

CITY OF ALEXANDRIA COMPLETE STREETS TO-11-DUKE STREET LEFT TURN CALMING CONCEPTUAL PLANS

PROJECT DESCRIPTION

THE PURPOSE OF THIS PROJECT IS TO DEVELOP A CONCEPTUAL PLAN FOR SAFETY AND LEFT TURN TRAFFIC CALMING MEASURES ALONG THE 1.4 MILE DUKE STREET CORRIDOR FROM JORDAN STREET TO NORTH RIPLEY STREET. THE PLANS INCLUDE INSTALLATION OF PAVEMENT MARKINGS AND SIGNAGE, CURB EXTENSIONS, AND SIGNAL HEAD MODIFICATIONS.

INDEX OF SHEETS

- TITLE SHEET
- 2A GENERAL NOTES
- 2B GENERAL NOTES
- DUKE STREET AND JORDAN STREET
- DUKE STREET AND SHOPPES OF FOXCHASE
- DUKE STREET AND CAMERON STATION BLVD
- DUKE STREET AND SOUTH PICKETT STREET
- DUKE STREET AND NORTH PAXTON STREET
- DUKE STREET AND SOUTH REYNOLDS STREET
- DUKE STREET AND NORTH RIPLEY STREET
- A1 AUTOTURN EXHIBIT
- A2 AUTOTURN EXHIBIT
- A3 AUTOTURN EXHIBIT
- A4 AUTOTURN EXHIBIT



SCALE: 1" = 3000'

CONTACTS

CITY OF ALEXANDRIA TRANSPORTATION AND ENVIRONMENTAL SERVICES CITY HALL 301 KING STREET, SUITE 3600 ALEXANDRIA, VA 22314 TEL: (703) 746-4408 FAX: (703) 212-8405 CONTACT: ALEXANDRIA CARROLL, COMPLETE STREETS PROGRAM MANAGER CIVIL ENGINEER KIMLEY-HORN AND ASSOCIATES 11400 COMMERCE PARK DRIVE, SUITE 400 RESTON, VA 20191 TEL: (703) 674-1300 FAX: (703) 674-1350 CONTACT: DAVID SAMBA, P.E.

30% SUBMITTAL

Kimley» Horn 2/3/23 11400 COMMERCE PARK DR., SUITE 400, RESTON, VA 20191 PHONE: 703-674-1300 FAX: 703-674-1350 WWW.KIMLEY-HORN.COM

SHEET NUMBER

SIGNING AND PAVEMENT MARKING NOTES:

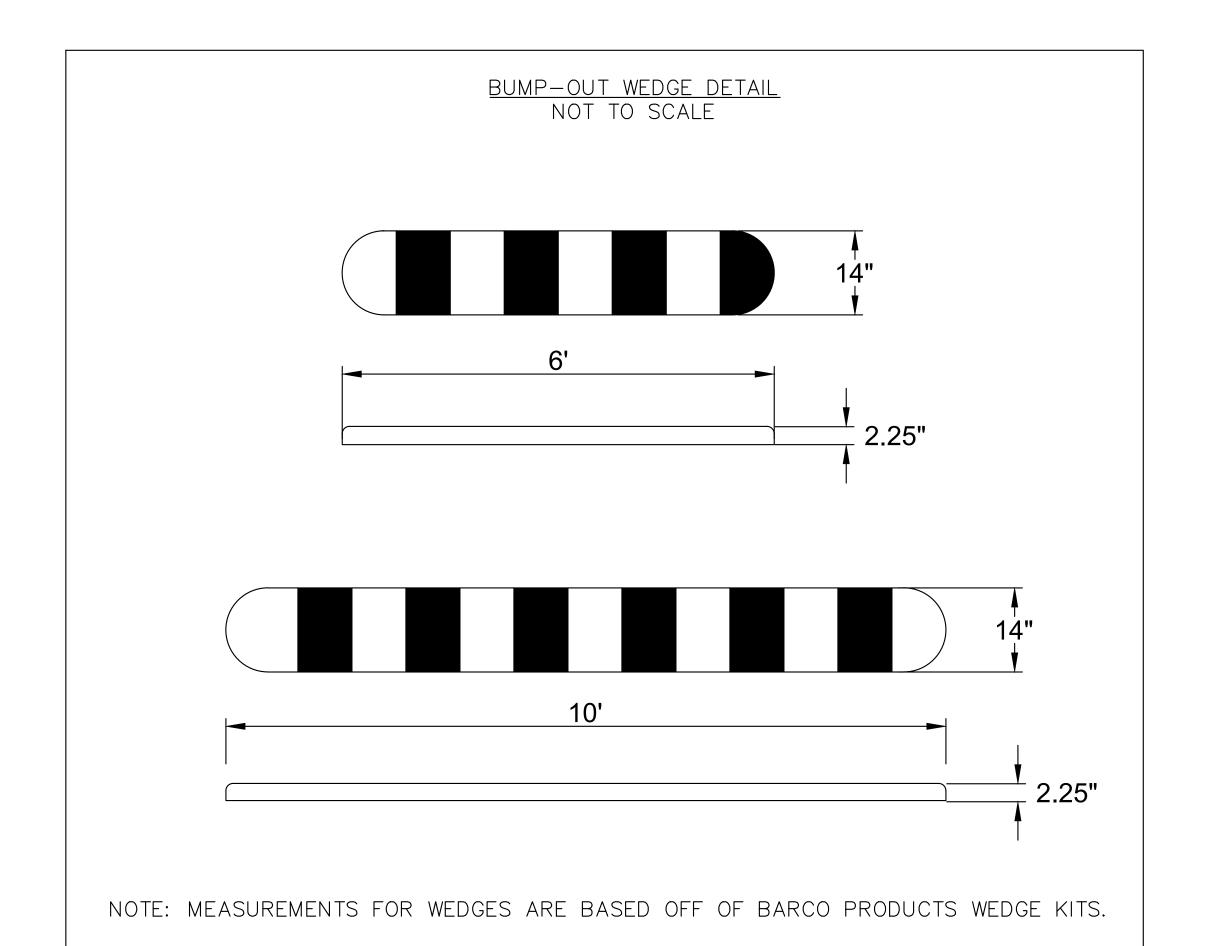
- 1. ALL PROPOSED SIGNING AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH CITY OF ALEXANDRIA CONSTRUCTION STANDARDS.
- 2. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE NOTED IN THE PAVEMENT MARKING LEGEND.
- 3. ANY EXISTING PAVEMENT MARKINGS THAT WILL CONFLICT WITH PROPOSED PAVEMENT MARKINGS SHALL BE COMPLETELY ERADICATED.
- 4. LIMITS SHOWN OF PROPOSED MARKINGS ARE APPROXIMATE AND SHALL BE MODIFIED IN THE FIELD TO ENSURE THAT PROPOSED PAVEMENT MARKINGS CONTINUE UNTIL EXISTING PAVEMENT MARKINGS CAN BE MATCHED.
- 5. LIMITS OF PARKING LANE MARKINGS ARE APPROXIMATE.
- 6. PROPOSED SIGN LOCATIONS ARE APPROXIMATE AND SHALL BE MODIFIED IN THE FIELD TO AVOID CONFLICT WITH UNDERGROUND UTILITIES OR OTHER CONSTRUCTIONS.
- PROPOSED SIGNS SHALL BE INSTALLED SO THAT NO PORTION OF THE SIGN PANEL OVERHANGS ADJACENT ROADWAY PAVEMENT, I.E. SHALL NOT HANG IN FRONT OF A FACE OF CURB.
- 8. PROPOSED SIGNS AND POSTS SHALL BE INSTALLED SO THEY DO NOT BLOCK THE VISIBILITY OF ANY EXISTING SIGNS OR SIGNALS.
- 9. PROPOSED SIGNS AND POSTS SHALL BE CLEAR OF EXISTING FIRE HYDRANTS, SURFACE UTILITY, AND OVERHEAD UTILITY EQUIPMENT A MINIMUM OF 10 FEET.
- 10. FOR NEW POST INSTALLATION, THE CONTRACTOR SHALL VERIFY THAT THERE ARE NOT CONFLICTING UNDERGROUND OR OVERHEAD UTILITIES.
- 11. IF SIGNS ARE MOUNTED ON A POLE NOT OWNED BY THE CITY, WRITTEN PERMISSION MUST BE OBTAINED FROM THE OWNER (UTILITY COMPANY OR PROPERTY OWNER). THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING REQUIRED PERMISSION.
- 12. ALL SIGN LOCATIONS SHOWN ON THE PLANS ARE SCHEMATIC AND MAY NOT REFLECT ACTUAL FIELD LOCATION. THE CONTRACTOR SHALL VERIFY EACH LOCATION PRIOR TO INSTALLING A SIGN. IF AT ANY POINT THE CONTRACTOR FINDS A CONFLICT. THE CONTRACT SHALL CONTACT THE ENGINEER PRIOR TO INSTALLING THE PROPOSED SIGN. PROPOSED SIGN LOCATIONS CAN BE ADJUSTED AS APPROVED BY THE ENGINEER.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING WITH MATCHING MATERIALS ANY PAVEMENT, PAVEMENT MARKINGS, CURB AND GUTTER, SIDEWALK, ETC. THAT ARE DAMAGED DURING CONSTRUCTION.
- 14. INSTALLATION OF TRAFFIC SEPARATOR IS TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. DIMENSIONS, MATERIALS. AND ATTACHMENTS MAY VARY BETWEEN MANUFACTURERS. COLOR OF SEPARATOR SHALL MATCH COLOR OF APPLICABLE EDGE LINE.
- 15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK ZONE SIGNING, DELINEATION, PAVEMENT MARKINGS AND ANY OTHER TRAFFIC CONTROL DEVICES NECESSARY TO PERFORM THE WORK. THE WORK ZONE TRAFFIC CONTROL SHALL CONFORM TO THE CURRENT EDITION OF THE VIRGINIA WORK AREA PROTECTION MANUAL. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL IMMEDIATELY REMOVE ALL TEMPORARY DEVICES.
- 16. CITY OF ALEXANDRIA T&ES MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENTS OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION. CERTIFIED RESPONSIBLE LAND DISTURBER IS REQUIRED TO ATTEND PRE-CONSTRUCTION MEETINGS.
- 17. ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH THE ALEXANDRIA NOISE CONTROL CODE TITLE 11, CHAPTER 5, WHICH PERMITS CONSTRUCTION ACTIVITIES TO OCCUR BETWEEN THE FOLLOWING HOURS:
- MONDAY THROUGH FRIDAY FROM 7AM TO 6PM
- SATURDAYS FROM 9AM TO 6PM
- NO CONSTRUCTION ACTIVITIES ARE PERMITTED ON SUNDAYS

- 18. EMERGENCY VEHICLE EASEMENT SIGNAGE AND FIRE HYDRANTS SHALL REMAIN AVAILABLE DURING AND AFTER CONSTRUCTION. IN THE EVENT THAT ROAD CLOSURE IS REQUIRED, THE APPLICANT SHALL CONTACT THE ALEXANDRIA FIRE DEPARTMENT'S COMMUNICATIONS DIVISION AT 703-838-4660.
- 19. ALL EXISTING RESIDENTIAL AND COMMERCIAL ENTRANCES SHALL REMAIN OPEN AT ALL TIMES UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER.
- 20. SIDEWALKS AND CROSSWALKS SHALL REMAIN OPEN AT ALL TIMES UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER.
- 21. ALL LANE WIDTHS SHALL BE A MINIMUM OF 10 FEET DURING CONSTRUCTION.
- 22. LANE CLOSURES REQUIRE A MINIMUM OF 5 BUSINESS DAYS ADVANCE NOTICE TO CITY ENGINEER FOR APPROVAL.
- 23. SOURCE OF BASE MAPPING IS CITY OF ALEXANDRIA GEOGRAPHIC INFORMATION SYSTEM (GIS). ALL DIMENSIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO ORDERING MATERIALS FOR CONSTRUCTION. WHEN THESE PLANS ARE IN CONFLICT WITH ACTUAL SITE CONDITIONS, ANY DISCREPANCY SHALL BE REPORTED TO THE CITY ENGINEER PRIOR TO BEGINNING WORK. PROPOSED PAVEMENT MARKINGS AND SIGNAGE MAY BE ADJUSTED AS DIRECTED BY THE CITY ENGINEER.
- 24. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING MISS UTILITY PRIOR TO BEGINNING WORK. ANY DAMAGE TO UTILITIES MUST BE REPAIRED OR REPLACED BY THE CONTRACTOR, AT HIS OR HER EXPENSE.

