# SPECIAL USE PERMIT PLAT
# TOMMY'S EXPRESS - 9917 FAIRFAX BLVD

**TAX MAP #48-3-13-001**
**9917 FAIRFAX BOULEVARD**
**FAIRFAX, VA 22031**
**09/12/2024**

## NOTES

1. THIS APPLICATION IS REQUESTING A SPECIAL USE PERMIT TO ALLOW A CAR WASH INSIDE A COMMERCIAL RETAIL ZONE.
2. THIS APPLICATION INCLUDES THE FOLLOWING SPECIAL USE PERMIT AND SPECIAL EXCEPTION APPLICATIONS:
   a. SPECIAL USE PERMIT TO ALLOW A CAR WASH SERVICE BAY IN THE CR ZONE.
   b. 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.
   c. 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.
   d. 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.
3. 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.
4. 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 SUP PLAT.
5. THE PROPOSED BUILDING FOOTPRINTS AND SITE IMPROVEMENTS SHOWN ON THIS 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 SUP PLAT.
6. 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.
7. ALL SIGNAGE WILL BE PROVIDED IN ACCORDANCE WITH SECTION 4.6 OF THE ZONING ORDINANCE.
8. THE SUBJECT PROPERTY IS SERVED BY PUBLIC WATER AND SEWER.

## VICINITY MAP

SCALE: 1" = 2000'

NORTH

## SHEET INDEX


| Sheet Number | Sheet Title |
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| 2 | EXISTING CONDITIONS PLAN |
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| 4 | SPECIAL USE PERMIT PLAT |
| 5 | CONCEPTUAL LANDSCAPE PLAN |
| 6 | TRUCK TURNING MOVEMENTS |
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## PROJECT DESCRIPTION

THIS PROJECT PROPOSES TO DEMOLISH THE EXISTING STRUCTURES ONSITE AND CONSTRUCT A 4,553 SF CAR WASH WITH 14 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

### CURRENT OWNER

CHESAPEAKE PINES VA 4 LLC
6211 HIGHLAND DRIVE, STE 3501
SALT LAKE CITY, UT 84121

### DEVELOPER/APPLICANT

MICHAEL CIANELLI
OLYMPUS PINES, LLC
6900 S 900 E, SUITE 250
MIDVALE, UT 84047
MICHAEL@OLYMPUSPINES.COM

### ARCHITECT

ADEL A. NUR
BIGNELL WATKNS HASSER ARCHITECTS, PC
1934 OLD GALLOWS ROAD, SUITE 350
VIENNA, VA 22182
(410) 224-2727

### ENGINEER

CHRIS HOWELL
KIMLEY-HORN
11400 COMMERCE PARK DRIVE, SUITE 400
RESTON, VA 20191
(703) 674-1300

### AGENT / LAND USE ATTORNEY

ROBERT BRANT
WALSH, COLUCCI, LUBELEY & WALSH
2200 CLARENDON BOULEVARD, SUITE 1300
ARLINGTON, VA 22201
(703) 528-4700 (ext 5424)

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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

COMMONWEALTH OF VIRGINIA
CHRIS HOWELL
Lic. No. 0402058105
09/12/2024
PROFESSIONAL ENGINEER

KHA PROJECT 110792001
DATE 09/12/2024
SCALE AS SHOWN
DESIGNED BY CMH
DRAWN BY EPR
CHECKED BY CMH

COVER SHEET

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

SHEET NUMBER
1

Plotted By:Weiner-Light, David Sheet Set:OLYMPUS TOMMY'S Layout:COVER SHEET September 12, 2024 10:18:46am \\kimley-horn.com\AT_NV42\NVA_CV\110792001 - olympus tommy's fairfax\CAD\plansheets\SHEET 1 - COVER SHEET.dwg
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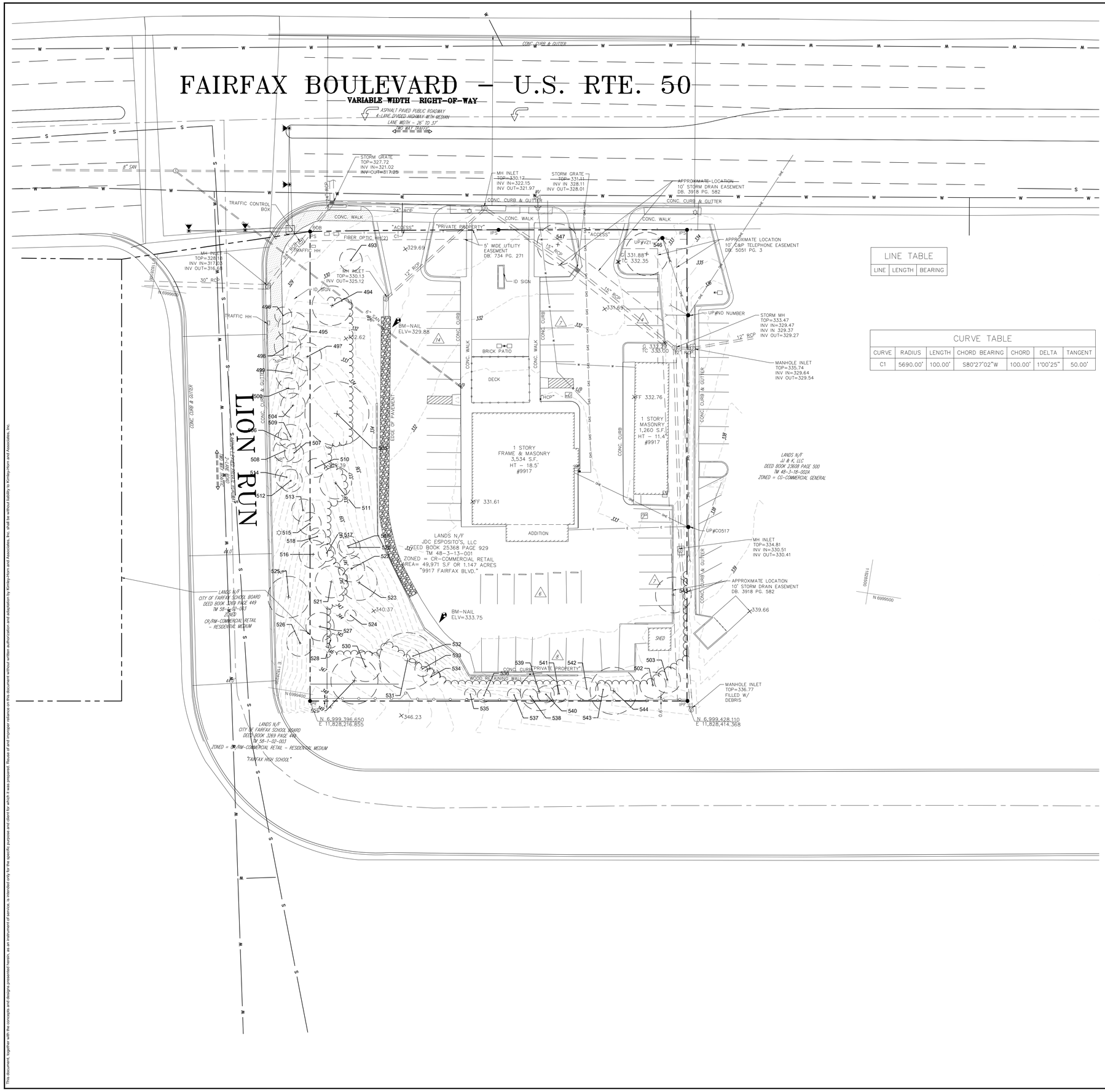


## SITE LEGEND

- PROPERTY LINE
- EXISTING CONTOUR
- APPROX. LOC. OVERHEAD ELECTRIC
- APPROX. LOC. UNDERGROUND TELEPHONE
- APPROX. LOC. WATER LINE
- METAL OR WOOD FENCE
- WIRE FENCE
- WATER VALVE
- WATER METER
- FIRE HYDRANT
- GAS VALVE
- GAS METER
- UTILITY POLE
- UTILITY POLE WITH LIGHT
- GUY WIRE
- TELEPHONE PEDESTAL
- TRANSFORMER
- AREA LIGHT
- SIGN
- BOLLARD
- TREE (W/SIZE)
- BUSH
- TREE LINE
- GRATE INLET
- SANITARY MANHOLE
- TELEPHONE MANHOLE
- STORM DRAIN MANHOLE
- CLEAN OUT
- DENOTES PARKING COUNT
- TITLE EXCEPTION
- BENCHMARK
- PAINTED ARROWS
- WHEEL STOP
- HANDICAP PARKING
- STOP BAR

LINE TABLE

| LINE | LENGTH | BEARING |
|---|---|---|

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 0 10 20 40

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PHONE: 703-674-1300 FAX: 703-674-1350
WWW.KIMLEY-HORN.COM

COMMONWEALTH OF VIRGINIA
CHRIS HOWELL
Lic. No. 0402058105
09/12/2024
PROFESSIONAL ENGINEER

| | |
|---|---|
| KHA PROJECT | 110720001 |
| DATE | 09/12/2024 |
| SCALE | AS SHOWN |
| DESIGNED BY | OGT |
| DRAWN BY | OGT |
| CHECKED BY | CMH |

