

City of Conover

ADA Transition Plan



TABLE OF CONTENTS

EXECUTIVE SUMMARY	3
TITLE II OF THE AMERICAN WITH DISABILITIES ACT OF 1990 (ADA)	3
SECTION 504 OF THE REHABILITATION ACT OF 1973	4
CITY OF CONOVER ADA PROGRAM	5
CONOVER GRIEVANCE PROCEDURE	5
WESTERN PIEDMONT COUNCIL OF GOVERNMENTS ADA WEBSITE FOR CONOVER	6
POPULATION WITH A DISABILITY OR FUNCTION DIFFICULTY ANALYSIS	6
ANALYSIS STUDY AREA	7
ANALYSIS METHODOLOGY	7
ANALYSIS STUDY RESULTS	8
FACILITY ASSESSMENT INTRODUCTION	14
FACILITY ASSESSMENT PRIORITIES	14
FACILITY ASSESSMENT METHODOLOGY	15
FACILITY ASSESSMENTS	16 - 58
ADA COMPLIANCE IN PLAY AREAS	59 - 77
PLAY AREA ASSESSMENTS	78
PEDESTRIAN RIGHT OF WAY COLLECTOR APPLICATION	78
PEDESTRIAN RIGHT OF WAY METHODOLOGY	79
INTRODUCTION TO COLLECTOR APPLICATION CATEGORIES AND TECHNICAL STANDARDS	80 - 85
PEDESTRIAN RIGHT OF WAY TECHNICAL STANDARDS	86
PROBLEMATIC AREAS WITHIN THE PEDESTRIAN RIGHT OF WAY	88 - 125
COST ESTIMATES	126 - 135
SENSE OF SAFETY AND SECURITY ALONG PEDESTRIAN ROUTES ANALYSIS	136
SAFE ROUTES NETWORK TO CONOVER FACILITIES	136
AADT AND POSTED SPEED LIMITS	136
WALKING AREAS	138
SIDEWALK	139
POSTED SPEED LIMIT	140
FUNCTIONAL CLASSIFICATION SYSTEM	141
SRN GRID AND DOCUMENTED PEDESTRIAN CRASHES	142 - 146
SRN CONCLUSION	147
REFERENCES	147
APPENDICES	148



EXECUTIVE SUMMARY

Cities with many pedestrian barriers can inhibit community mobility, access to services, and social participation for people with disabilities. Creating an inventory and plan of action for removing pedestrian barriers within municipalities is a crucial step to creating a more accessible environment for all. The primary purpose of this study is to prepare a plan, titled ADA Transition Plan, for the City of Conover in accordance with two civil rights legislations:

1. Americans with Disabilities Act of 1990 (ADA), Title II Regulations, Nondiscrimination on the Basis of Disability in State and Local Government Services, 28 CFR Part 351 , and
2. Section 504 of the Rehabilitation Act of 1973, as amended, Nondiscrimination on the Basis of Disability in Programs or Activities Receiving Federal Financial Assistance, 49 CFR Part 27.

The intent of the ADA Title II regulations is to ensure nondiscrimination and access for individuals with disabilities in State and local government services. The intent of the Section 504 regulations is to prohibit discrimination on the basis of disability in programs or activities receiving Federal financial assistance.

This report will identify barriers within municipally owned buildings as well as barriers within the pedestrian right of way. The pedestrian right of way includes any infrastructure meant for pedestrian utilization. Mobility hazards are identified during walking audits and documented in a Pedestrian Right of Way Collector Application. The application collects a broad range of data and has criteria for sidewalks, curb ramps, driveway cuts, intersections, railroad crossings, bus stops, crosswalks, and pedestrian islands.

City of Conover is required to conduct a self-assessment and to establish a transition plan (28 CFR 35.105-35.107). All ADA efforts have been based on the appropriate guidelines for the project at hand. The pedestrian right of way inventory collection process (mentioned above) utilizes the United States Access Board's Proposed Right-of-Way Accessibility Guidelines (PROWAG). The facility inventory produced by an external contractor utilized a checklist which was based on the 2010 ADA Standards for Accessible Design.

We look forward to our continued progress in achieving the objectives of Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, and the ADA Amendments Act of 2008.

TITLE II OF THE AMERICANS WITH DISABILITIES ACT OF 1990 (ADA)

Title II applies to State and local government entities, and protects qualified individuals with disabilities from discrimination on the basis of disability in services, programs, and activities provided by State and local government entities. Title II extends the prohibition on discrimination established by section 504 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. 794, to all activities of State and local governments regardless of whether these entities receive Federal financial assistance.

State and local governments are required to follow specific architectural standards in the new construction and alteration of their buildings. They also must relocate programs or otherwise provide access in inaccessible older buildings, and communicate effectively with people who have hearing, vision, or speech disabilities. Public entities are not required to take actions that would result in undue financial and administrative burdens. They are required to make reasonable modifications to policies, practices, and procedures where necessary to avoid discrimination, unless they can demonstrate that doing so would fundamentally alter the nature of the service, program, or activity being provided.