SIGN SCHEDULE

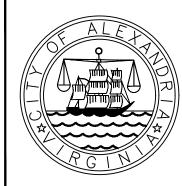
		PANEL SIZE		QUANTITY	PROPOSED SIGN STRUCTURE STD.
	MUTCD STANDARD		Н		
NO TURN ON RED	R10-11A	30"	36"	13	STP-1 SPD-5 TYPE C*

*ALL SIGNS SHALL BE MOUNTED ON EXISTING MAST ARMS EXCEPT WHERE NOTED IN THE PLANS.



11400 COMMERCE PARK DR., SUITE 400, RESTON, VA 20191 PHONE: 703-674-1300 FAX: 703-674-1350

WWW.KIMLEY-HORN.COM



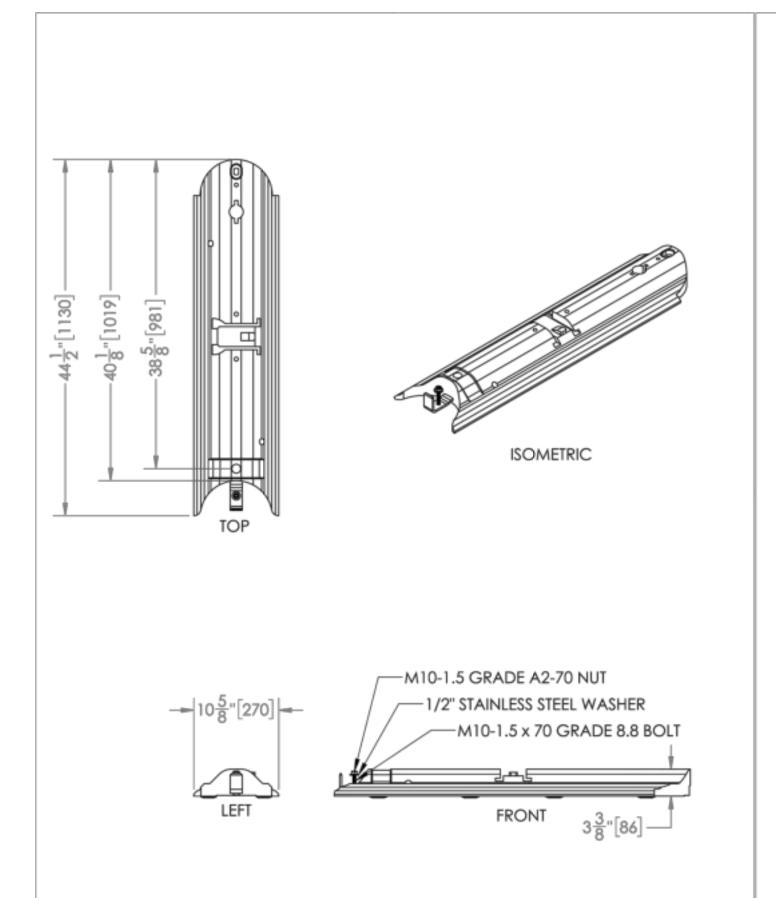
CITY OF ALEXANDRIA TASK ORDER TO-11 DUKE STREET LEFT TURN TRAFFIC CALMING

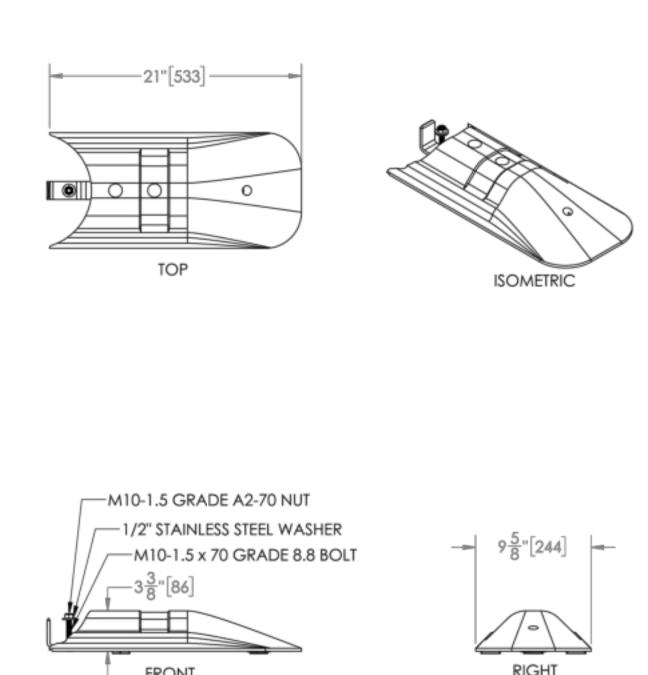
<u> HARDENED CENTER LINE — QWICK KURB BOLLARD DETAIL</u>

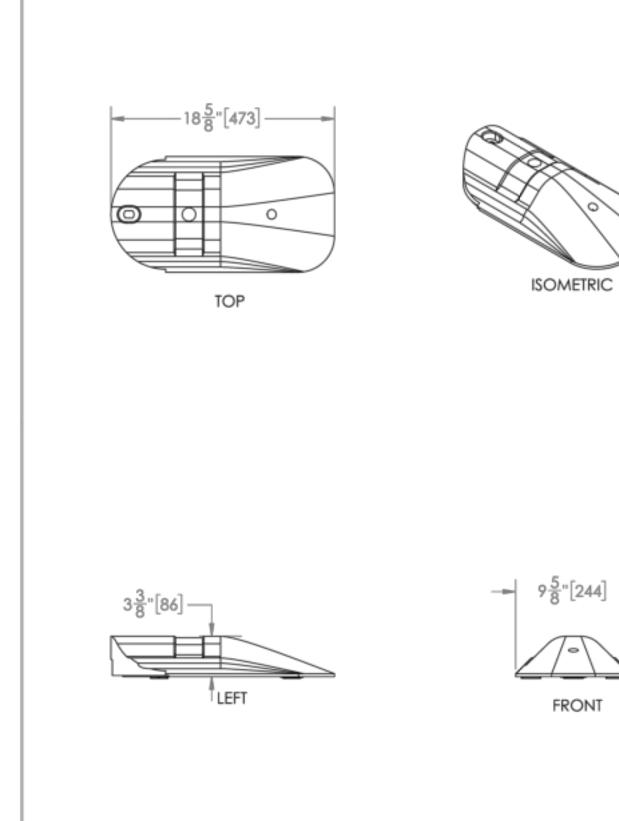
<u>HARDENED CENTER LINE —</u> QWICK KURB START CURB SECTION DETAIL

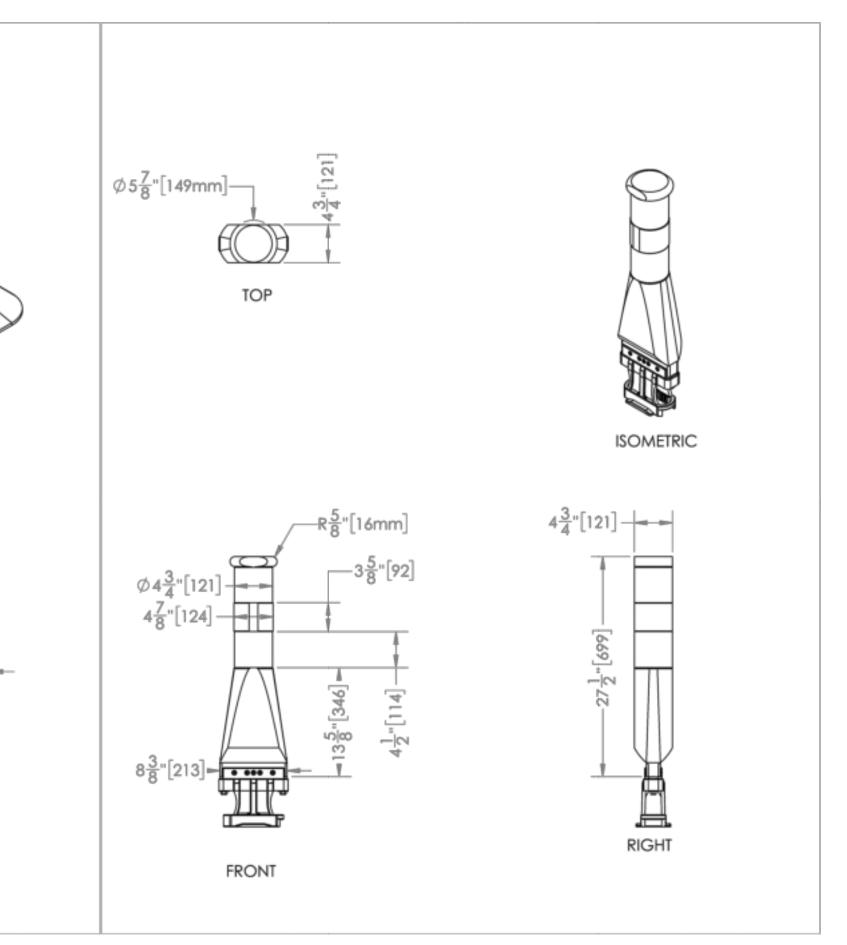
<u>HARDENED CENTER LINE —</u> <u>QWICK KURB END CURB SECTION DETAIL</u>

<u>HARDENED CENTER LINE —</u> QWICK KURB FLEX POST DETAIL

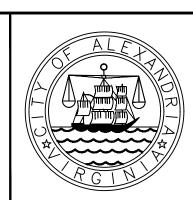








Kimley» Horn 11400 COMMERCE PARK DR., SUITE 400, RESTON, VA 20191 PHONE: 703-674-1300 FAX: 703-674-1350 WWW.KIMLEY-HORN.COM