# EXISTING CONDITIONS PLAN

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

CITY OF FAIRFAX VIRGINIA

SHEET NUMBER
2

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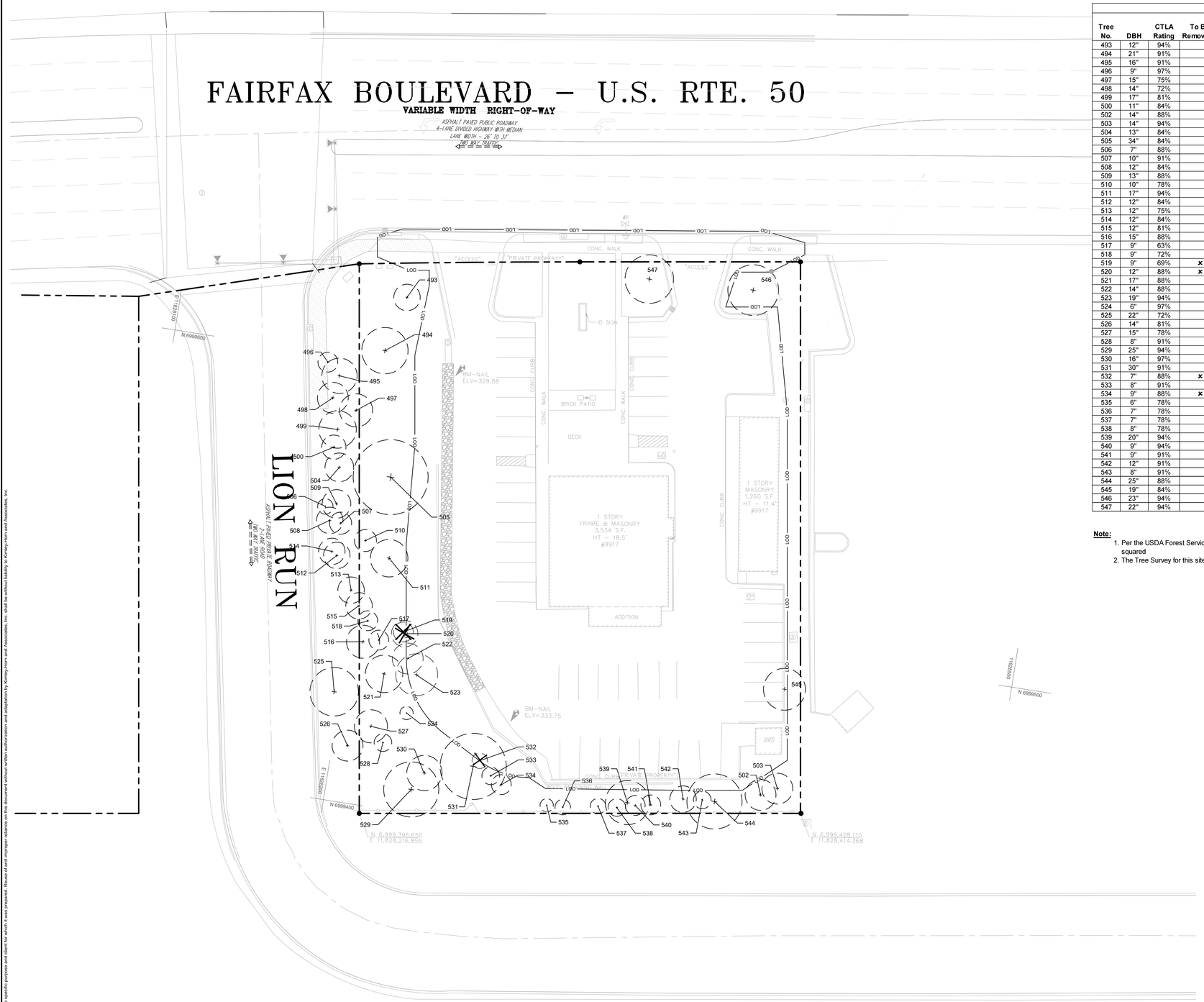


## Existing Tree Condition Inventory & Analysis

| Tree No. | DBH | CTLA Rating | To Be Removed? | Located within Property | Botanical Name | Common Name | Existing Canopy Coverage on Property | Tree Preservation Area | Notes |
|---|---|---|---|---|---|---|---|---|---|
| 493 | 12" | 94% | | ✓ | *Tilia cordata* | Little Leaf Linden | 452 SF | 452 SF | |
| 494 | 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 | 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 | 314 SF | 314 SF | |
| 511 | 17" | 94% | | ✓ | *Liriodendron tulipifera* | Tulip Poplar | 907 SF | 907 SF | |
| 512 | 12" | 84% | | | *Pinus virginiana* | Virginia Pine | | | |
| 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 | 907 SF | |
| 522 | 14" | 88% | | ✓ | *Gleditsia triacanthos* | Honey Locust | 615 SF | 615 SF | TO BE RELOCATED |
| 523 | 19" | 94% | | ✓ | *Liriodendron tulipifera* | Tulip Poplar | 1,134 SF | 1,134 SF | TO BE RELOCATED |
| 524 | 6" | 97% | | ✓ | *Fagus grandiflora* | American Beech | 113 SF | 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 | 1,963 SF | |
| 530 | 16" | 97% | | ✓ | *Fagus grandiflora* | American Beech | 804 SF | 804 SF | |
| 531 | 30" | 91% | | ✓ | *Fagus grandiflora* | American Beech | 2,826 SF | 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 | 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 | 1,520 SF | |

**Total Existing Canopy Coverage on Property: 27,054 SF**
**Tree preservation provided onsite: 26,348 SF**

**Note:**

1. 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
2. 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

5xX — EXISTING TREE *REFER TO TABLE*

EXISTING TREE TO BE REMOVED

W. DAVIS WALKER
CERTIFIED ARBORIST
ISA-CA #MA6373A

GRAPHIC SCALE IN FEET
0 10 20 40

NORTH

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PHONE: 703-674-1300 FAX: 703-674-1350
WWW.KIMLEY-HORN.COM

COMMONWEALTH OF VIRGINIA
CHRIS HOWELL
Lic. No. 0402056103
09/12/2024
PROFESSIONAL ENGINEER

| | |
|---|---|
| KHA PROJECT | 111072001 |
| DATE | 09/12/2024 |
| SCALE | AS SHOWN |
| DESIGNED BY | CMH |
| DRAWN BY | EPR |
| CHECKED BY | CMH |

# TREE SURVEY

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

CITY OF FAIRFAX VIRGINIA

SHEET NUMBER
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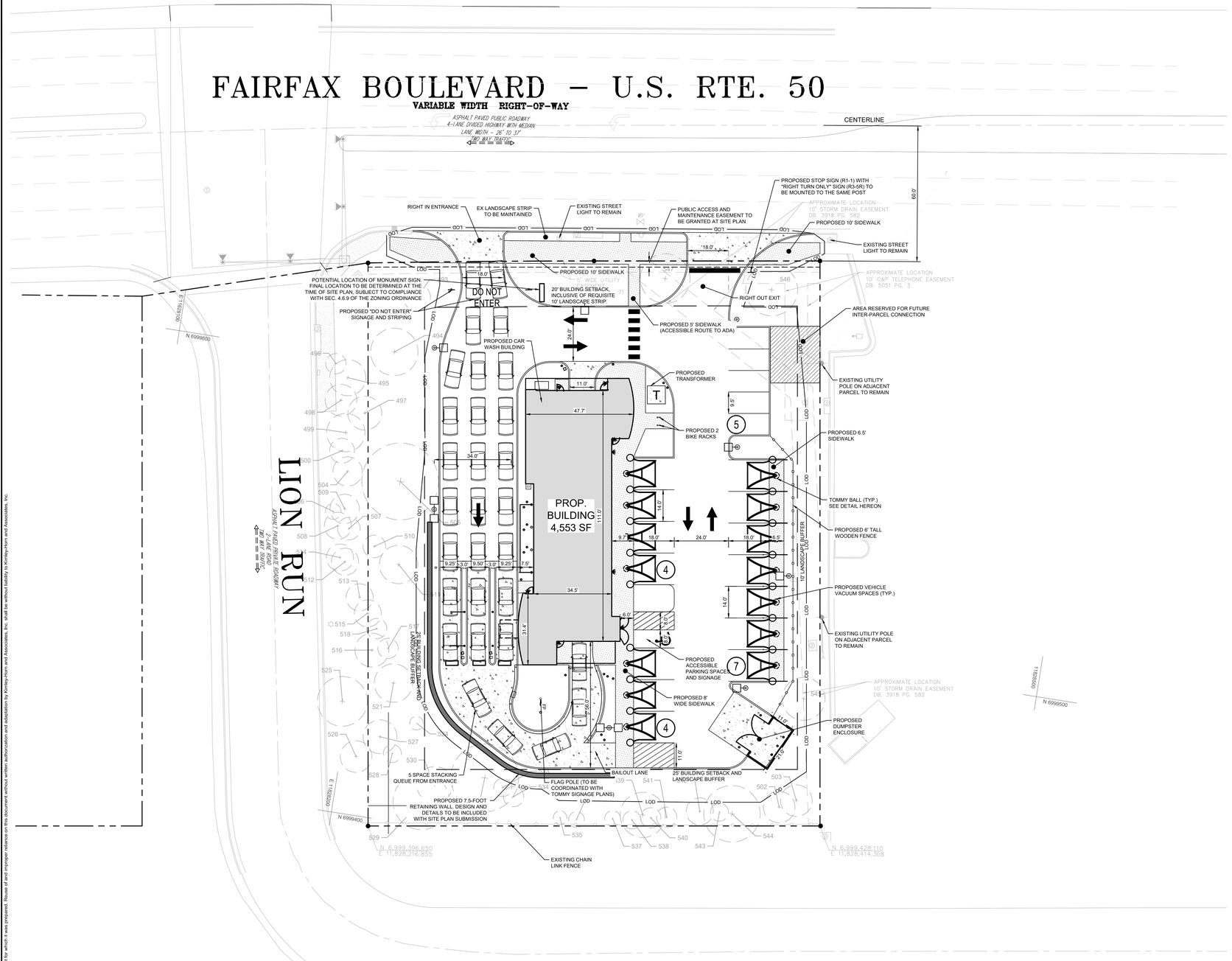
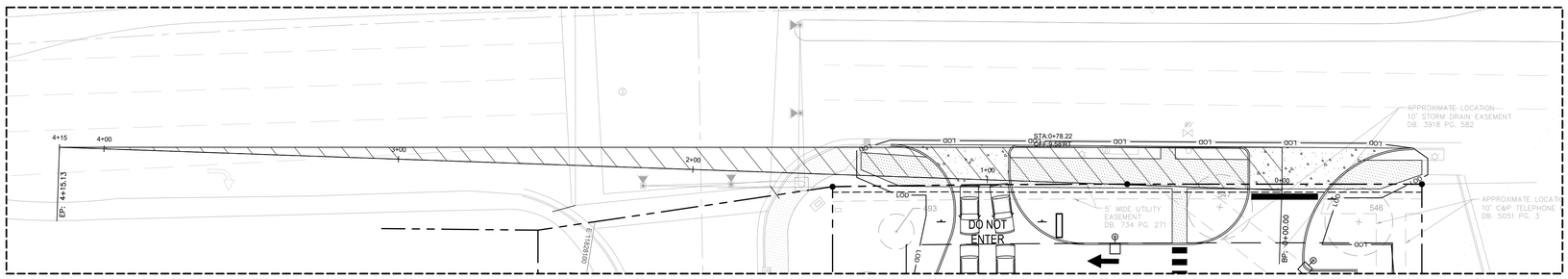



SIGHT DISTANCE TRIANGLE

## 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: | 20 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 29,075 SF OF THE 49,971 SF PROPERTY COVERED BY PAVEMENT OR BUILDINGS (58.2%). 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.