SECTION 504 OF THE REHABILITATION ACT OF 1973

Section 504 of the 1973 Rehabilitation Act was the first disability civil rights law to be enacted in the United States. It prohibits discrimination against people with disabilities in programs that receive federal financial assistance, and set the stage for enactment of the Americans with Disabilities Act. Section 504 works together with the ADA and IDEA to protect children and adults with disabilities from exclusion, and unequal treatment in schools, jobs and the community.

CITY OF CONOVER ADA PROGRAM

The City of Conover contracted with Western Piedmont Council of Governments (WPCOG) to identify mobility barriers and create a plan of action for city owned and sponsored services, events, buildings, and pedestrian infrastructure. The following was included in the scope of services:

- Inventory Collection: Create database for municipally owned facilities, parking lots, sidewalks, curb ramps, driveway cuts, intersections, railroad crossings, bus stops, crosswalks, and pedestrian islands
- Reporting to City/DOJ (when necessary)/ADA Specialists in accordance to the US Access Board
- Cost Analysis/Estimate to Correct Non-Compliant Areas – this is an estimation of materials and excludes labor costs
- Transition Plan: Coordination of the City's Capital Improvements Plan and the site evaluation survey to establish High / Medium /Low Impact Areas to be corrected
- Maintenance of all Changes/Improvements to Documents: Inventory List, Reports, Transition Plan, support for changes to website, and any filed grievances

CONOVER GRIEVANCE PROCEDURE

The following grievance procedure was adopted by City of Conover Council in July 2019. Please see Appendix A for the full form and questionnaire.

In accordance with the requirements of title II of the Americans with Disabilities Act of 1990 ("ADA"), the City of Conover will not discriminate against qualified individuals with disabilities in its services, programs, or activities.

Employment: The City of Conover does not discriminate based on disability in its hiring or employment practices and complies with all regulations promulgated by the U.S. Equal Employment Opportunity Commission under title I of the ADA.

Effective Communication: The City of Conover, upon request, will provide appropriate aids and services for effective communication for qualified persons with disabilities. Effective communication is essential in the equal participation of City of Conover programs, services, and activities. Available aids and services include qualified sign language interpreters, documents in Braille, and other ways of making information and communications accessible to people who have speech, hearing, or vision impairments.

Modifications to Policies and Procedures: The City of Conover will make all reasonable modifications to policies and programs to ensure that qualified individuals with disabilities have an equal opportunity to participate in all of its programs, services, and activities. This applies to service animals and other services as requested.

Anyone who requires an auxiliary aid should contact the office of the ADA Coordinator, Averi Ritchie, at or (828) 514-5200, as soon as possible, but no later than 72 hours before the scheduled event. Auxiliary aid includes services for effective communication, or a modification of policies or procedures to participate in a program, service, or activity of the City of Conover. Individuals with registered service animals only need to provide notice if event accommodations are necessary.

The ADA does not require the City of Conover to take any action that would fundamentally alter the nature of its programs or services, or impose an undue financial or administrative burden.

Grievances involving accessibility restrictions for persons with disabilities, that will be utilizing the City of Conover programs, services, or activities; are handled by the ADA Coordinator, Averi Ritchie, at (828) 514-5200.

The City of Conover will not place a surcharge on persons with disabilities to cover the cost of providing auxiliary aids/services or reasonable modifications of policy. This includes retrieving items from locations that are open to the public but are not accessible to persons who use wheelchairs.

WESTERN PIEDMONT COUNCIL OF GOVERNMENTS ADA WEBSITE FOR CONOVER

While WPCOG does not maintain the ADA portion of City of Conover's website, it does serve to provide support and guidance in posting necessary documents. WPCOG's ADA webpage includes a subset for City of Conover documents as well as ADA guidance and legislative updates. All adopted grievance documents and Transition Plans are posted to this subset.

POPULATION WITH A DISABILITY OR FUNCTION DIFFICULTY ANALYSIS

In planning for accessibility, analyzing data for communities with disabilities or function difficulty will better allow Conover to assess and plan for eliminating mobility barriers. The United States Census "attempts to capture six aspects of disability: (hearing, vision, cognitive, ambulatory, self-care, and independent living); which can be used together to create an overall disability measure, or independently to identify populations with specific disability types." Source: United States Census.

In 2008, the Census introduced new questions regarding "aspects of disability" to their American Community Survey questionnaires. The questions cover the six disability types to gauge disability status throughout each census tract. Each disability type, as defined by the Census, can be found below:

- Hearing difficulty--deaf or having serious difficulty hearing.
- Vision difficulty--blind or having serious difficulty seeing, even when wearing glasses.
- Cognitive difficulty--Because of a physical, mental, or emotional problem, having difficulty remembering, concentrating, or making decisions.
- Ambulatory difficulty--Having serious difficulty walking or climbing stairs.