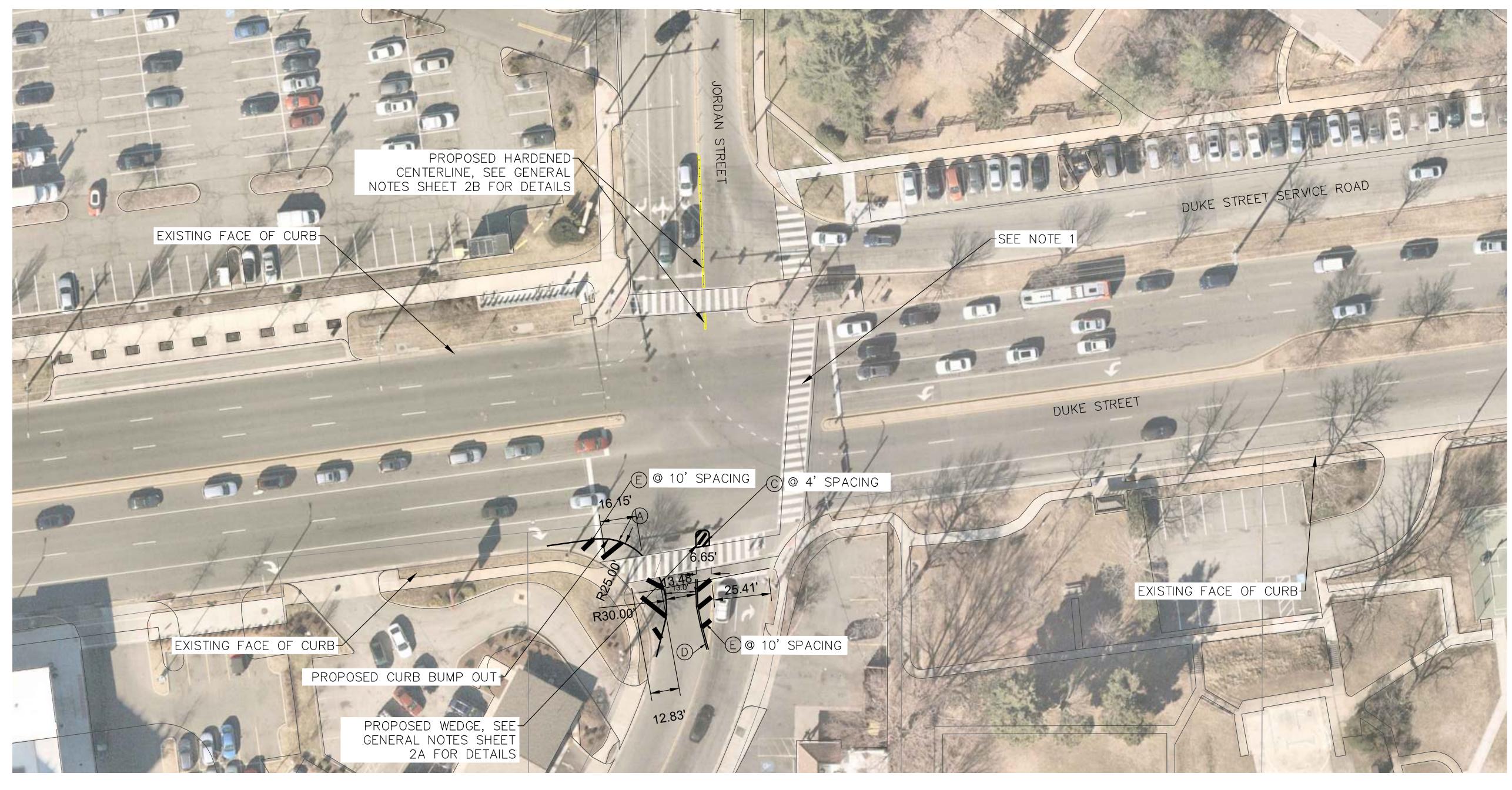


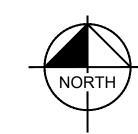
CITY OF ALEXANDRIA TASK ORDER TO-11 DUKE STREET LEFT TURN TRAFFIC CALMING GENERAL NOTES SCALE

DATE

1" = 25'

SHEET NUMBER 2/3/23 2B





<u>duke street and jordan street</u>

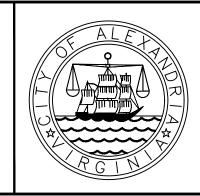
PAVEMENT MARKING LEGEND

- A TYPE B, CLASS 1, YELLOW, 6" WIDTH
- TYPE B, CLASS 1, WHITE, 4" WIDTH, 2' LONG, 6' SPACE
- TYPE B, CLASS I, YELLOW, 12" WIDTH
- TYPE B, CLASS 1, YELLOW, DOUBLE LINE: 4" WIDTH & 4" WIDTH, 4" SPACE
- TYPE B, CLASS I, YELLOW, 24" WIDTH

<u>NOTES</u>

- 1. LEADING PEDESTRIAN INTERVAL (LPI) TO BE ADDED TO NORTH-SOUTH PEDESTRIAN CROSSING.
- 2. LENGTH OF BUMP-OUT WEDGES TO BE DETERMINED IN THE FIELD.

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



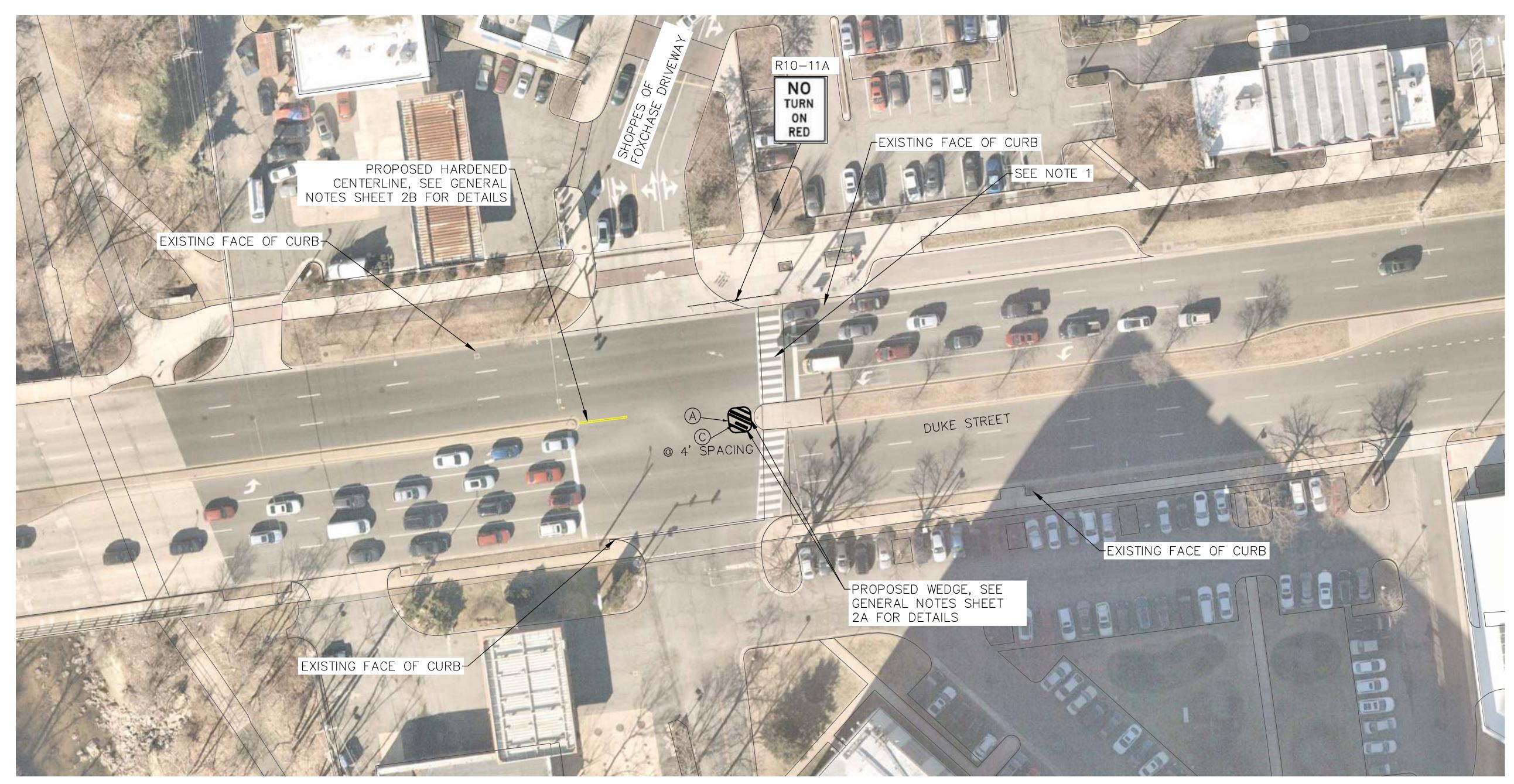
CITY OF ALEXANDRIA TASK ORDER TO-11 DUKE STREET LEFT TURN TRAFFIC CALMING

DUKE STREET AND JORDAN STREET

DATE SHEET NUMBER 2/3/23

SCALE 1" = 25'

30% SUBMITTAL





GRAPHIC SCALE IN FEET
0 12.5 25 50

<u>DUKE STREET AND SHOPPES OF FOXCHASE</u>

PAVEMENT MARKING LEGEND

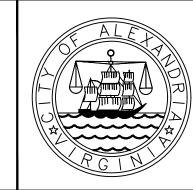
- A TYPE B, CLASS 1, YELLOW, 6" WIDTH
- (B) TYPE B, CLASS 1, WHITE, 4" WIDTH, 2' LONG, 6' SPACE
- © TYPE B, CLASS I, YELLOW, 12" WIDTH
- D TYPE B, CLASS 1, YELLOW, DOUBLE LINE: 4" WIDTH & 4" WIDTH, 4" SPACE

NOTES

- 1. LEADING PEDESTRIAN INTERVAL (LPI) TO BE ADDED TO NORTH—SOUTH PEDESTRIAN CROSSING.
- 2. LENGTH OF BUMP-OUT WEDGES TO BE DETERMINED IN THE FIELD.

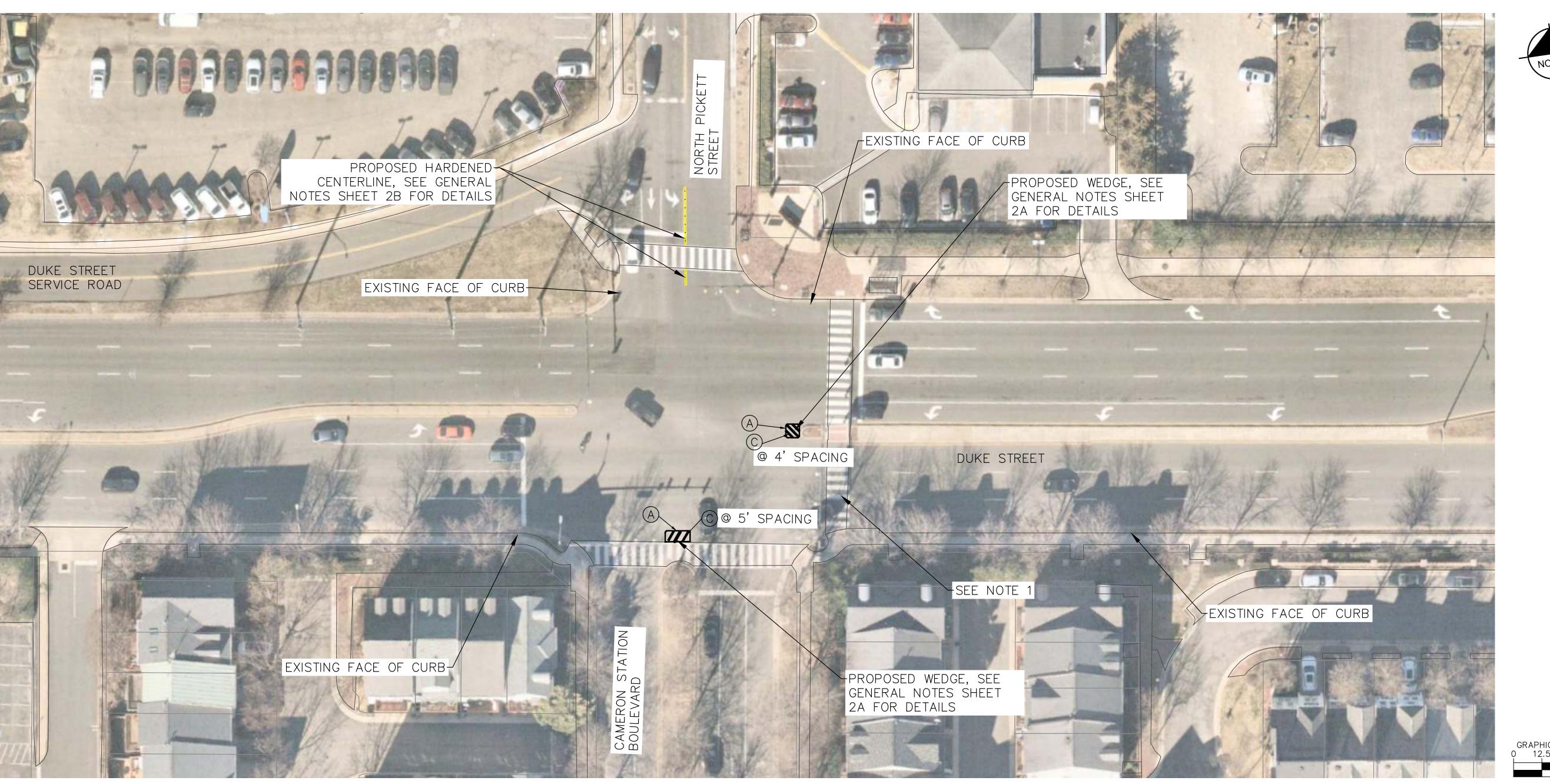
Kimley» Horn

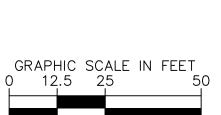
11400 COMMERCE PARK DR., SUITE 400, RESTON, VA 20191
PHONE: 703-674-1300 FAX: 703-674-1350
WWW.KIMLEY-HORN.COM