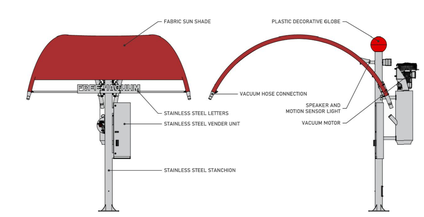
IN THE PROPOSED CONDITION, APPROXIMATELY 695 SF OF IMPERVIOUS COVER WILL BE ADDED, RESULTING IN A PROPOSED LOT COVERAGE OF 29,770 SF (60.0%). SITE TOPOGRAPHY WILL REMAIN THE SAME AS THE SITE WILL CONTINUE TO SLOPE TOWARDS FAIRFAX BOULEVARD. A DRAINAGE NETWORK IS PROPOSED ONSITE AND STORMWATER MANAGEMENT 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 AND DRIVEWAYS ON PRIVATE PROPERTY WILL BE SUBJECT TO A PUBLIC ACCESS EASEMENT.

## TOMMY CAR WASH SYSTEMS - VACCUM ELEVATIONS

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KHA PROJECT 110720001
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# SPECIAL USE PERMIT PLAT

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

CITY OF FAIRFAX VIRGINIA

SHEET NUMBER
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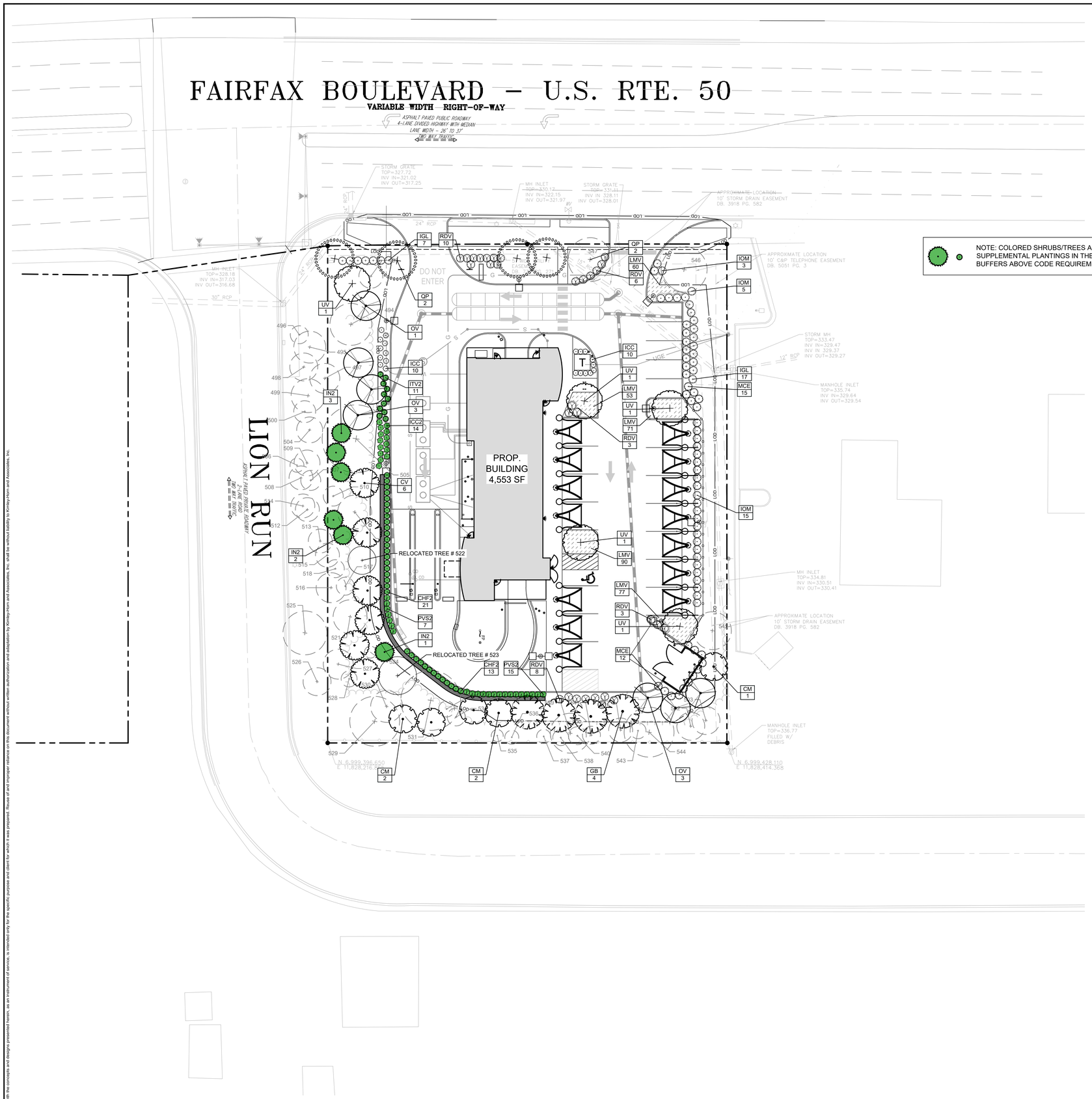


| Qty. | Key | Botanical Name | Common Name | Size | Type | 10 Yr. Canopy | |
|---|---|---|---|---|---|---|---|
| | | **Canopy Tree** | | | | | |
| 4 | GB | *Ginkgo biloba 'Princeton Sentry'* | Princeton Sentry Gingko | 3.5" Cal. | B & B | 75 | 300 |
| 4 | QP | *Quercus phellos* | Willow Oak | 3.5" Cal. | B & B | 250 | 1,000 |
| 5 | UV | *Ulmus americana 'Valley Forge'* | American Elm | 3.5" Cal. | B & B | 250 | 1,250 |
| | | | | | | ***Canopy Trees Subtotal:*** | ***2,250*** |
| | | **Understory Trees** | | | | | |
| 6 | CV | *Chionanthus virginicus* | White Fringetree | 3.5" Cal. | B & B | 125 | 750 |
| 5 | CM | *Cornus mas* | Cornelian Cherry Dogwood | 3.5" Cal. | B & B | 125 | 625 |
| 7 | OV | *Ostrya virginiana* | Eastern Hophornbeam | 3.5" Cal. | B & B | 125 | 875 |
| | | | | | | ***Understory Trees Subtotal:*** | ***2,250*** |
| | | **Evergreen Trees** | | | | | |
| 6 | IN2 | *Ilex x 'Nellie R. Stevens'* | Nellie R. Steven Holly | 6 Ft. Ht. | B & B | 135 | 810 |
| | | | | | | ***Evergreen Tree Subtotal:*** | ***810*** |
| | | | | | | **Total (s.f.)** | **5,310** |
| | | **Shrubs** | | | | | |
| 34 | CHF2 | *Cephalotaxus harringtonia 'Fastigiata'* | Upright Japanese Plum Yew | 30" Ht. | Cont. | | |
| 34 | ICC ICC2 | *Ilex crenata 'Compacta'* | Dwarf Japanese Holly | 30" Ht. | Cont. | | |
| 24 | IGL | *Ilex glabra* | Inkberry Holly | 30" Ht. | Cont. | | |
| 11 | ITV2 | *Itea virginica 'Little Henry'* | Little Henry Virginia Sweetspire | 30" Ht. | Cont. | | |
| 27 | MCE | *Morella cerifera 'Fairfax'* | Fairfax Wax Myrtle | 30" Ht. | Cont. | | |
| 22 | PVS2 | *Panicum virgatum 'Shenandoah'* | Shenandoah Switchgrass | 30" Ht. | Cont. | | |
| 30 | RDV | *Rhododendron x 'Delavaire Valley White'* | Delaware Valley White Azalea | 30" Ht. | Cont. | | |
| 23 | VDT | *Viburnum dentatum* | Viburnum | 30" Ht. | Cont. | | |
| | | **Groundcover** | | | | | |
| 416 | LMV | *Liriope muscari '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 SF |
| Development District: Commerical Retail | | |
| Existing Tree Canopy | | 27,409 SF |
| Tree Canopy Required | *(10% required)* | 5,009 SF |
| Tree Canopy Provided through Tree Preservation | | 26,549 SF |
| Tree Canopy Provided through Planting | | 5,310 SF |
| **Total Canopy Provided** | | **31,859 SF** |

### TREE CANOPY AT TIME OF PLANTING

| | |
|---|---|
| Tree Canopy Provided through Tree Preservation | 26,549 SF |
| Tree Canopy Provided through Planting | 1,192 SF |
| **Total Canopy Provided** | **27,741 SF** |

### TRANSITIONAL YARDS

*Per Zoning Code 4.5.5*

Proposed Development District: **Commercial Retail**

| Location | Adjacent Development District | Width | Transitional Yard Required |
|---|---|---|---|
| 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

| Plant Material Type | Quantity Required | Quantity Provided |
|---|---|---|
| Canopy Tree | (4/100 LF)= 8 | 4 |
| *Exisiting Trees* | | 4 |
| Understory Tree | (4/100 LF)= 8 | 8 |
| Evergreen Tree | N/A | 6 |
| Shrubs | (4/100 LF)= 8 | 36 |

**West Boundary** — Length = 240 LF

Buffer Type: Transitional Yard 3

| Plant Material Type | Quantity Required | Quantity Provided |
|---|---|---|
| Canopy Tree | (4/100 LF)= 10 | 1 |
| *Exisiting Trees* | | 9 |
| Understory Tree | (4/100 LF)= 10 | 10 |
| Shrubs | (4/100 LF)= 10 | 63 |

### 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 1)* |
| Lion Run | | 0 *(Note 2)* |

**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 | 20 |
| Trees Required *(1 per 10 parking spaces)* | 2 |
| Proposed Trees Provided: | 4 |
| *Existing Trees to Remain* | 1 |

**Notes:**
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

GRAPHIC SCALE IN FEET
0 10 20 40

NORTH

| No. | REVISIONS | DATE | BY |
|---|---|---|---|

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PHONE: 703-674-1300 FAX: 703-674-1350
WWW.KIMLEY-HORN.COM

