATING	WATTS/LUMINAIRE	TOTAL WATTS	MANUFACTURER	CATALOG LOGIC
	6	A4	Single	8574	1.030	B1-U0-G2	72	432	Cree Inc	OSQ-ML-B-XX-XX + OSQM-B-11L-57K7-4M-UL-NM-XX-Q9 + OSQ-BLSMF
	1	A4-1	Back-Back	8574	1.030	B1-U0-G2	72	144	Cree Inc	OSQ-ML-B-XX-XX + OSQM-B-11L-57K7-4M-UL-NM-XX-Q9 + OSQ-BLSMF
	1	A4-2	Twin	8574	1.030	B1-U0-G2	72	144	Cree Inc	OSQ-ML-B-XX-XX + OSQM-B-11L-57K7-4M-UL-NM-XX-Q9 + OSQ-BLSMF
	6	C	Single	11280	1.030	B3-U0-G0	101	606	CREE, INC.	CAN-304-PS-XX-06-E-UL-XX-525-57K-DIM
	4	F1	Single	4330	1.040	B2-U0-G0	37	148	CREE, INC.	FLD-EDG-N6-AA-02-E-UL-XX-525-57K
	2	W1	Single	12678	1.030	B3-U0-G2	134	268	Cree Inc.	SEC-EDG-4M-WM-06-E-UL-XX-700-57K-DIM
	6	X1	Single	657	1.000	N.A.	6	36	BARRON LGHTING GROUP	SLW-15-4K-XX-EM

LUMINAIRE LOCATION SUMMARY

LUM NO.	LABEL	MTG. HT.
1	A4	20
2	A4	20
3	A4	20
4	A4	20
5	A4	20
6	A4	20
7	A4-1	20
8	A4-2	20
9	C	15
10	C	15
11	C	15
12	C	15
13	C	15
14	C	15
15	F1	18.5
16	F1	1
17	F1	1
18	F1	1
19	W1	15
20	W1	15
21	X1	9
22	X1	9
23	X1	9
24	X1	9
25	X1	9
26	X1	9

TOMMY'S CAR WASH
9917 FAIRFAX BLVD
PREPARED FOR
OLYMPUS PINES

PHOTOMETRIC PLAN

KMA PROJECT
110730001
DATE
02/15/2024
SCALE
AS SHOWN
DESIGNED BY
CNH
DRAWN BY
EPR
CHECKED BY
CNH



Kimley»Horn
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No.
REVISIONS
DATE
BY

QTY	LABEL	DESCRIPTION
6	A4	OSQ-ML-B-XX-XX + OSQM-B-11L-57K7-4M-UL-NM-XX-Q9 + OSQ-BLSMF
1	A4-1	OSQ-ML-B-XX-XX + OSQM-B-11L-57K7-4M-UL-NM-XX-Q9 + OSQ-BLSMF
1	A4-2	OSQ-ML-B-XX-XX + OSQM-B-11L-57K7-4M-UL-NM-XX-Q9 + OSQ-BLSMF

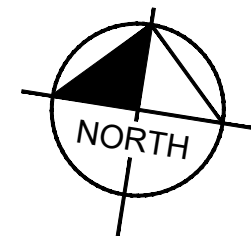
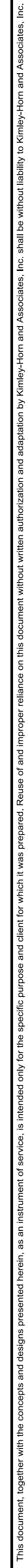
ADDITIONAL FIXTURE INFO

OSQ Series

OSQ™ LED Area/Flood Luminaire featuring Cree TrueWhite® Technology - Medium & Large

Product Description

The OSQ™ Area/Flood Luminaire blends extreme optical control, advanced thermal management and robust, clear extrusions. Built to last, the housing is ruggedized aluminum with an integral, waterproof LED driver compartment. Featuring ruggedized components offer simple installation. Its low profile design integrates well with freestanding and flush-mount applications. The slim profile, low glare, and high output make it a suitable upgrade for most applications. The OSQ Series is available in 100W, 150W, 200W, 300W, 400W, 500W, 600W, 700W, 800W, 900W, 1000W, 1200W, 1500W, 1800W, 2000W, 2500W, 3000W, 3500W, 4000W, 4500W, 5000W, 5500W, 6000W, 6500W, 7000W, 7500W, 8000W, 8500W, 9000W, 9500W, 10000W, 10500W, 11000W, 11500W, 12000W, 12500W, 13000W, 13500W, 14000W, 14500W, 15000W, 15500W, 16000W, 16500W, 17000W, 17500W, 18000W, 18500W, 19000W, 19500W, 20000W, 20500W, 21000W, 21500W, 22000W, 22500W, 23000W, 23500W, 24000W, 24500W, 25000W, 25500W, 26000W, 26500W, 27000W, 27500W, 28000W, 28500W, 29000W, 29500W, 30000W, 30500W, 31000W, 31500W, 32000W, 32500W, 33000W, 33500W, 34000W, 34500W, 35000W, 35500W, 36000W, 36500W, 37000W, 37500W, 38000W, 38500W, 39000W, 39500W, 40000W, 40500W, 41000W, 41500W, 42000W, 42500W, 43000W, 43500W, 44000W, 44500W, 45000W, 45500W, 46000W, 46500W, 47000W, 47500W, 48000W, 48500W, 49000W, 49500W, 50000W, 50500W, 51000W, 51500W, 52000W, 52500W, 53000W, 53500W, 54000W, 54500W, 55000W, 55500W, 56000W, 56500W, 57000W, 57500W, 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Project Name:

Tommy's Fairfax

Date:

02/15/204

Linear Development Project?