CITY OF ALEXANDRIA
TASK ORDER TO-11
DUKE STREET LEFT TURN TRAFFIC CALMING

DUKE STREET AND SHOPPES OF FOXCHASE





DUKE STREET AND CAMERON STATION BOULEVARD/NORTH PICKETT STREET

PAVEMENT MARKING LEGEND

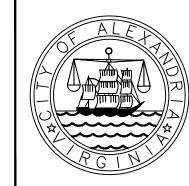
- A TYPE B, CLASS 1, YELLOW, 6" WIDTH
- (B) TYPE B, CLASS 1, WHITE, 4" WIDTH, 2' LONG, 6' SPACE
- © TYPE B, CLASS I, YELLOW, 12" WIDTH
- D TYPE B, CLASS 1, YELLOW, DOUBLE LINE: 4" WIDTH & 4" WIDTH, 4" SPACE

NOTES

- 1. LEADING PEDESTRIAN INTERVAL (LPI) TO BE ADDED TO NORTH—SOUTH PEDESTRIAN CROSSING.
- 2. LENGTH OF BUMP-OUT WEDGES TO BE DETERMINED IN THE FIELD.

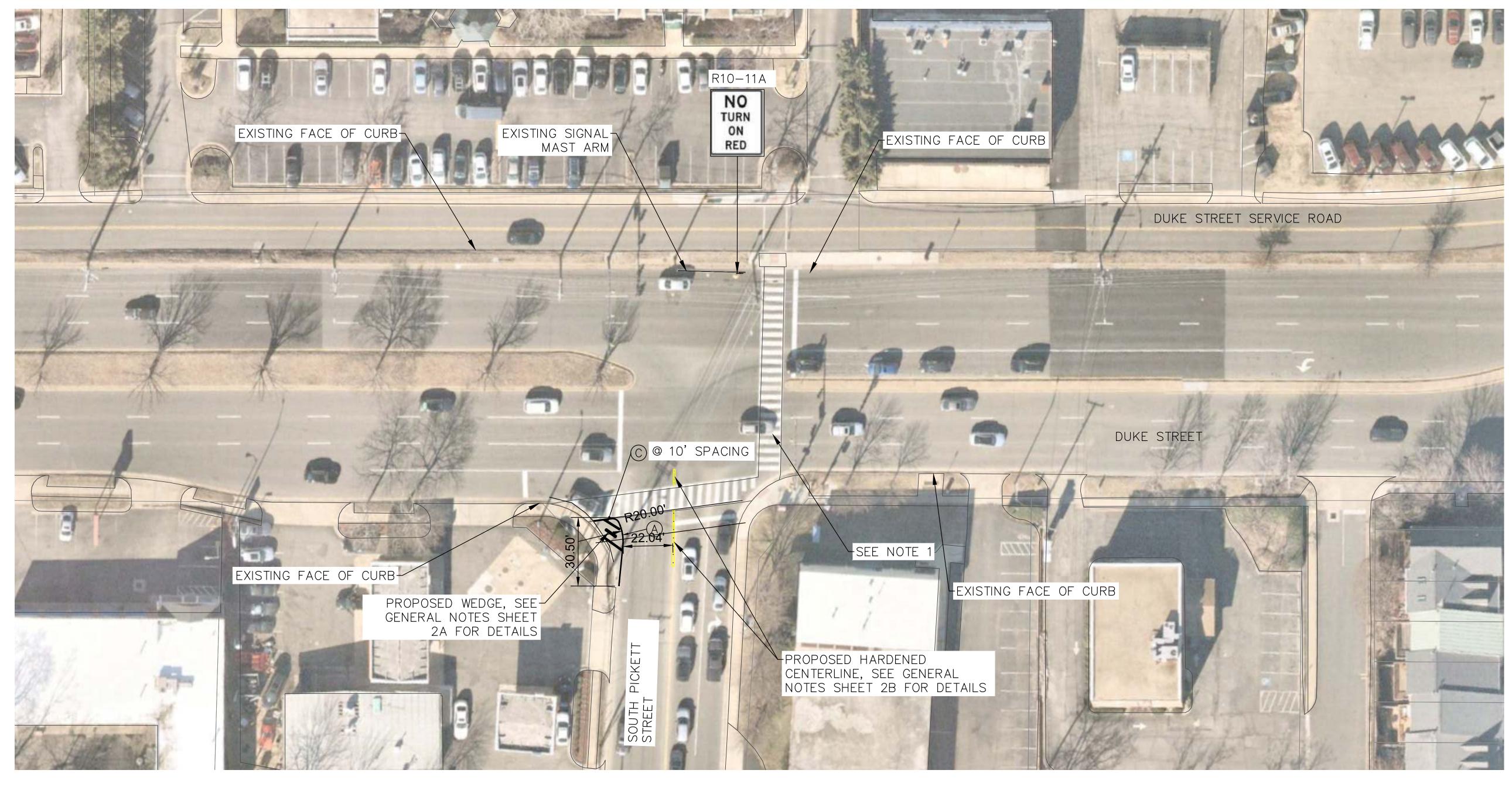
Kimley» Horn

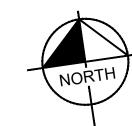
11400 COMMERCE PARK DR., SUITE 400, RESTON, VA 20191
PHONE: 703-674-1300 FAX: 703-674-1350
WWW.KIMLEY-HORN.COM



CITY OF ALEXANDRIA
TASK ORDER TO-11
DUKE STREET LEFT TURN TRAFFIC CALMING

DUKE STREET AND CAMERON STATION BLVD





GRAPHIC SCALE IN FEET
12.5 25 50

<u>DUKE STREET AND SOUTH PICKETT STREET</u>

PAVEMENT MARKING LEGEND

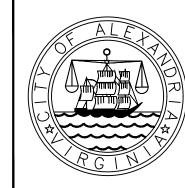
- A TYPE B, CLASS 1, YELLOW, 6" WIDTH
- (B) TYPE B, CLASS 1, WHITE, 4" WIDTH, 2' LONG, 6' SPACE
- © TYPE B, CLASS I, YELLOW, 12" WIDTH
- D TYPE B, CLASS 1, YELLOW, DOUBLE LINE: 4" WIDTH & 4" WIDTH, 4" SPACE

NOTES

- 1. LEADING PEDESTRIAN INTERVAL (LPI) TO BE ADDED TO NORTH—SOUTH PEDESTRIAN CROSSING.
- 2. LENGTH OF BUMP-OUT WEDGES TO BE DETERMINED IN THE FIELD.

Kimley» Horn

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

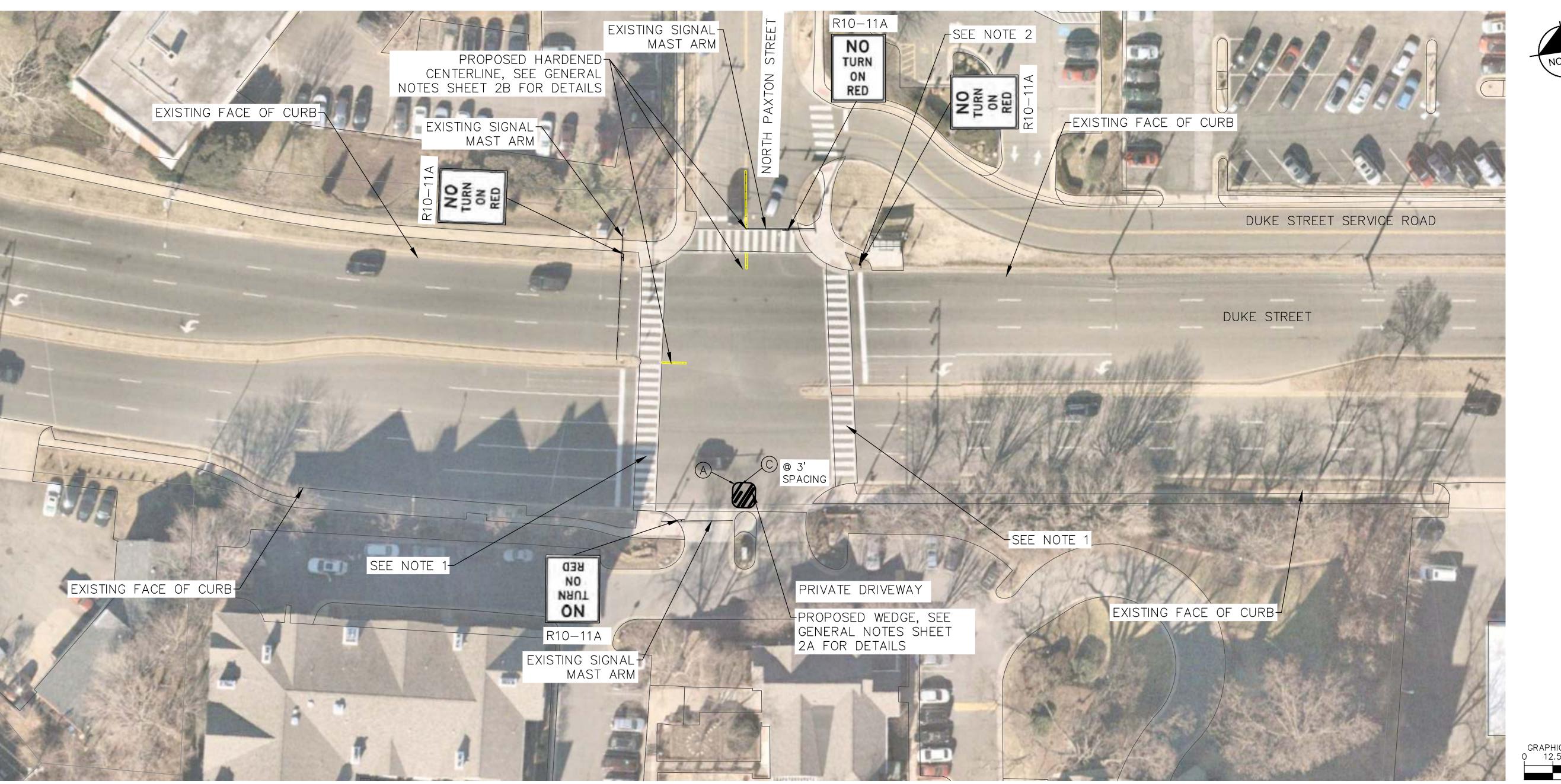


CITY OF ALEXANDRIA
TASK ORDER TO-11
DUKE STREET LEFT TURN TRAFFIC CALMING

DUKE STREET AND SOUTH PICKETT STREET

DATE SHEET NUMBER 2/3/23

SCALE





<u>DUKE STREET AND NORTH PAXTON STREET</u>

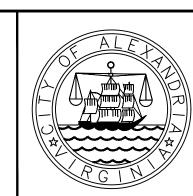
PAVEMENT MARKING LEGEND

- A TYPE B, CLASS 1, YELLOW, 6" WIDTH
- TYPE B, CLASS 1, WHITE, 4" WIDTH, 2' LONG, 6' SPACE
- © TYPE B, CLASS I, YELLOW, 12" WIDTH
- TYPE B, CLASS 1, YELLOW, DOUBLE LINE: 4" WIDTH & 4" WIDTH, 4" SPACE

<u>NOTES</u>

- 1. LEADING PEDESTRIAN INTERVAL (LPI) TO BE ADDED TO NORTH-SOUTH PEDESTRIAN CROSSING.
- 2. REMOVE EXISTING "NO TURN ON RED WHEN PEDESTRIANS ARE PRESENT" SIGN AND REPLACE WITH R10-11A.
- 3. LENGTH OF BUMP-OUT WEDGES TO BE DETERMINED IN THE FIELD.