COMMONWEALTH OF VIRGINIA
CHRIS HOWELL
Lic. No. 0402058105
09/12/2024
PROFESSIONAL ENGINEER

KHA PROJECT 111072001
DATE 09/12/2024
SCALE AS SHOWN
DESIGNED BY WDW
DRAWN BY WDW
CHECKED BY WDW

# CONCEPTUAL LANDSCAPE PLAN

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

SHEET NUMBER
5

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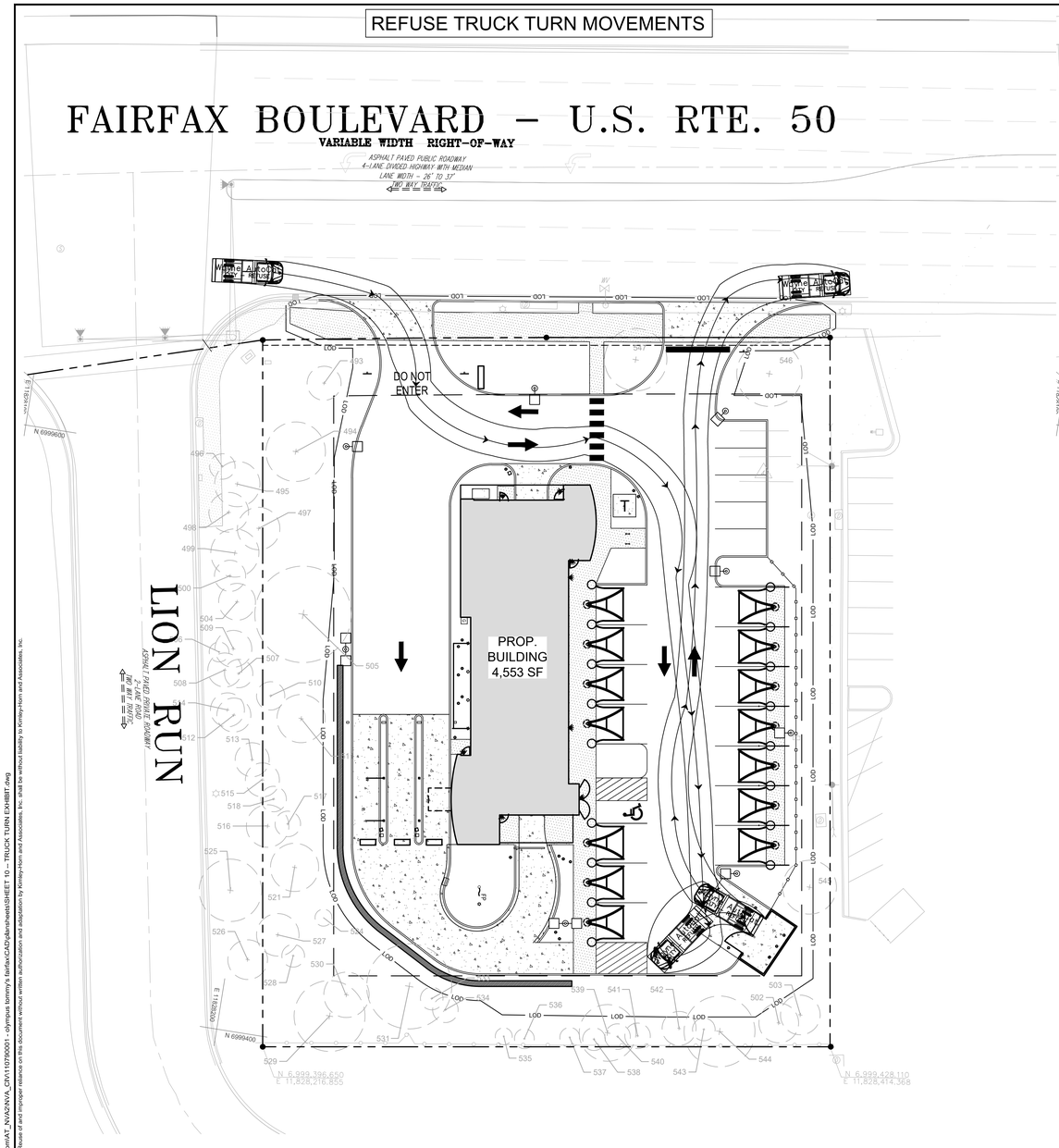
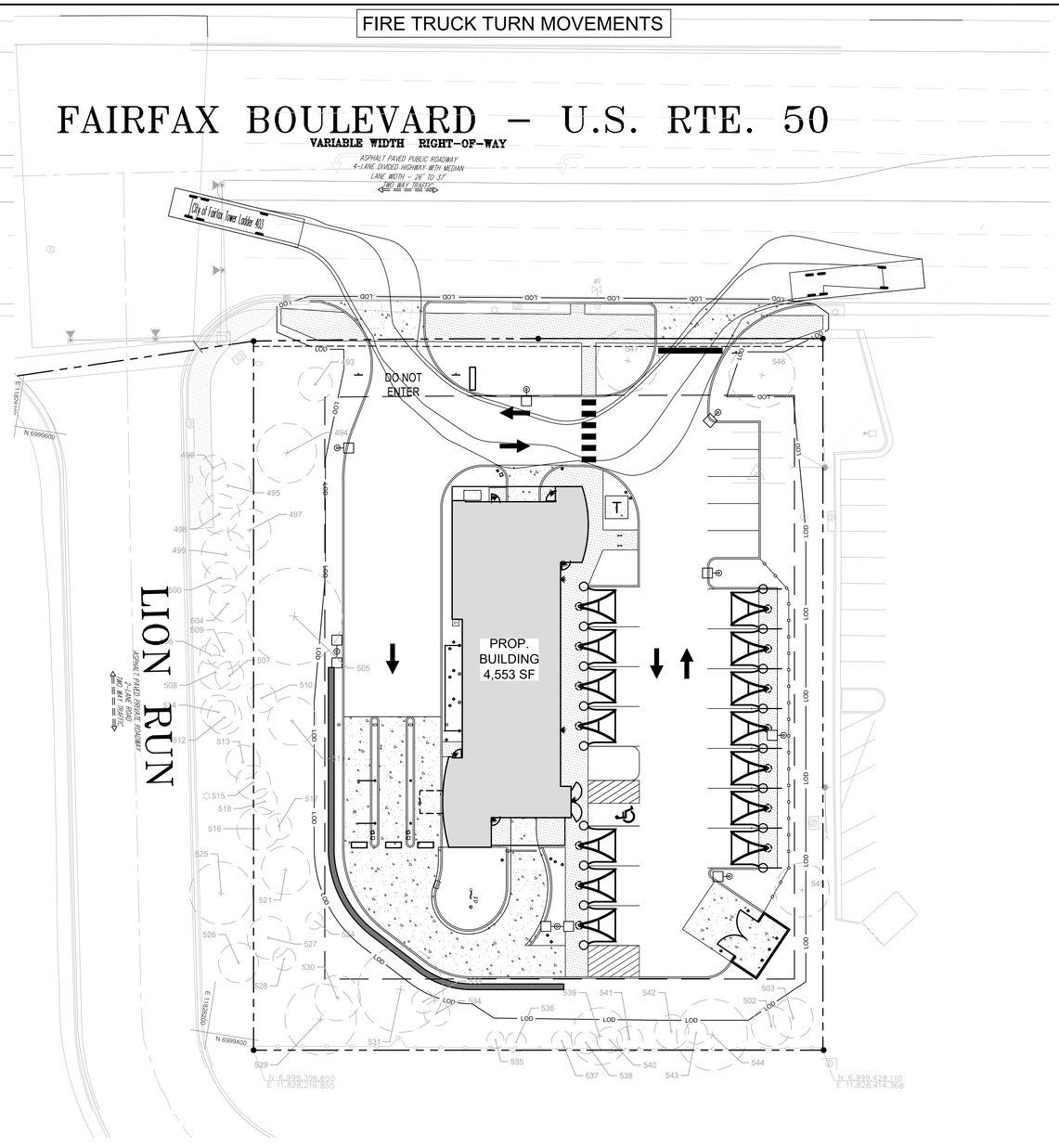
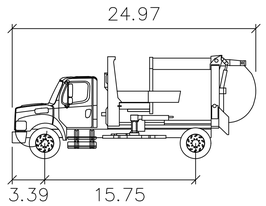
REFUSE TRUCK TURN MOVEMENTS




FIRE TRUCK TURN MOVEMENTS



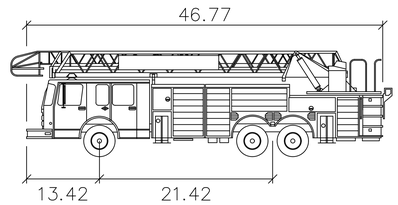

GARBAGE TRUCK DETAIL




Wayne AutoCat

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

FIRE TRUCK DETAIL




City of Fairfax Tower Ladder 403

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

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PHONE: 703-674-1300 FAX: 703-674-1350
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COMMONWEALTH OF VIRGINIA
CHRIS HOWELL
Lic. No. 0402058105
09/12/2024
PROFESSIONAL ENGINEER

KHA PROJECT 110720001
DATE 09/12/2024
SCALE AS SHOWN
DESIGNED BY AF
DRAWN BY AF
CHECKED BY CMH

# TRUCK TURNING MOVEMENTS

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

CITY OF FAIRFAX VIRGINIA

SHEET NUMBER
6

Plotted By:Weiner-Light, David Sheet Set:OLYMPUS TOMMY'S Layout:TRUCK TURNING MOVEMENTS September 12, 2024 10:19:58am Vikenlep-horn.com/KT_NV/A3NVA_CDV110720001 - olympus tommy's fairfax/CAD/plansheets/SHEET 10 - TRUCK TURNING MOVEMENTS.dwg
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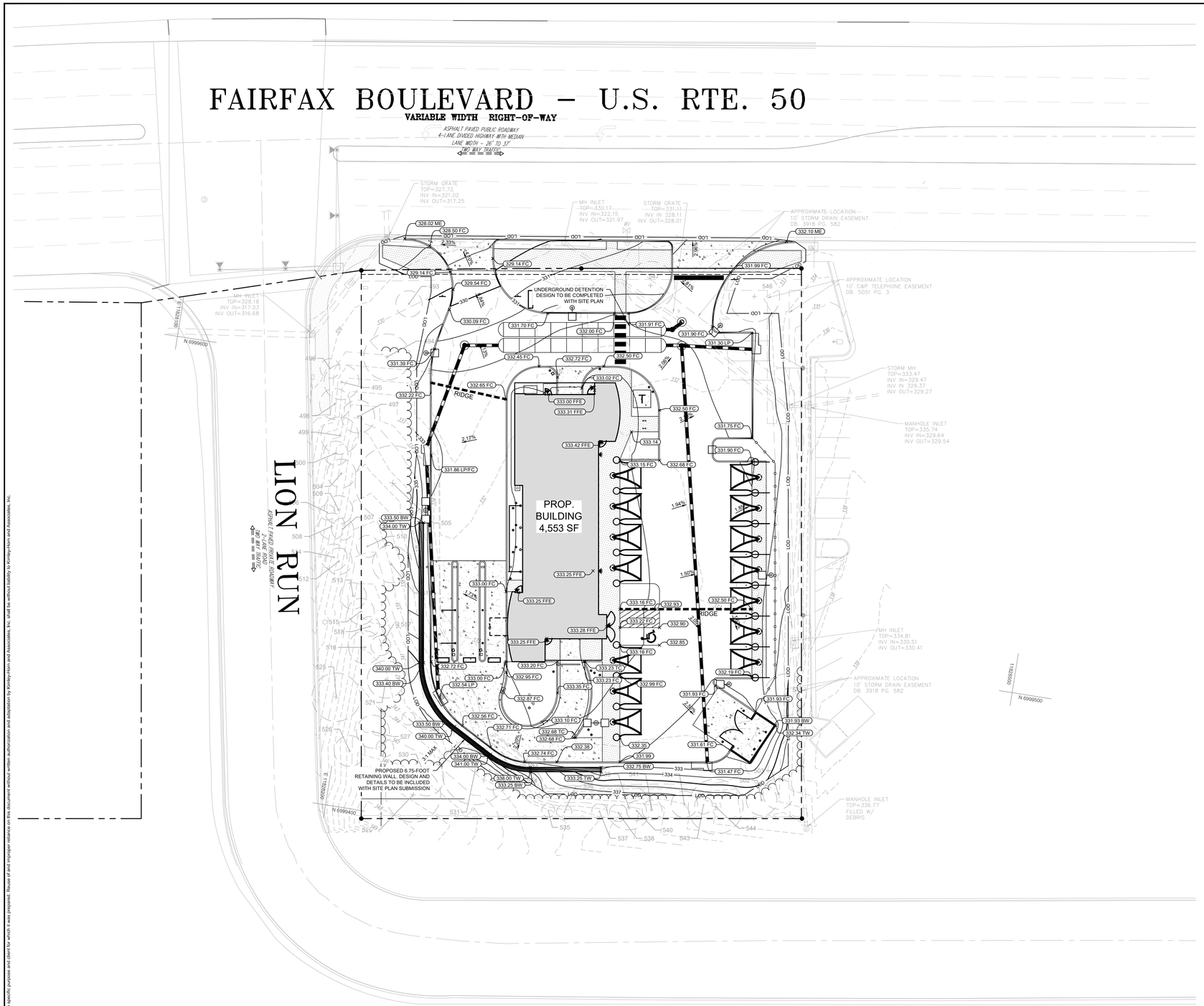