No

CLEAR ALL

(Ctrl+Shift+R)

data input cells

constant values

calculation cells

final results

Site Information

Post-Development Project (Treatment Volume and Loads)

Enter Total Disturbed Area (acres) →

1.01

Maximum reduction required:

20%

The site's net increase in impervious cover (acres) is:

0.016

Post-Development TP Load Reduction for Site (lb/yr):

0.38

Check:

BMP Design Specifications List:

3013 Draft Stds & Specs

Linear project?

No

Land cover areas entered correctly?

✓

Total disturbed area entered?

✓

Pre-ReDevelopment Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed forest/open space					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be		0.26			0.26
Impervious Cover (acres)		0.75			0.75
					1.01

Post-Development Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be		0.25	0.00		0.25
Impervious Cover (acres)		0.77			0.77
Area Check	OK.	OK.	OK.	OK.	1.01

Constants

Annual Rainfall (inches)	43
Target Rainfall Event (inches)	1.00
Total Phosphorus (TP) EMC (mg/L)	0.26
Total Nitrogen (TN) EMC (mg/L)	1.86
Target TP Load (lb/acre/yr)	0.41
Pj (unitless correction factor)	0.90

Runoff Coefficients (Rv)

	A Soils	B Soils	C Soils	D Soils
Forest/Open Space	0.02	0.03	0.04	0.05
Managed Turf	0.15	0.20	0.22	0.25
Impervious Cover	0.95	0.95	0.95	0.95

LAND COVER SUMMARY -- PRE-REDEVELOPMENT

Land Cover Summary-Pre		
Pre-ReDevelopment	Listed	Adjusted ¹
Forest/Open Space Cover (acres)	0.00	0.00
Weighted Rv(forest)	0.00	0.00
% Forest	0%	0%
Managed Turf Cover (acres)	0.26	0.25
Weighted Rv(turf)	0.20	0.20
% Managed Turf	26%	25%
Impervious Cover (acres)	0.75	0.75
Rv(impervious)	0.95	0.95
% Impervious	74%	75%
Total Site Area (acres)	1.01	0.99
Site Rv	0.76	0.77

Treatment Volume and Nutrient Load

Pre-ReDevelopment Treatment Volume (acre-ft)	0.0636	0.0634
Pre-ReDevelopment Treatment Volume (cubic feet)	2,772	2,761
Pre-ReDevelopment TP Load (lb/yr)	1.74	1.73
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	1.72	1.75
Baseline TP Load (lb/yr) (0.41 lbs/acre/yr applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)		0.41

LAND COVER SUMMARY -- POST DEVELOPMENT

Land Cover Summary-Post (Final)

Post ReDev. & New Impervious

Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.25
Weighted Rv (turf)	0.20
% Managed Turf	24%
Impervious Cover (acres)	0.77
Rv(impervious)	0.95
% Impervious	76%
Final Site Area (acres)	1.01
Final Post Dev Site Rv	0.77

Land Cover Summary-Post

Post-ReDevelopment

Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.25
Weighted Rv (turf)	0.20
% Managed Turf	25%
ReDev. Impervious Cover (acres)	0.75
Rv(impervious)	0.95
% Impervious	75%
Total ReDev. Site Area (acres)	0.99
ReDev Site Rv	0.77

Land Cover Summary-Post

Post-Development New Impervious

New Impervious Cover (acres)	0.02
Rv(impervious)	0.95

Final Post-Development Treatment Volume (acre-ft) 0.0646 || Final Post-Development Treatment Volume (cubic feet) | 2,816 |
Final Post-Development TP Load (lb/yr)	1.77
Final Post-Development TP Load per acre (lb/acre/yr)	1.75
Max. Reduction Required (Below Pre-ReDevelopment Load)	20%
TP Load Reduction Required for Redeveloped Area (lb/yr)	0.35

Post-Development Treatment Volume (acre-ft) 0.0634 || Post-Development Treatment Volume (cubic feet) | 2,761 |
| Post-Development TP Load (lb/yr) | 1.73 |
| Post-Development TP Load (lb/yr) | 0.03 |

TP Load Reduction Required for New Impervious Area (lb/yr) 0.03 |

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr)0.38

Nitrogen Loads (Informational Purposes Only)

Pre-ReDevelopment TN Load (lb/yr)

12.46

Final Post-Development TN Load (Post-ReDevelopment & New Impervious) (lb/yr)

12.66

Adjusted Land Cover Summary:

Pre ReDevelopment land cover minus pervious land cover (forest/open space or managed turf) acreage proposed for new impervious cover.