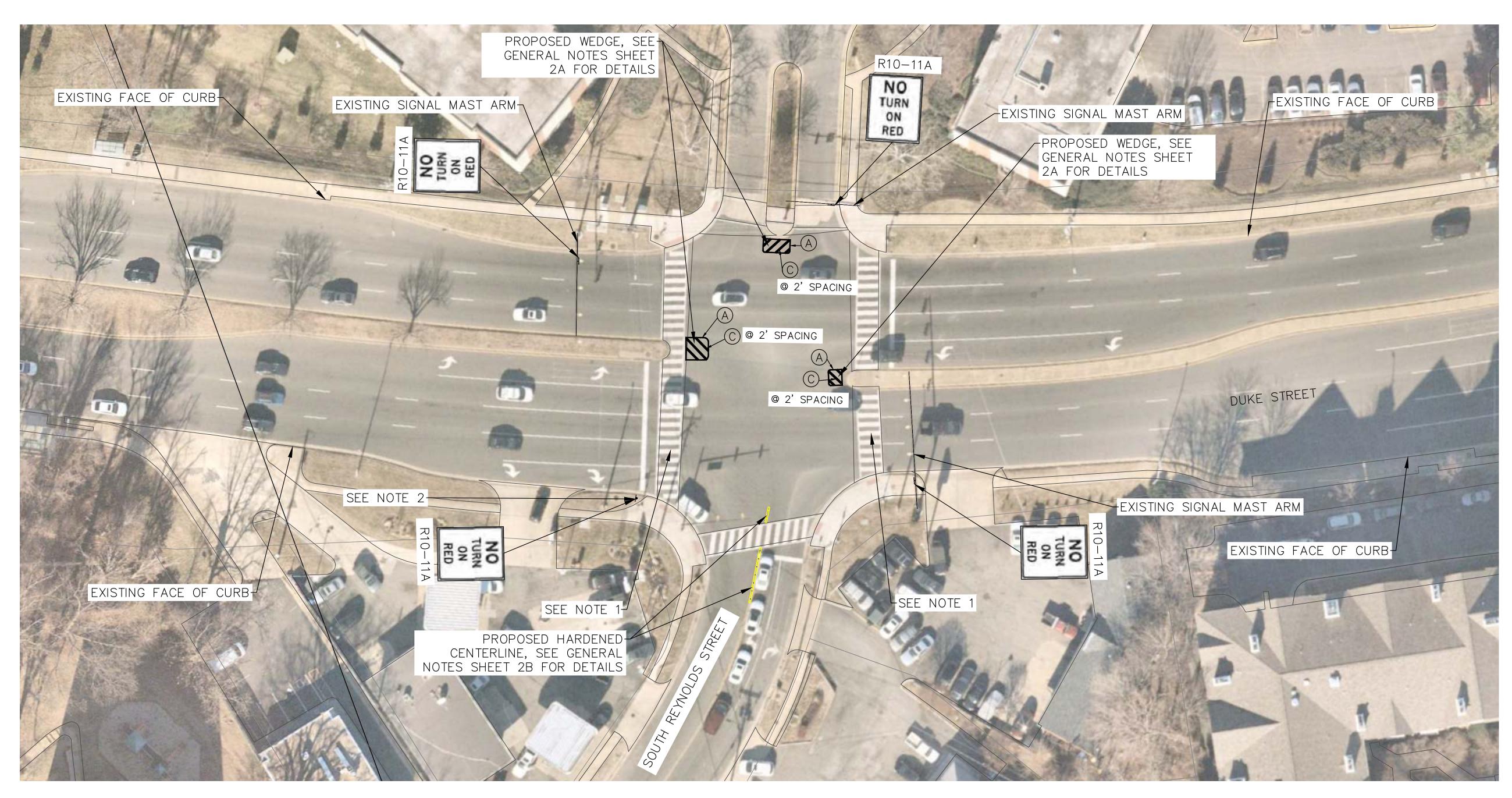


CITY OF ALEXANDRIA TASK ORDER TO-11 DUKE STREET LEFT TURN TRAFFIC CALMING

DUKE STREET AND NORTH PAXTON STREET

DATE SHEET NUMBER 2/3/23

SCALE





<u>duke street and south reynolds street</u>

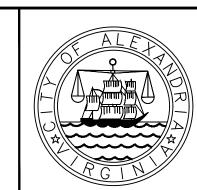
PAVEMENT MARKING LEGEND

- A TYPE B, CLASS 1, YELLOW, 6" WIDTH
- TYPE B, CLASS 1, WHITE, 4" WIDTH, 2' LONG, 6' SPACE
- © TYPE B, CLASS I, YELLOW, 12" WIDTH
- TYPE B, CLASS 1, YELLOW, DOUBLE LINE: 4" WIDTH & 4" WIDTH, 4" SPACE

<u>NOTES</u>

- 1. LEADING PEDESTRIAN INTERVAL (LPI) TO BE ADDED TO NORTH-SOUTH PEDESTRIAN CROSSING.
- 2. REMOVE EXISTING "NO TURN ON RED WHEN PEDESTRIANS ARE PRESENT" SIGN AND REPLACE WITH R10-11A.
- 3. LENGTH OF BUMP-OUT WEDGES TO BE DETERMINED IN THE FIELD.





CITY OF ALEXANDRIA TASK ORDER TO-11 DUKE STREET LEFT TURN TRAFFIC CALMING

DUKE STREET AND SOUTH REYNOLDS STREET





DUKE STREET AND NORTH RIPLEY STREET

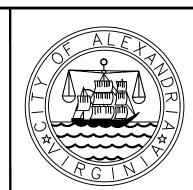
PAVEMENT MARKING LEGEND

- A TYPE B, CLASS 1, YELLOW, 6" WIDTH
- TYPE B, CLASS 1, WHITE, 4" WIDTH, 2' LONG, 6' SPACE
- © TYPE B, CLASS I, YELLOW, 12" WIDTH
- D TYPE B, CLASS 1, YELLOW, DOUBLE LINE: 4" WIDTH & 4" WIDTH, 4" SPACE

<u>NOTES</u>

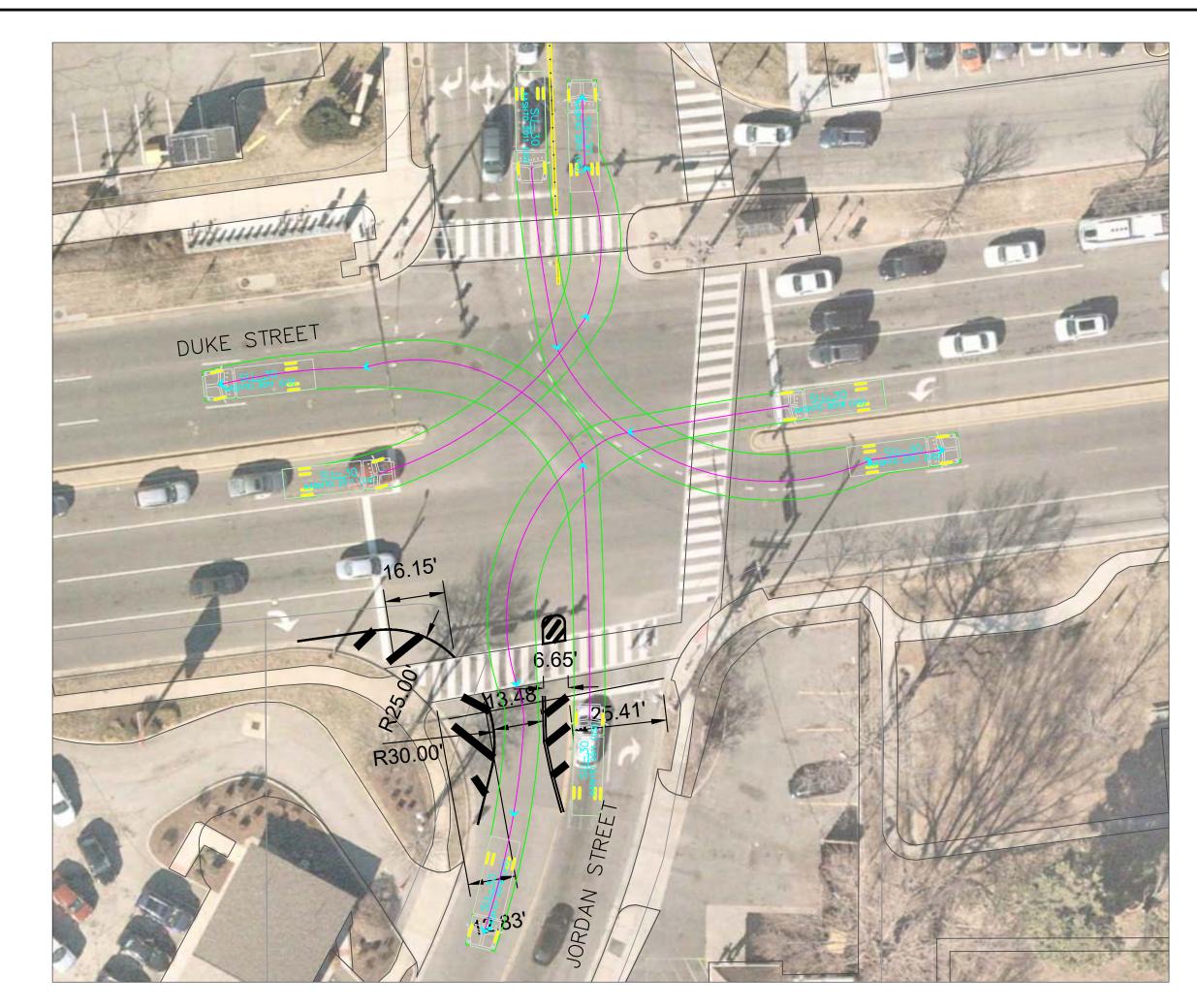
- 1. EXCLUSIVE PEDESTRIAN CROSSING PHASE TO BE ADDED TO NORTH-SOUTH AND EAST-WEST PEDESTRIAN CROSSINGS.
- 2. LENGTH OF BUMP-OUT WEDGES TO BE DETERMINED IN THE FIELD.