## GRADING LEGEND

- 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
- X.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.

GRAPHIC SCALE IN FEET
0 10 20 40

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Lic. No. 0402058105
09/12/2024
PROFESSIONAL ENGINEER

| | |
|---|---|
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| DESIGNED BY | CMH |
| DRAWN BY | EPR |
| CHECKED BY | CMH |

# PRELIMINARY GRADING PLAN

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

CITY OF FAIRFAX VIRGINIA

SHEET NUMBER
7

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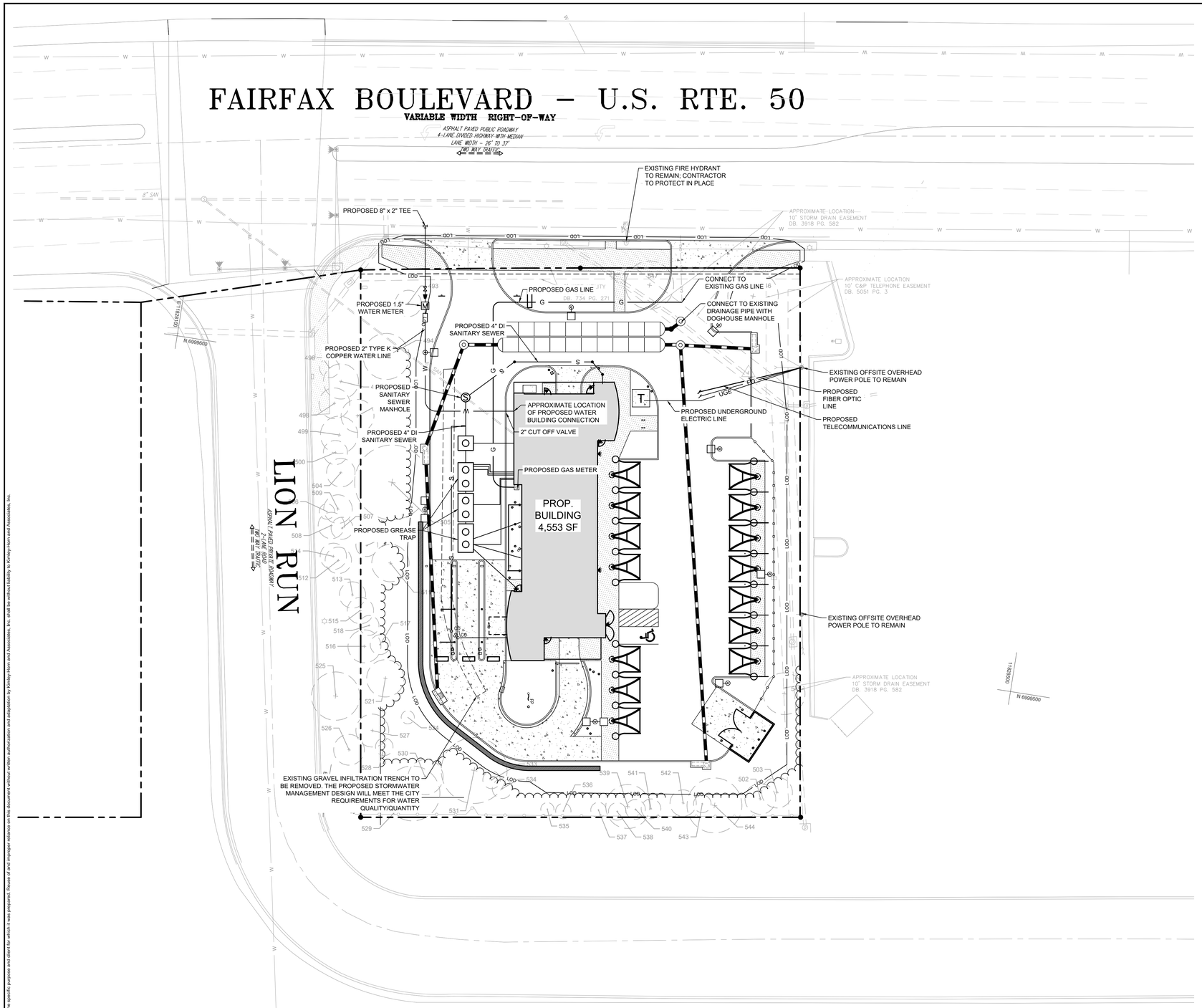


## SITE LEGEND

| | |
|---|---|
| | 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) |
| S | 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.

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PHONE: 703-674-1300 FAX: 703-674-1350
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Lic. No. 0402058105
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PROFESSIONAL ENGINEER

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| DESIGNED BY | CMH |
| DRAWN BY | EPR |
| CHECKED BY | CMH |

# PRELIMINARY UTILITY PLAN

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

CITY OF FAIRFAX VIRGINIA

SHEET NUMBER
8

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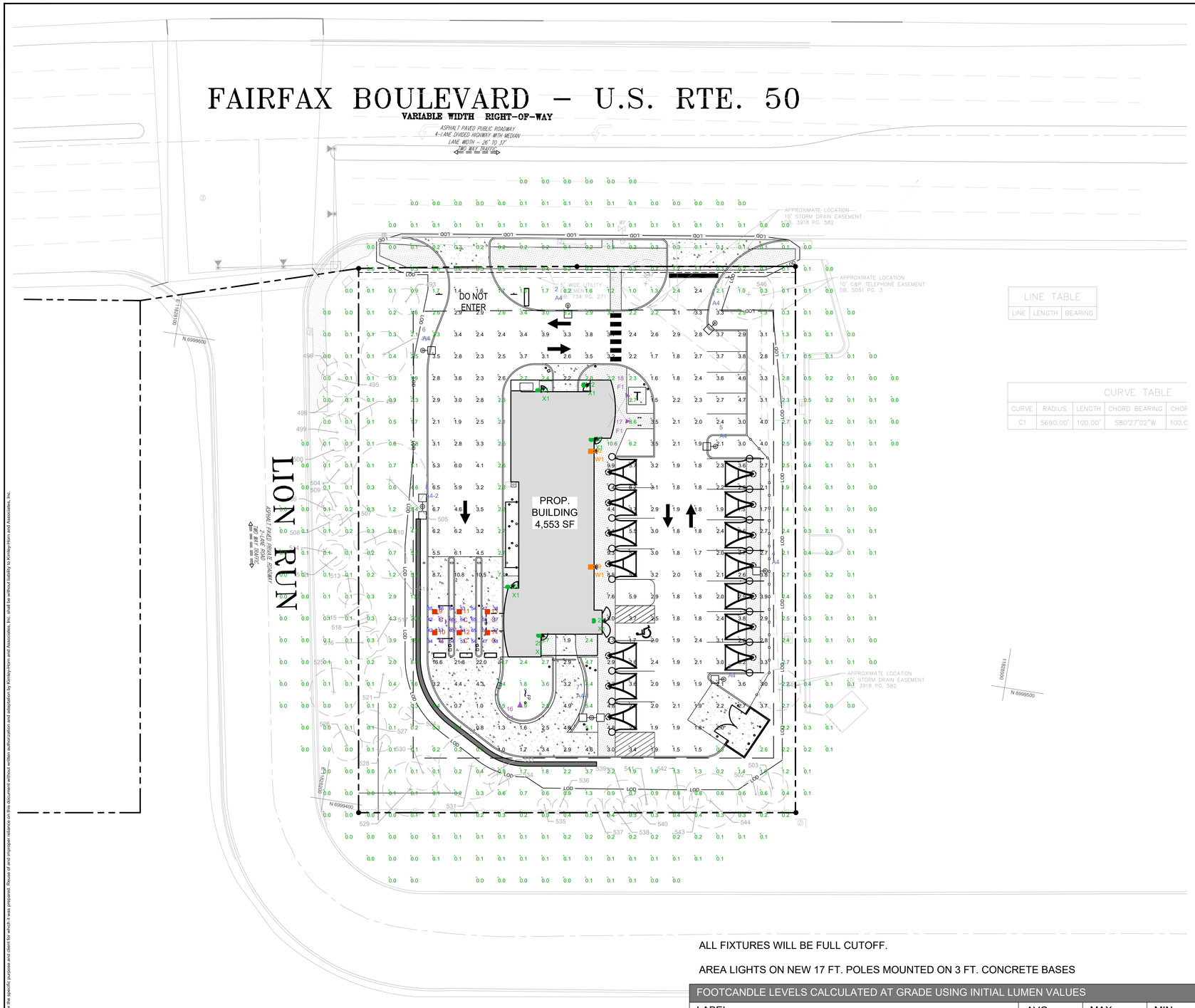


ALL FIXTURES WILL BE FULL CUTOFF.