Adjusted total acreage is consistent with Post-ReDevelopment acreage (minus acreage of new impervious cover).

Column 1 shows load reduction requirement for new impervious cover (based on new development load limit, 0.41 lbs/acre/year).

Drainage Area A

CLEAR BMP AREAS

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.00	0.00
Managed Turf (acres)		0.20	0.00		0.20	0.20
Impervious Cover (acres)		0.59	0.00		0.59	0.95
Total					0.79	

Stormwater Best Management Practices (RR = Runoff Reduction)

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft³)	Runoff Reduction (ft³)	Remaining Runoff Volume (ft³)	Total BMP Treatment Volume (ft³)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
14. Manufactured Treatment Devices (no RR)													
14.a. Manufactured Treatment Device-Hydrodynamic	0			0	0	0	0	20	0.00	0.00	0.00	0.00	
14.b. Manufactured Treatment Device-Filtering	0	0.20	0.59	0	0	2,191	2,191	40	0.00	1.37	0.55	0.82	
14.c. Manufactured Treatment Device-Generic	0			0	0	0	0	20	0.00	0.00	0.00	0.00	

TOTAL IMPERVIOUS COVER TREATED (ac)0.59

TOTAL MANAGED TURF AREA TREATED (ac)0.20

AREA CHECK: OK.

AREA CHECK: OK.

TOTAL PHOSPHORUS REMOVAL REQUIRED ON SITE (lb/yr)0.38

TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. A (lb/yr)1.38

TOTAL PHOSPHORUS REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)0.55

TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)0.00

TOTAL PHOSPHORUS LOAD REDUCTION ACHIEVED IN D.A. A (lb/yr)0.55

TOTAL PHOSPHORUS REMAINING AFTER APPLYING BMP LOAD REDUCTIONS IN D.A. A (lb/yr)0.83

SEE WATER QUALITY COMPLIANCE TAB FOR SITE COMPLIANCE CALCULATIONS

NITROGEN REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)0.00

NITROGEN REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)0.00

TOTAL NITROGEN REMOVED IN D.A. A (lb/yr)0.00

Site Results (Water Quality Compliance)

Area Checks

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
FOREST/OPEN SPACE (ac)	0.00	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER (ac)	0.59	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	0.59	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	0.20	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	0.20	0.00	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

Site Treatment Volume (ft³)2,816

Runoff Reduction Volume and TP By Drainage Area

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	TOTAL
RUNOFF REDUCTION VOLUME ACHIEVED (ft³)	0	0	0	0	0	0
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	1.38	0.00	0.00	0.00	0.00	1.38
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.55	0.00	0.00	0.00	0.00	0.55
TP LOAD REMAINING (lb/yr)	0.83	0.00	0.00	0.00	0.00	0.83
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.00	0.00	0.00	0.00	0.00	0.00
Total Phosphorus						
FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	1.77					
TP LOAD REDUCTION REQUIRED (lb/yr)	0.38					
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.55					
TP LOAD REMAINING (lb/yr)	1.22					
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.00	**				
** TARGET TP REDUCTION EXCEEDED BY 0.17 LB/YEAR **						
Total Nitrogen (For Informational Purposes)						
POST-DEVELOPMENT LOAD (lb/yr)	12.66					
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.00					
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	12.66					

WATER QUALITY NARRATIVE

THE LIMIT OF ANALYSIS FOR THE WATER QUALITY CALCULATIONS (1.01 ACRE) INCLUDES THE ENTIRE DISTURBED AREA FOR THE DEVELOPMENT. PER VADEQ REQUIREMENT 9VAC25-870-63, THE POST DEVELOPMENT TOTAL PHOSPHORUS RUNOFF LOAD NEEDS TO BE REDUCED BY 0.38 LB/YEAR. THE PROPOSED CHANGES TO THE COVER CHARACTERISTICS OF THE SITE INCLUDE AN INCREASE OF 0.02 ACRES OF IMPERVIOUS COVER. WATER QUALITY TREATMENT REQUIREMENTS ARE MET THROUGH THE INSTALLATION OF THE UNDERGROUND MANUFACTURED TREATMENT DEVICE FOR THE REQUIRED 0.38 LB/YEAR.

This document, together with the calculations and designs provided herein, is an instrument of service, is intended only for the specific purpose and intent for which it was prepared, and is not to be used for any other purpose without the written authorization and adaptation by Kimley-Horn and Associates, Inc. It shall be without liability to Kimley-Horn and Associates, Inc.

Kimley»Horn

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WWW.KIMLEY-HORN.COM

KHA PROJECT
110790001

DATE
02/15/2024

SCALE AS SHOWN

DESIGNED BY
CNH

DRAWN BY
EPR

CHECKED BY
CNH

WATER QUALITY
CALCULATIONS

TOMMY'S CAR WASH
9917 FAIRFAX BLVD
PREPARED FOR
OLYMPUS PINES

VIRGINIA

SHEET NUMBER
12

CITY OF FAIRFAX

REVISIONS

DATE

BY