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



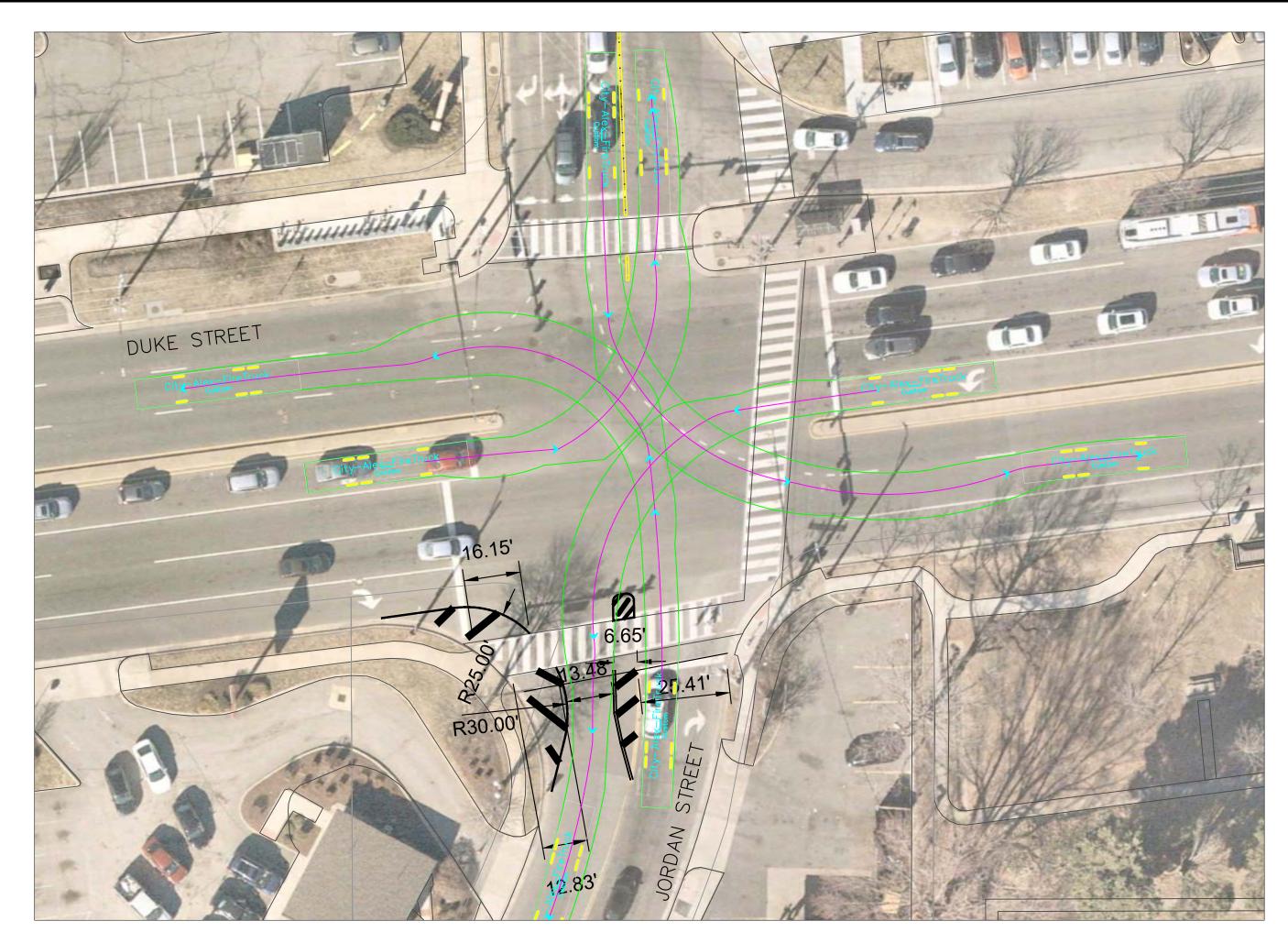
CITY OF ALEXANDRIA TASK ORDER TO-11 DUKE STREET LEFT TURN TRAFFIC CALMING

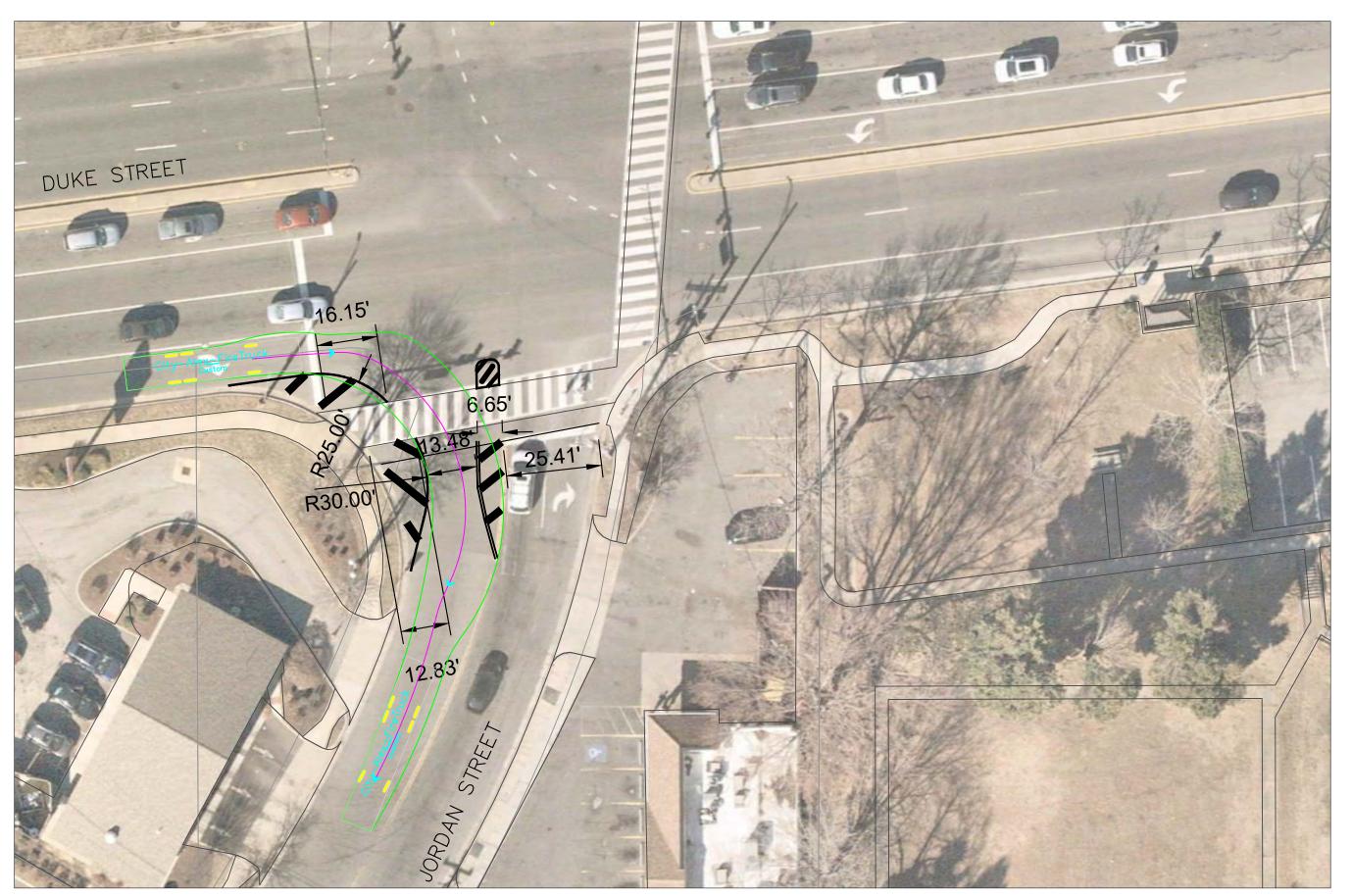
DUKE STREET AND NORTH RIPLEY STREET





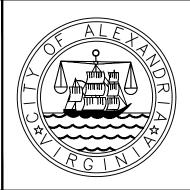






<u>DUKE STREET AND JORDAN STREET - FIRE TRUCK</u>