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 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 |

| 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 |

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COMMONWEALTH OF VIRGINIA
CHRIS HOWELL
Lic. No. 0402058105
09/12/2024
PROFESSIONAL ENGINEER

KHA PROJECT 110079001
DATE 09/12/2024
SCALE AS SHOWN
DESIGNED BY CMH
DRAWN BY EPR
CHECKED BY CMH

# PHOTOMETRIC PLAN

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

SHEET NUMBER
9

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| | QTY | LABEL | DESCRIPTION |
|---|---|---|---|
| AREA | 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 |

| | QTY | LABEL | DESCRIPTION |
|---|---|---|---|
| CANOPY | 6 | C | CAN-304-PS-XX-06-E-UL-XX-525-57K-DIM |

| | QTY | LABEL | DESCRIPTION |
|---|---|---|---|
| FLOOD | 4 | F1 | FLD-EDG-N6-AA-02-E-UL-XX-525-57K |

| | QTY | LABEL | DESCRIPTION |
|---|---|---|---|
| WALL MOUNTED | 2 | W1 | SEC-EDG-4M-WM-06-E-UL-XX-700-57K-DIM |

ADDITIONAL FIXTURE INFO

ADDITIONAL FIXTURE INFO

ADDITIONAL FIXTURE INFO

ADDITIONAL FIXTURE INFO

## OSQ Series

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

Rev. Date: V5 09/14/2021

### Product Description

The OSQ™ Area/Flood luminaire blends extreme optical control, advanced thermal management and modern, clean aesthetics. Built to last, the housing is rugged cast aluminum with an integral, weathertight LED driver compartment. Versatile mounting configurations offer simple installation. Its slim, low-profile design minimizes wind load requirements and blends seamlessly into the site providing even, quality illumination. The 6L lumen package is a suitable upgrade for HID applications up to 250 Watt, and the 11L lumen package is a suitable upgrade for HID applications up to 400 Watt. The 22L lumen package is a suitable upgrade for HID applications up to 750 Watts, and the 30L lumen package is a suitable upgrade for HID applications up to 1000 Watts.

**Applications:** Parking lots, walkways, campuses, car dealerships, office complexes, tunnels, underpasses, and internal roadways

### Performance Summary

Utilizes Cree TrueWhite® Technology on 5000K Luminaires

NanoOptic® Precision Delivery Grid™ optic

Assembled in the U.S.A. of U.S. and imported parts

**Initial Delivered Lumens:** 4,000 – 30,000

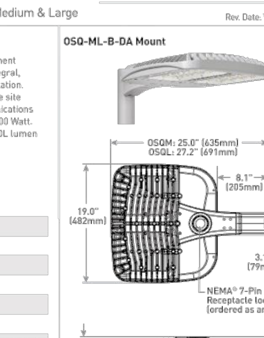
**Efficacy:** Up to 173 LPW

**CRI:** Minimum 70 CRI (3000K, 4000K & 5700K); 90 CRI (5000K)

**CCT:** 3000K, 4000K, 5000K, 5700K

**Limited Warranty**†: 10 years on luminaire; 10 years on Colorfast DeltaGuard® finish; up to 5 years for Synapse® accessories; 1 year on luminaire accessories

OSQ-ML-B-DA Mount



| Luminaire | Weight |
|---|---|
| OSQM | 28.9 lbs. (13.1kg) |
| OSQL | 32.4 lbs. (14.7kg) |

US: creelighting.com (800) 236-6800
Canada: creelighting-canada.com (800) 473-1234

CREE LIGHTING

## 304 Series™

LED Recessed Canopy Luminaire

Rev. Date: V7 04/05/2021

### Product Description

Luminaire housing is constructed from rugged die cast aluminum components (RS Mount) or die cast and extruded aluminum components (RD Mount). LED driver is mounted in a sealed weathertight center chamber that allows for access from below the fixture. Luminaire mounts directly to the canopy deck and is secured in place with die cast aluminum trim frame. Luminaire housing is provided with factory applied foam gasket that provides a watertight seal between luminaire housing and canopy deck. Suitable for use in single or double skin canopies with 16" (406 mm) wide panels. Designed for canopies of 19-22 gauge (maximum 0.040" [1 mm] thickness).

**Applications:** Petroleum stations, convenience stores, drive-thru banks and restaurants, retail and grocery

### Performance Summary

Patented NanoOptic® Product Technology

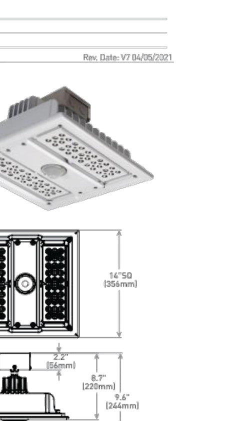
Assembled in the U.S.A. of U.S. and imported parts

**CRI:** Minimum 70 CRI

**CCT:** 4000K (+/- 300K), 5700K (+/- 500K) standard

**Limited Warranty**†: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

RS Mount



| Weight |
|---|
| 22.0 lbs. (9.9kg) |

US: creelighting.com (800) 236-6800
Canada: creelighting-canada.com (800) 473-1234

CREE LIGHTING

## THE EDGE® Series

LED Area/Flood Luminaire

Rev. Date: V11 09/07/2021

### Product Description

THE EDGE® Series has a slim, low profile design. Its rugged cast aluminum housing minimizes wind load requirements and features an integral, weathertight LED driver compartment and high performance aluminum heat sinks. Various mounting choices: Adjustable Arm, Direct Arm, Direct Arm Long, or Side Arm (details on page 2). Includes a leaf/debris guard.

**Applications:** Parking lots, walkways, campuses, car dealerships, office complexes, and internal roadways

### Performance Summary

Patented NanoOptic® Product Technology

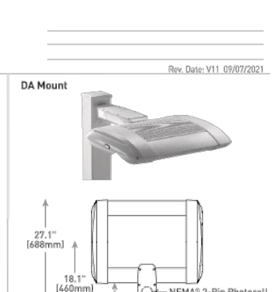
Assembled in the U.S.A. of U.S. and imported parts

**CRI:** Minimum 70 CRI (4000K & 5700K); 80 CRI (3000K); 90 CRI (5000K)

**CCT:** Turtle Friendly Amber, 3000K (+/- 300K), 4000K (+/- 300K), 5000K (+/- 500K), 5700K (+/- 500K) standard

**Limited Warranty**†: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish /1 year on accessories

DA Mount



US: creelighting.com (800) 236-6800
Canada: creelighting-canada.com (800) 473-1234

CREE LIGHTING

## THE EDGE® Series

LED Security Wall Pack Luminaire

Rev. Date: V8 09/03/2021

### Product Description

THE EDGE® wall mount luminaire has a slim, low profile design. The luminaire end caps are made from rugged die cast aluminum with integral, weathertight LED driver compartments and high performance aluminum heat sinks specifically designed for LED applications. Housing is rugged aluminum. Includes a lightweight mounting box for installation over standard and mud ring single gang J-Boxes. Secures to wall with four 3/16" (5mm) screws (by others). Conduit entry from top, bottom, sides and rear. Allows mounting for uplight or downlight. Designed and approved for easy through-wiring. Includes leaf/debris guard.

**Applications:** General area and security lighting

### Performance Summary

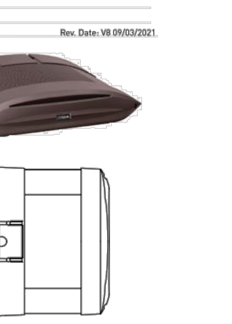
Patented NanoOptic® Product Technology

Assembled in the U.S.A. of U.S. and imported parts

**CRI:** Minimum 70 CRI (4000K & 5700K); 80 CRI (3000K); 90 CRI (5000K)

**CCT:** Turtle Friendly Amber, 3000K (+/- 300K), 4000K (+/- 300K), 5000K (+/- 500K), 5700K (+/- 500K) standard

**Limited Warranty**†: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish/1 year on accessories



| LED Count (x10) | Dim. "A" | Weight |
|---|---|---|
| 02 | 9.9" (251mm) | 20 lbs. (9.1kg) |
| 04 | 11.9" (303mm) | 22 lbs. (10.0kg) |
| 06 | 13.9" (353mm) | 25 lbs. (11.3kg) |
| 08 | 15.9" (404mm) | 27 lbs. (12.2kg) |
| 10 | 17.9" (455mm) | 31 lbs. (14.1kg) |
| 12 | 19.9" (505mm) | 32 lbs. (14.5kg) |

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Canada: creelighting-canada.com (800) 473-1234

CREE LIGHTING

## THE EDGE® Series

LED Area/Flood Luminaire

Rev. Date: V12 02/08/2023

### Product Description

THE EDGE® Series has a slim, low profile design. Its rugged cast aluminum housing minimizes wind load requirements and features an integral, weathertight LED driver compartment and high performance aluminum heat sinks. Various mounting choices: Adjustable Arm, Direct Arm, Direct Arm Long, or Side Arm (details on page 2). Includes a leaf/debris guard.

**Applications:** Parking lots, walkways, campuses, car dealerships, office complexes, and internal roadways

### Performance Summary

Patented NanoOptic® Product Technology

Assembled in the USA by Cree Lighting from US and imported parts

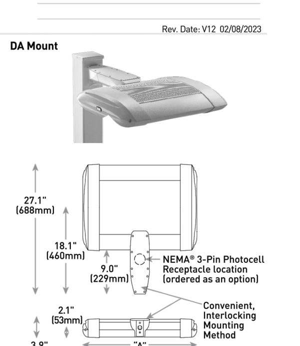
**CRI:** Minimum 70 CRI (4000K & 5700K); 80 CRI (3000K); 90 CRI (5000K)

**CCT:** Turtle Friendly Amber, 3000K (+/- 300K), 4000K (+/- 300K), 5000K (+/- 500K), 5700K (+/- 500K) standard

**Limited Warranty**†: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish/5 years on PML sensors/1 year on accessories

† See http://creelighting.com/warranty for warranty terms

DA Mount



| LED Count (x10) | Dim. "A" | Weight |
|---|---|---|
| 02 | 12.1" (306mm) | 21 lbs. (10kg) |
| 04 | 12.1" (306mm) | 24 lbs. (11kg) |
| 06 | 14.1" (357mm) | 27 lbs. (12kg) |
| 08 | 16.1" (408mm) | 28 lbs. (13kg) |
| 10 | 18.1" (459mm) | 32 lbs. (15kg) |
| 12 | 20.1" (510mm) | 34 lbs. (15kg) |
| 14 | 22.1" (560mm) | 37 lbs. (17kg) |
| 16 | 24.1" (611mm) | 41 lbs. (19kg) |

**AA/DL/SA Mount -** see page 22 for weight & dimensions

### Accessories

| Field-Installed | |
|---|---|
| **Bird Spikes** XA-BRDSPK<br>**Hand-Held Remote** XA-SENSREM<br>- For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required | **Backlight Control Shields** XA-20BLS-4<br>- Four-pack<br>- Unpainted stainless steel<br>**Shorting Cap** XA-XSLSHRT<br>**NEMA® 3-Pin Photocell** C-ACC-A-PCELL-NEMA3-LV<br>- On/off functionality only<br>- Available with UL voltage only |

### Ordering Information

Example: ARE-EDG-2M-AA-12-E-UL-SV-350

| Product | Optic | Mounting* | LED Count (x10) | Series | Voltage | Color Options | Drive Current | Options |
|---|---|---|---|---|---|---|---|---|
| ARE-EDG | 2M Type II Medium; 2MB Type II Medium w/BLS; 2MP Type II Medium w/Partial BLS; 3M Type III Medium; 3MB Type III Medium w/BLS; 3MP Type III Medium w/Partial BLS; 4M Type IV Medium; 4MB Type IV Medium w/BLS; 4MP Type IV Medium w/Partial BLS; 5M Type V Medium; 5S Type V Short | AA Adjustable Arm; DA Direct Arm; DL Direct Long Arm | 02, 04, 06, 08, 10, 12, 14, 16 | E | UL Universal 120-277V; UH Universal 347-480V | BK Black; BZ Bronze; SV Silver; WH White | 350 350mA; 525 525mA; 700 700mA - Available with 20-60 LEDs | DIM 0-10V Dimming - Control by others - Refer to Dimming spec sheet for details - Can't exceed specified drive current - Not available with PML options; F Fuse - Compatible only with 120V, 277V or 347V (phase to neutral) - Consult factory if fusing is required for 208V, 240V or 480V (phase to phase) - Refer to PML spec sheet for availability with PML options - When code dictates fusing, use time delay fuse; HL Hi/Low (Dual Circuit Input) - Refer to HL spec sheet for details - Sensor not included; P Photocell - Refer to PML spec sheet for availability with PML options - Available with UL voltage only; PML Programmable Multi-Level, 20-40' Mounting Height - Refer to PML spec sheet for details - Intended for downlight applications at 0° tilt; PML2 Programmable Multi-Level, 10-30' Mounting Height - Refer to PML spec sheet for details - Intended for downlight applications at 0° tilt; R NEMA® 3-Pin Photocell Receptacle - 3-pin receptacle per ANSI C136.10 - Not available with SA mount - Intended for downlight applications with maximum 45° tilt - Requires photocell or shorting cap by others - Refer to PML spec sheet for availability with PML options; 30K 3000K Color Temperature - Minimum 80 CRI - Color temperature per luminaire; 40K 4000K Color Temperature - Minimum 70 CRI - Color temperature per luminaire; 50K 5000K Color Temperature - Minimum 90 CRI - Color temperature per luminaire; TRL Amber Turtle Friendly LEDs - Available only with 350mA - 600nm dominant wavelength - Additional shielding (by others) may be required for Florida Fish and Wildlife Conservation Commission compliance |
| FLD-EDG | 25 25° Flood; 40 40° Flood; 70 70° Flood; SN Sign; N6 NEMA® 6 | AA Adjustable Arm; SA Side Arm - Available with 20-60 LEDs | | | | | | |

* Reference EPA and pole configuration suitability data beginning on page 19

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CREE LIGHTING

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

304 Series™ LED Recessed Canopy Luminaire

THE EDGE® LED Area/Flood Luminaire

THE EDGE® LED Security Wall Pack Luminaire

THE EDGE® LED Area/Flood Luminaire

### Product Specifications

**CONSTRUCTION & MATERIALS**

- Slim, low profile, minimizing wind load requirements
- Luminaire sides are rugged die cast aluminum with integral, weathertight LED driver compartment and high performance heat sinks
- DA and DL mount utilizes convenient interlocking mounting method. Mounting is rugged die cast aluminum, mounts to 3-6" (76-152mm) square or round pole and secures to pole with 5/16-18 UNC bolts spaced on 2" (51mm) centers
- AA and SA mounts are rugged die cast aluminum and mount to 2" (51mm) IP, 2.375" (60mm) O.D. tenons
- Includes leaf/debris guard
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, silver, and white are available
- **Weight:** See Dimensions and Weight Charts on pages 1 and 22

**ELECTRICAL SYSTEM**

- **Input Voltage:** 120-277V or 347-480V, 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- DA and DL mounts designed with integral weathertight electrical box with terminal strips (12Ga–20Ga) for easy power hookup
- Integral 10kV/5kA surge suppression protection standard
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- **Maximum 10V Source Current:** 20 LED (350mA): 10mA; 20 LED (525 & 700mA) and 40-80 LED: 0.15mA; 100-160 LED: 0.30mA

**REGULATORY & VOLUNTARY QUALIFICATIONS**

- cULus Listed
- Suitable for wet locations
- Enclosure rated IP66 per IEC 60529 when ordered without P or R options
- Consult factory for CE Certified products
- Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards when ordered with AA, DA and DL mounts
- ANSI C136.2 10kV/5kA surge protection, tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- RoHS compliant. Consult factory for additional details
- Assembled in the USA by Cree Lighting from US and imported parts
- Meets Buy American requirements within ARRA
- **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – www.p65warnings.ca.gov

**Electrical Data***

| LED Count (x10) | CCT | System Watts 120-480V | 120V | 208V | 240V | 277V | 347V | 480V |
|---|---|---|---|---|---|---|---|---|
| 350mA | | | | | | | | |
| 02 | 30K/40K/50K/57K | 25 | 0.21 | 0.13 | 0.11 | 0.10 | 0.08 | 0.07 |
| | TRL | 19 | 0.16 | 0.09 | 0.08 | 0.07 | 0.05 | 0.04 |
| 04 | 30K/40K/50K/57K | 46 | 0.36 | 0.23 | 0.21 | 0.20 | 0.15 | 0.12 |
| | TRL | 35 | 0.29 | 0.17 | 0.15 | 0.13 | 0.10 | 0.07 |
| 06 | 30K/40K/50K/57K | 66 | 0.52 | 0.31 | 0.28 | 0.26 | 0.20 | 0.15 |
| | TRL | 50 | 0.41 | 0.24 | 0.21 | 0.18 | 0.14 | 0.10 |
| 08 | 30K/40K/50K/57K | 90 | 0.75 | 0.44 | 0.38 | 0.34 | 0.26 | 0.20 |
| | TRL | 68 | 0.57 | 0.33 | 0.28 | 0.25 | 0.20 | 0.14 |
| 10 | 30K/40K/50K/57K | 110 | 0.92 | 0.53 | 0.47 | 0.41 | 0.32 | 0.24 |
| | TRL | 83 | 0.69 | 0.40 | 0.35 | 0.30 | 0.24 | 0.17 |
| 12 | 30K/40K/50K/57K | 130 | 1.10 | 0.63 | 0.55 | 0.48 | 0.38 | 0.28 |
| | TRL | 99 | 0.82 | 0.48 | 0.41 | 0.36 | 0.28 | 0.21 |
| 14 | 30K/40K/50K/57K | 158 | 1.32 | 0.77 | 0.68 | 0.62 | 0.47 | 0.35 |
| | TRL | 120 | 1.00 | 0.58 | 0.50 | 0.43 | 0.34 | 0.25 |
| 16 | 30K/40K/50K/57K | 179 | 1.49 | 0.87 | 0.77 | 0.68 | 0.53 | 0.39 |
| | TRL | 136 | 1.13 | 0.65 | 0.57 | 0.49 | 0.39 | 0.28 |
| 525mA | | | | | | | | |
| 02 | 30K/40K/50K/57K | 37 | 0.30 | 0.19 | 0.17 | 0.16 | 0.12 | 0.10 |
| 04 | 30K/40K/50K/57K | 70 | 0.58 | 0.34 | 0.31 | 0.28 | 0.21 | 0.16 |
| 06 | 30K/40K/50K/57K | 101 | 0.84 | 0.49 | 0.43 | 0.38 | 0.30 | 0.22 |
| 08 | 30K/40K/50K/57K | 133 | 1.13 | 0.66 | 0.58 | 0.51 | 0.39 | 0.28 |
| 10 | 30K/40K/50K/57K | 171 | 1.43 | 0.83 | 0.74 | 0.66 | 0.50 | 0.38 |
| 12 | 30K/40K/50K/57K | 202 | 1.69 | 0.98 | 0.86 | 0.77 | 0.59 | 0.44 |
| 14 | 30K/40K/50K/57K | 232 | 1.94 | 1.12 | 0.98 | 0.87 | 0.68 | 0.50 |
| 16 | 30K/40K/50K/57K | 263 | 2.21 | 1.27 | 1.11 | 0.97 | 0.77 | 0.56 |
| 700mA | | | | | | | | |
| 02 | 30K/40K/50K/57K | 50 | 0.41 | 0.25 | 0.22 | 0.20 | 0.15 | 0.12 |
| 04 | 30K/40K/50K/57K | 93 | 0.78 | 0.46 | 0.40 | 0.36 | 0.27 | 0.20 |
| 06 | 30K/40K/50K/57K | 134 | 1.14 | 0.65 | 0.57 | 0.50 | 0.39 | 0.29 |

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V or 347-480V +/- 10%

**THE EDGE® Series Ambient Adjusted Lumen Maintenance**[1]

| Ambient | CCT | Initial LMF | 25K hr Reported[2] LMF | 50K hr Reported[2] LMF | 75K hr Reported[2]/Estimated[3] LMF | 100K hr Estimated[3] LMF |
|---|---|---|---|---|---|---|
| 5°C (41°F) | 30K/40K/50K/57K | 1.04 | 1.03 | 1.03 | 1.03[2] | 1.03 |
| | TRL | 1.06 | 1.06 | 1.06 | 1.06[3] | 1.06 |
| 10°C (50°F) | 30K/40K/50K/57K | 1.03 | 1.02 | 1.02 | 1.02[2] | 1.02 |
| | TRL | 1.04 | 1.04 | 1.04 | 1.04[3] | 1.04 |
| 15°C (59°F) | 30K/40K/50K/57K | 1.02 | 1.01 | 1.01 | 1.01[2] | 1.01 |
| | TRL | 1.03 | 1.03 | 1.03 | 1.03[3] | 1.03 |
| 20°C (68°F) | 30K/40K/50K/57K | 1.01 | 0.99 | 0.99 | 0.99[2] | 0.99 |
| | TRL | 1.01 | 1.01 | 1.01 | 1.01[3] | 1.01 |
| 25°C (77°F) | 30K/40K/50K/57K | 1.00 | 0.98 | 0.98 | 0.98[2] | 0.98 |
| | TRL | 1.00 | 1.00 | 1.00 | 1.00[3] | 1.00 |

[1] Lumen maintenance values at 25°C (77°F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the Temperature Zone Reference Document for outdoor average nighttime ambient conditions.
[2] In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to 6x the tested duration in the IES LM-80 report for the LED.
[3] Estimated values are calculated and represent time durations that exceed the 6x test duration of the LED.