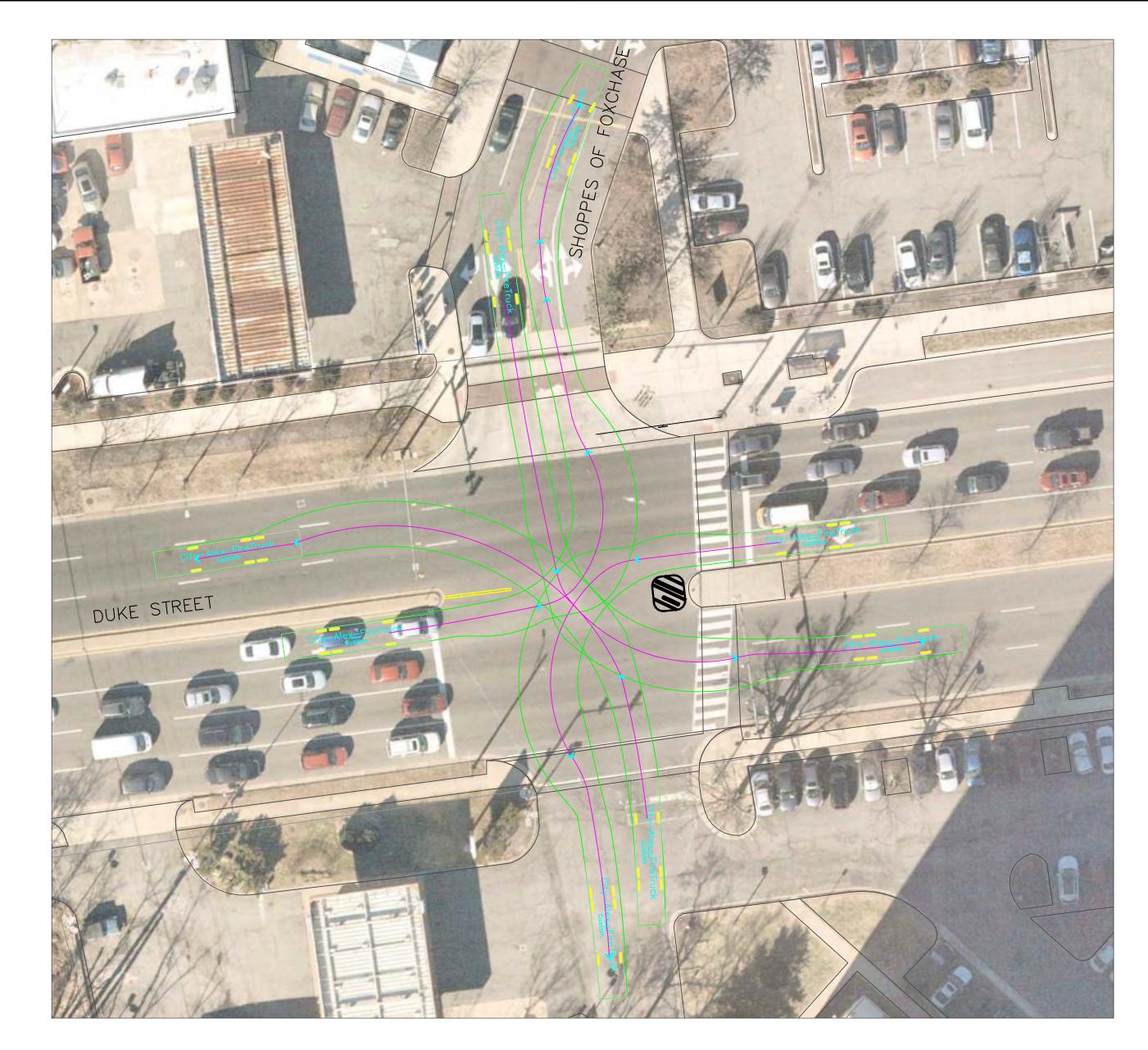




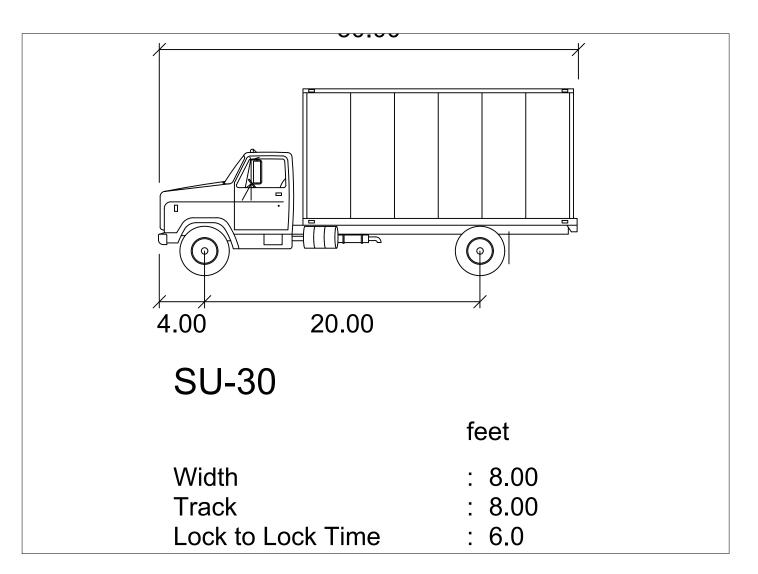
CITY OF ALEXANDRIA TASK ORDER TO-11 DUKE STREET LEFT TURN TRAFFIC CALMING

AUTOTURN EXHIBIT

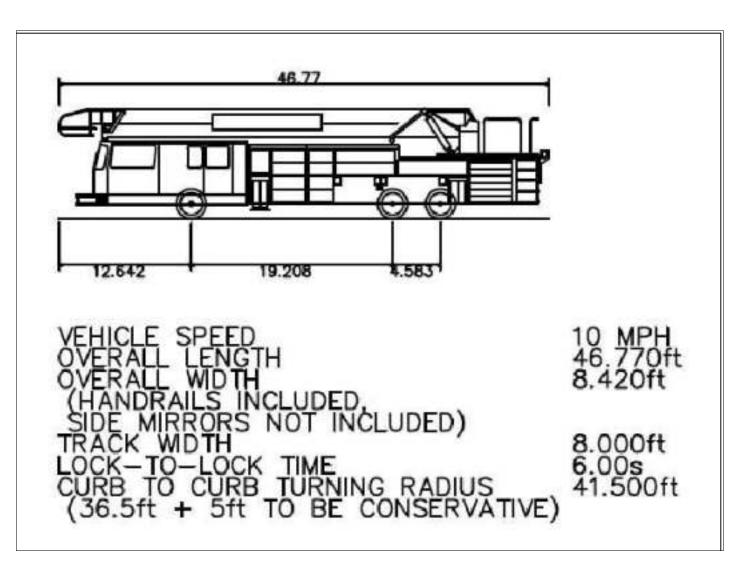
DATE	SHEET NUMBER	
2/3/23	A1	
SCALE		



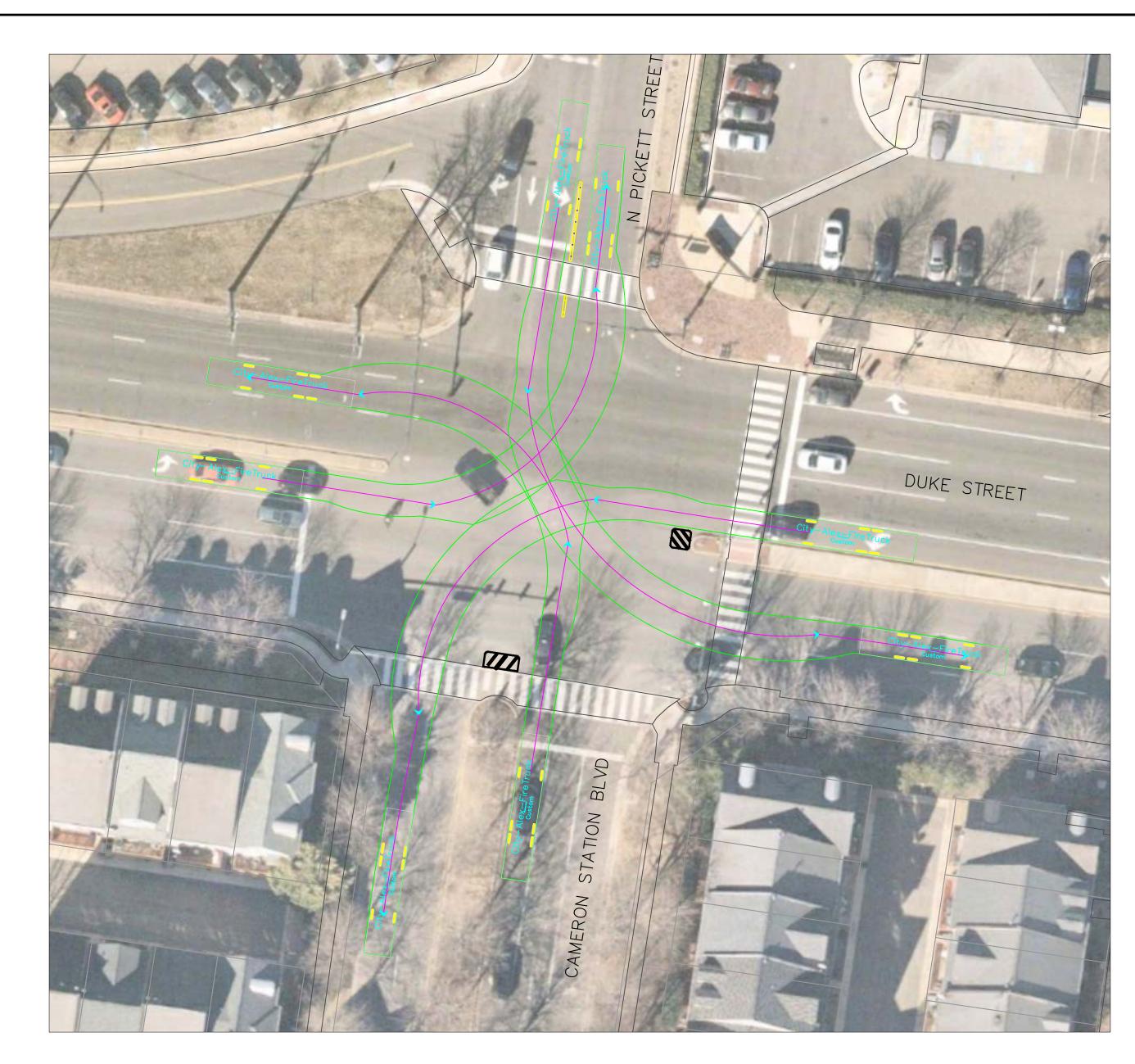
<u>duke street and shoppes of foxchase — fire truck</u>