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CREE LIGHTING

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PROJECT NAME:
TOMMY CARWASH
FAIRFAX, VA
DRAWING NUMBER:
RL-7989-S1-R1

TOMMY CAR WASH SYSTEMS

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| No. | REVISIONS | DATE | BY |
|---|---|---|---|

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

COMMONWEALTH OF VIRGINIA
CHRIS HOWELL
Lic. No. 0402058105
09/12/2024
PROFESSIONAL ENGINEER

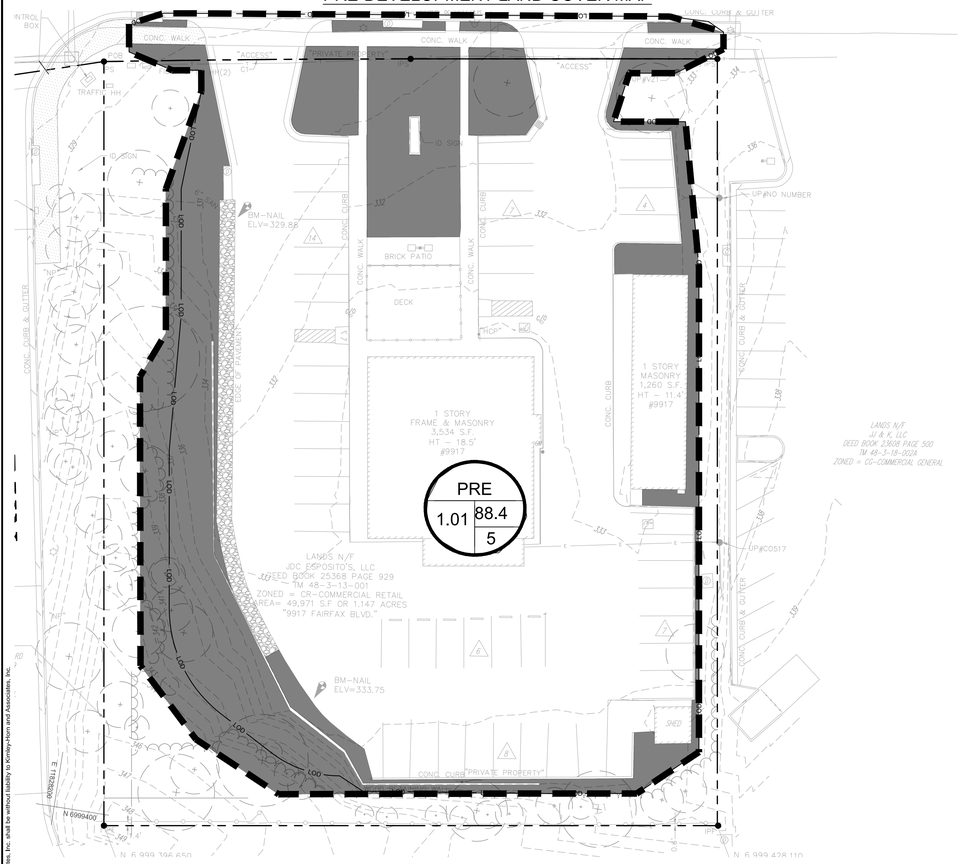
KHA PROJECT 110790001
DATE 09/12/2024
SCALE AS SHOWN
DESIGNED BY CMH
DRAWN BY EPR
CHECKED BY CMH

# LIGHTING DETAILS

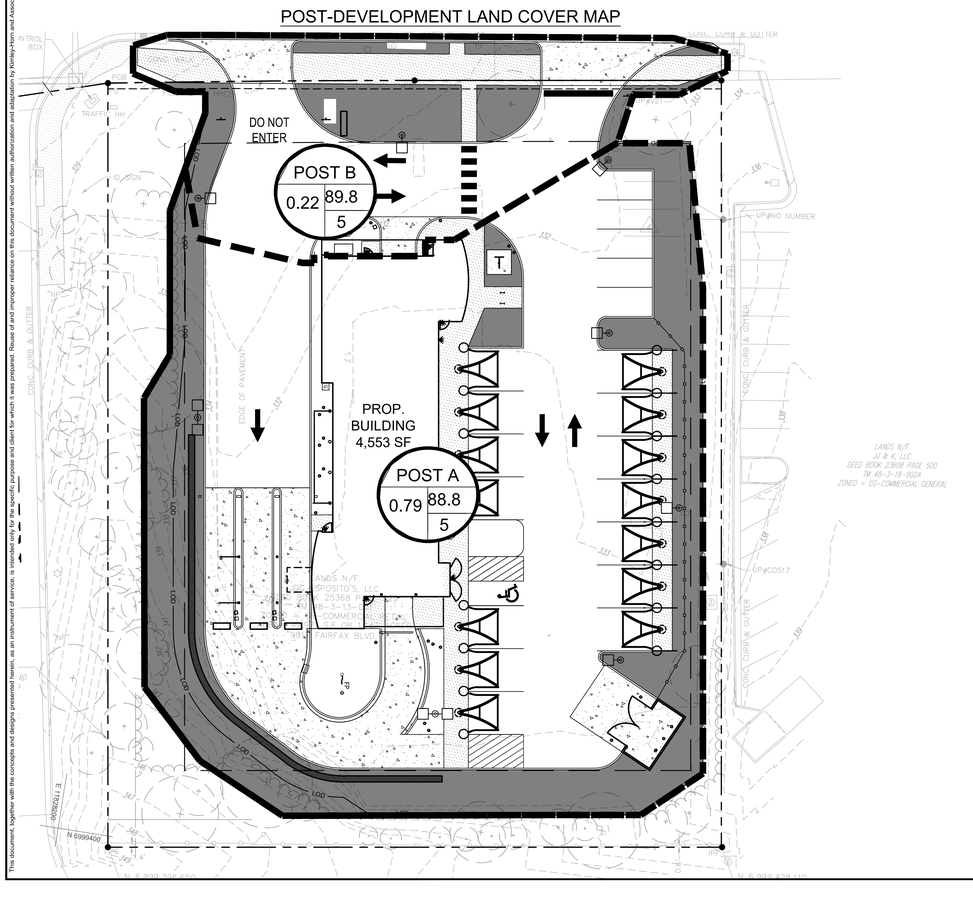
TOMMY'S CAR WASH
9917 FAIRFAX BLVD
PREPARED FOR
OLYMPUS PINES
CITY OF FAIRFAX
VIRGINIA

SHEET NUMBER
10

## PRE-DEVELOPMENT LAND COVER MAP




## POST-DEVELOPMENT LAND COVER MAP

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### Development Drainage Area Calculations for SCS Method

**Project:** Tommy's Fairfax 02/15/24 **Initials:** EB

**Curve Numbers**

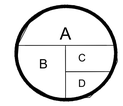
| Land Cover | A | B | C | D |
|---|---|---|---|---|
| Open Space (good) | 39 | 61 | 74 | 80 |
| Impervious | 98 | 98 | 98 | 98 |
| Woods (good) | 30 | 55 | 70 | 77 |
| - | - | - | - | - |
| - | - | - | - | - |

**Runoff Coefficients**

| Drainage Area | Open Space (good) B | Impervious B | Woods (good) D | Woods (good) C | Woods (good) B | Total Area | Curve Number |
|---|---|---|---|---|---|---|---|
| | Runoff Coefficient 61 | Runoff Coefficient 98 | Runoff Coefficient 77 | Runoff Coefficient 70 | Runoff Coefficient 55 | | |
| | Area (ac) | Area (ac) | Area (ac) | Area (ac) | Area (ac) | A | C |
| **Pre** | 0.26 | 0.75 | | | | **1.01** | **88.4** |
| **Post-A** | 0.20 | 0.59 | | | | **0.79** | **88.8** |
| **Post-B** | 0.05 | 0.17 | | | | **0.22** | **89.8** |
| **Total Post** | 0.25 | 0.77 | | | | **1.01** | **89.0** |

## LEGEND

- PROPERTY LINE
- LOD — LIMITS OF DISTURBANCE
- DRAINAGE DIVIDE
- PERVIOUS AREA




A. DRAINAGE AREA NAME
B. ACREAGE
C. CURVE NUMBER
D. TIME OF CONCENTRATION

GRAPHIC SCALE IN FEET 0 10 20 40

NORTH

| No. | REVISIONS | DATE | BY |
|---|---|---|---|

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PHONE: 703-674-1300 FAX: 703-674-1350
WWW.KIMLEY-HORN.COM

KHA PROJECT 110720001
DATE 09/12/2024
SCALE AS SHOWN
DESIGNED BY CMH
DRAWN BY EPR
CHECKED BY CMH

# LAND COVER MAP

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

CITY OF FAIRFAX VIRGINIA

SHEET NUMBER
11

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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:* 2013 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* |

[1] *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 I shows load reduction requriement for new impervious cover (based on new development load limit, 0.41 lbs/acre/year).*

### 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 |

**Treatment Volume and Nutrient Load**

| | |
|---|---|
| **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 |

| | |
|---|---|
| **Post-ReDevelopment Treatment Volume (acre-ft)** | 0.0634 |
| **Post-ReDevelopment Treatment Volume (cubic feet)** | 2,761 |
| **Post-ReDevelopment Load (TP) (lb/yr)*** | **1.73** |
| Post-ReDevelopment 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)** | 0.0013 |
| **Post-Development Treatment Volume (cubic feet)** | 55 |
| **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 |

## 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 | |

| | |
|---|---|
| Total Phosphorus Available for Removal in D.A. A (lb/yr) | 1.38 |
| Post Development Treatment Volume in D.A. A ($ft^3$) | 2,191 |

### Stormwater Best Management Practices (RR = Runoff Reduction)

--Select from dropdown lists-

| Practice | Runoff Reduction Credit (%) | Managed Turf Credit Area (acres) | Impervious Cover Credit Area (acres) | Volume from Upstream Practice ($ft^3$) | Runoff Reduction ($ft^3$) | Remaining Runoff Volume ($ft^3$) | Total BMP Treatment Volume ($ft^3$) | 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 | AREA CHECK: OK. |
| TOTAL MANAGED TURF AREA TREATED (ac) | 0.20 | 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 ($ft^3$) | 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 ($ft^3$) | 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 Information 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.

| No. | REVISIONS | DATE | BY |
|---|---|---|---|

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
11400 COMMERCE PARK DR., SUITE 400, RESTON, VA 20191
PHONE: 703-674-1300 FAX: 703-674-1350
WWW.KIMLEY-HORN.COM

KHA PROJECT 111079001
DATE 09/12/2024
SCALE AS SHOWN
DESIGNED BY CMH
DRAWN BY EPR
CHECKED BY CMH

WATER QUALITY CALCULATIONS

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

CITY OF FAIRFAX VIRGINIA

SHEET NUMBER
12

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