<u>VEHICLE PROFILE: SU-30</u>

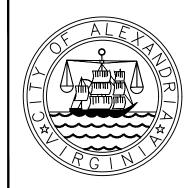


VEHICLE PROFILE: FIRE TRUCK



<u>duke street and cameron station boulevard — fire truck</u>

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



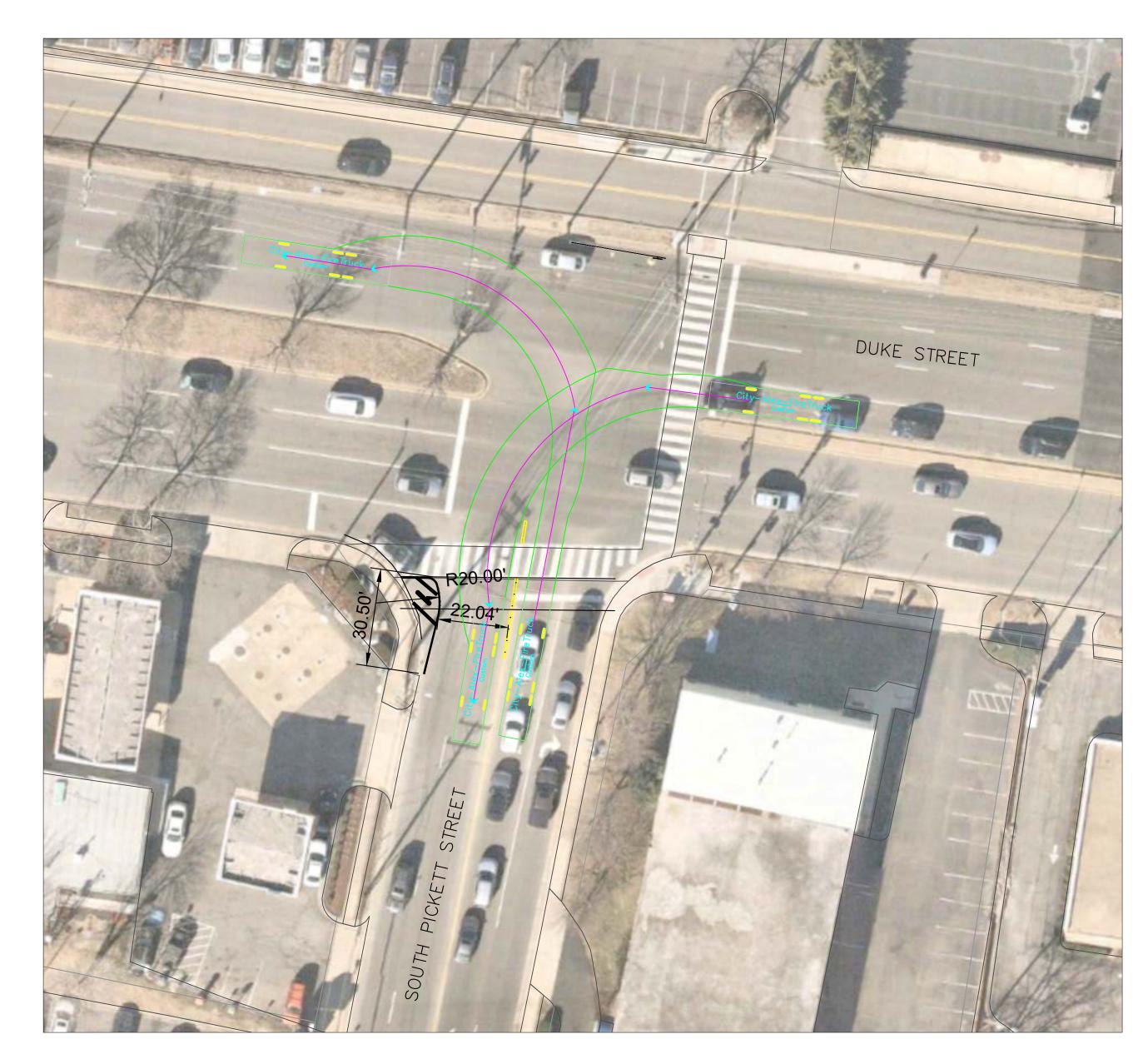
CITY OF ALEXANDRIA TASK ORDER TO-11 DUKE STREET LEFT TURN TRAFFIC CALMING

AUTOTURN EXHIBIT

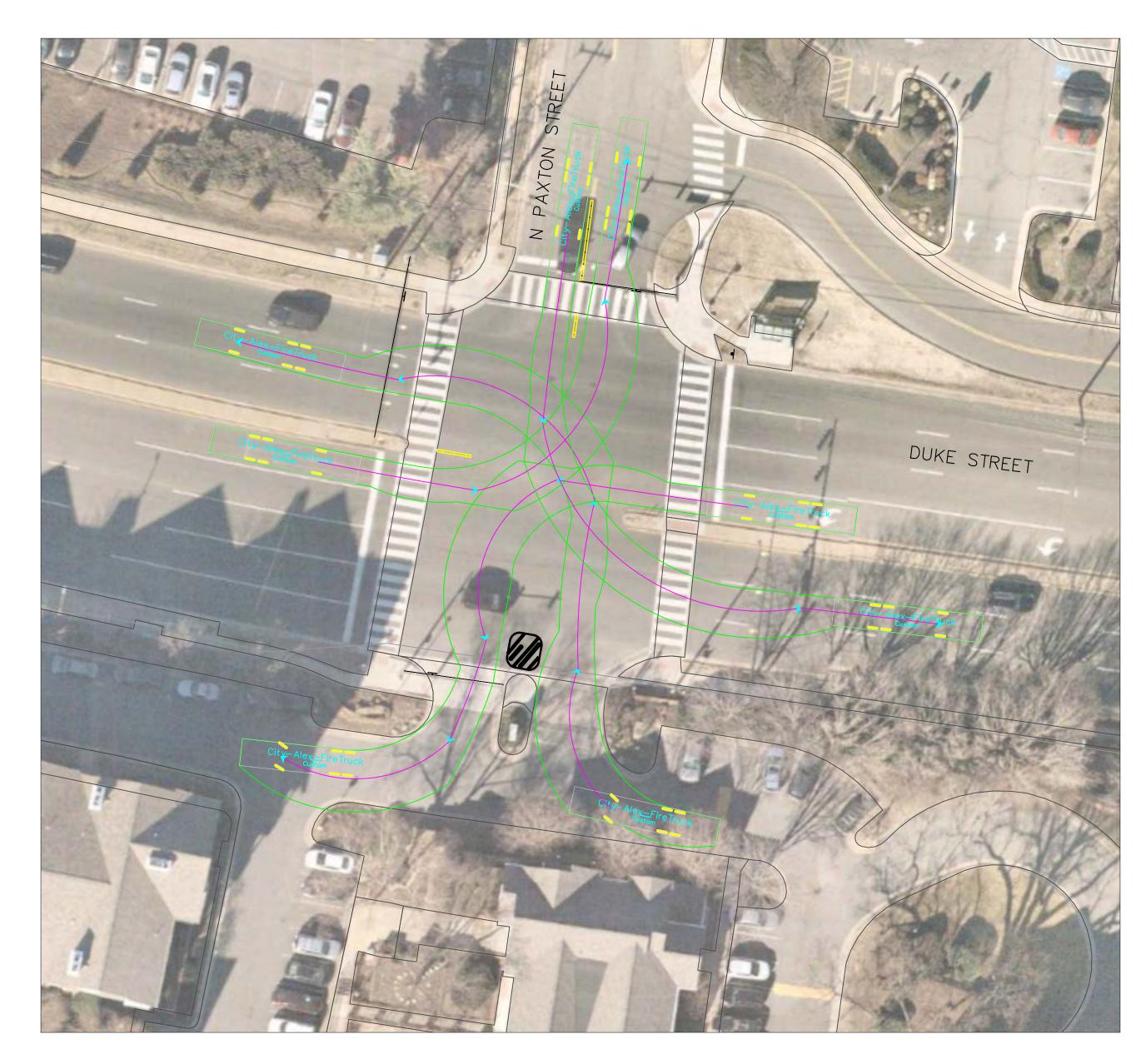
DATE SHEET NUMBER 2/3/23 SCALE

1" = 25'

30% SUBMITTAL



<u>duke street and south pickett street — fire truck</u>

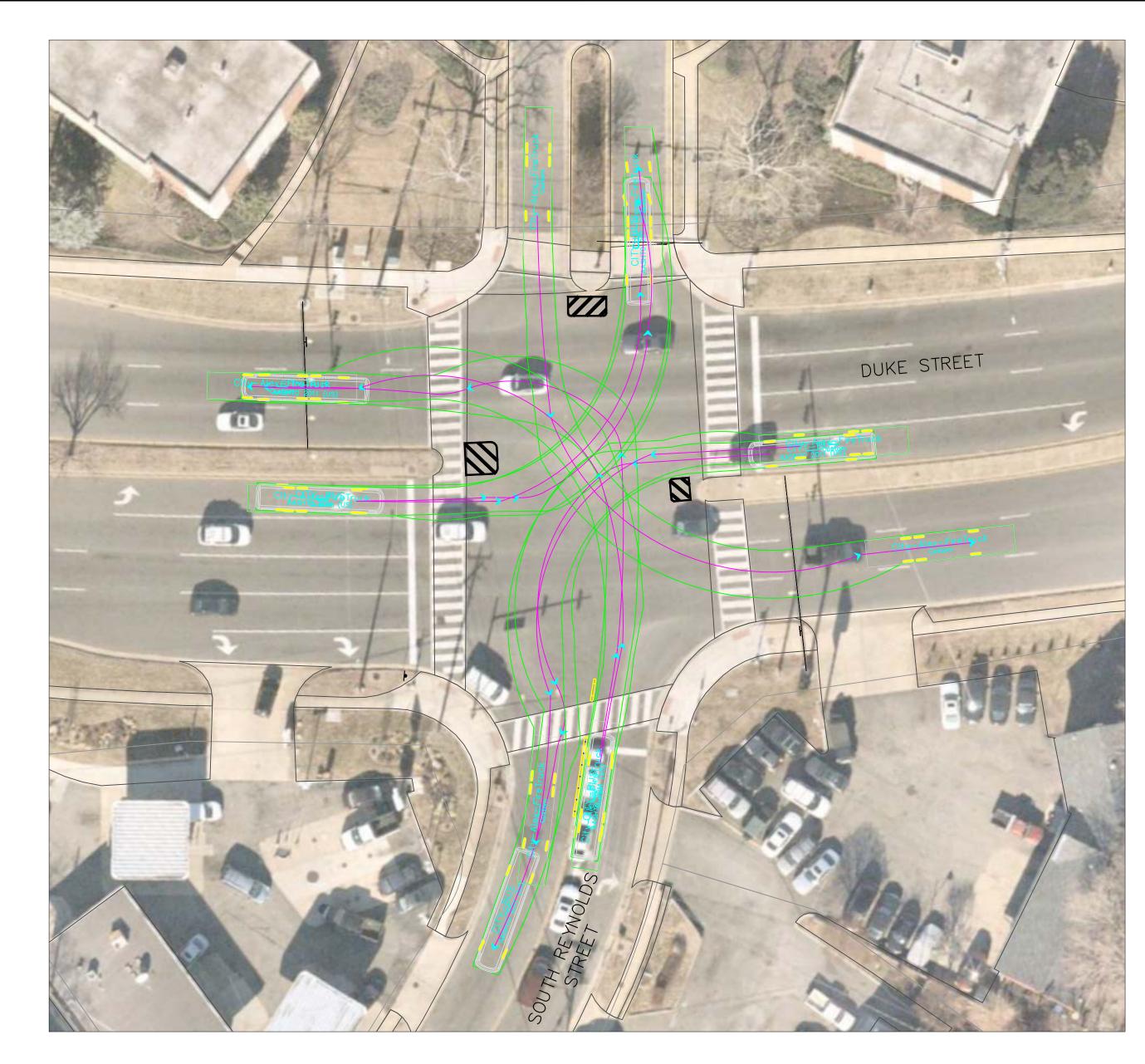


<u>duke street and north paxton street — fire truck</u>

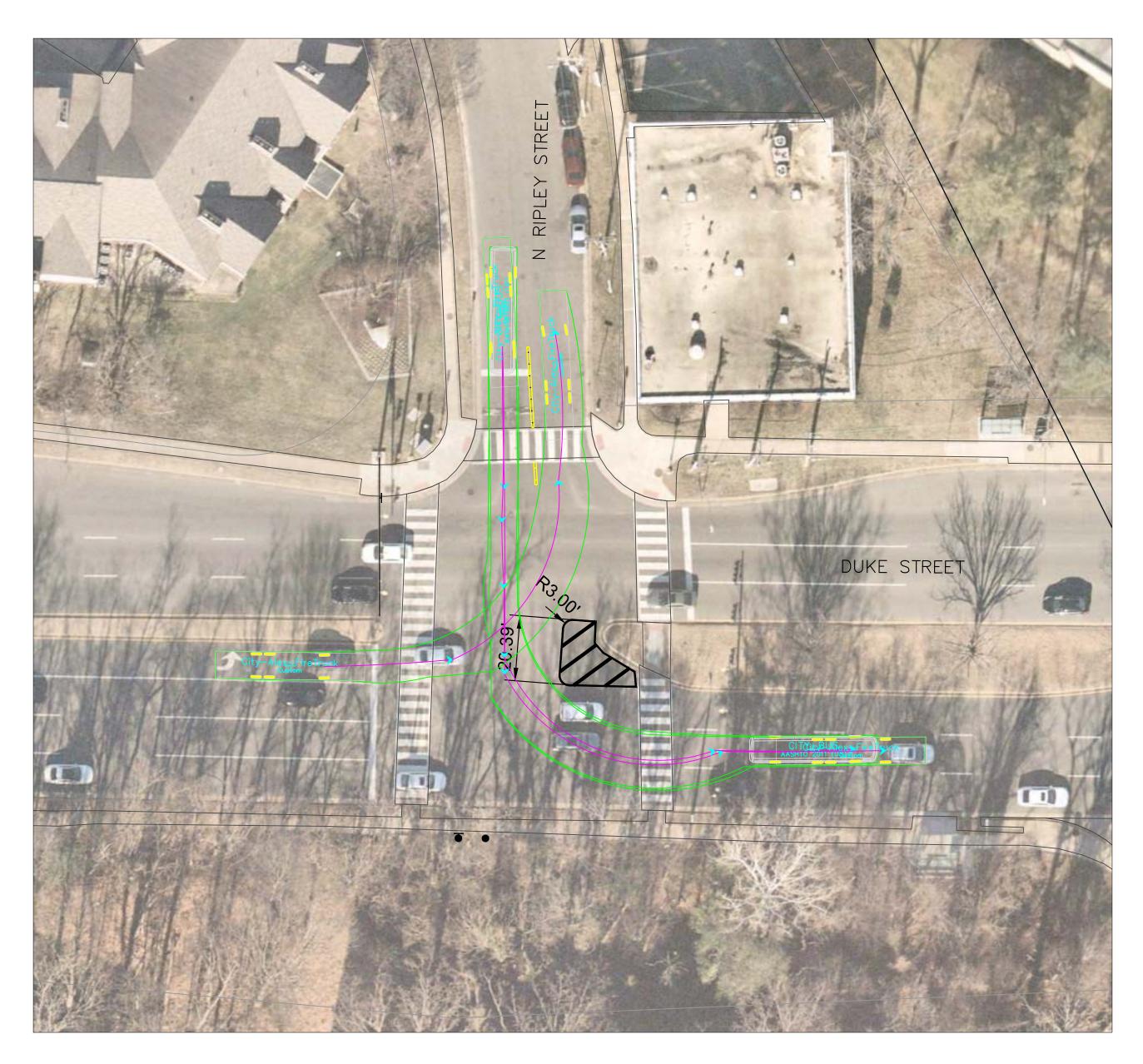
1" = 25'

30% SUBMITTAL

AUTOTURN EXHIBIT



<u>duke street and south reynolds street — fire truck</u>



<u>duke street and ripley street — fire truck</u>

30% SUBMITTAL

AUTOTURN EXHIBIT