- Self-care difficulty--Having difficulty bathing or dressing.
- Independent living difficulty--Because of a physical, mental, or emotional problem, having difficulty doing errands alone such as visiting a doctor's office or shopping. Source: US Census

An analysis was performed using Census social characteristics data to examine disability and function difficulty conditions within City of Conover's city limits. This analysis aims to note concentrated areas of Conover's population reported as having a disability. These areas must be identified to give special consideration to existing pedestrian and town managed facility placement within these areas. The analysis methodology and results are discussed in this section.

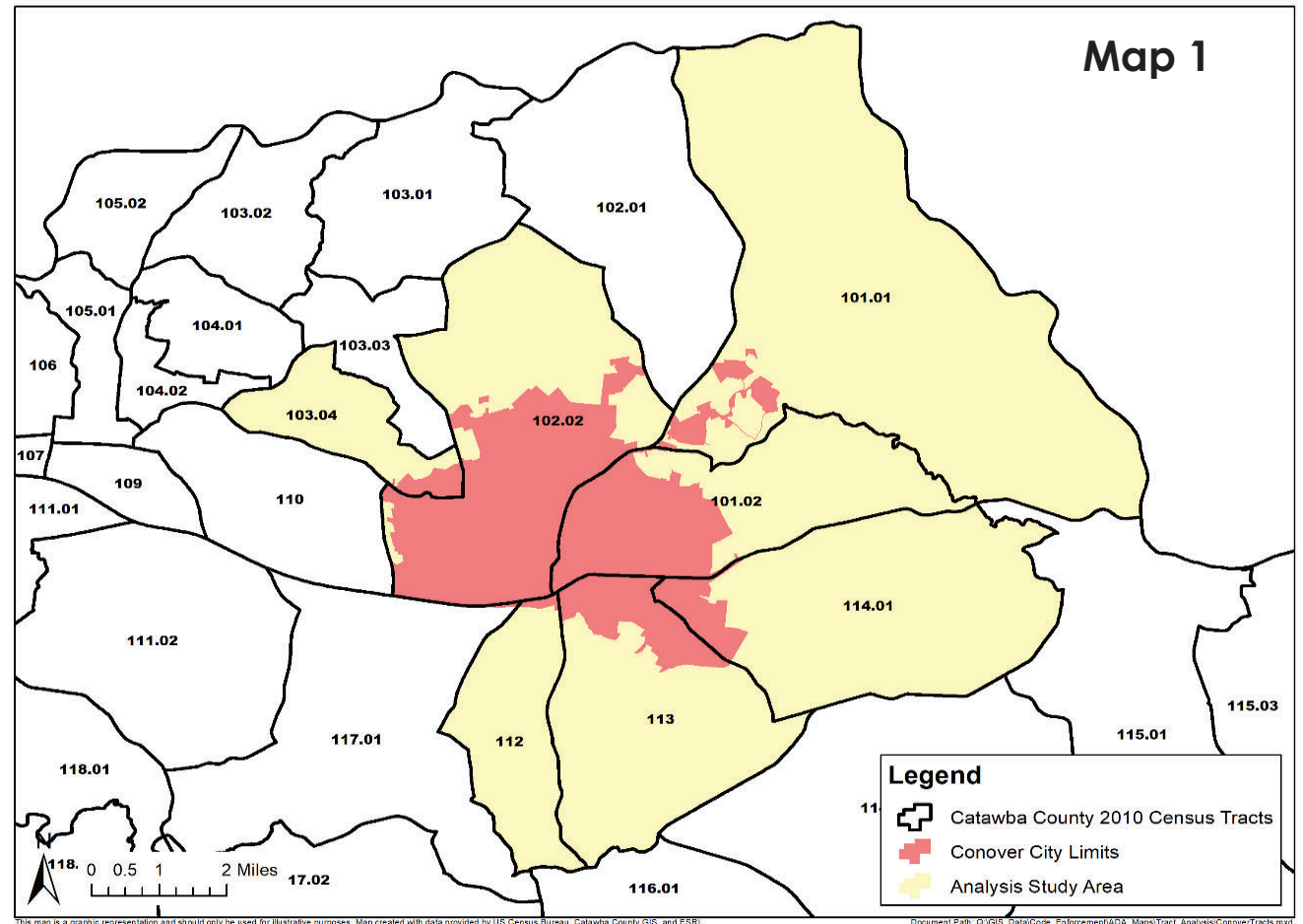
ANALYSIS STUDY AREA

This analysis utilized the 2010 Census Tracts. Census Tracts are small, relatively permanent statistical subdivisions of a county. Catawba County Census Tracts that intersect the Conover city limits make up the analysis study area. This area includes the combined size of Tracts 101.01, 101.02, 102.02, 103.04, 112, 113, and 114.01, as illustrated in Map 1. The location of these Tracts is in the center and the northeastern corner of Catawba County, which totals approximately 85 square miles in size. Conover's city limits intersect Tracts 101.01, 101.02, 102.02, 113, and 114.01. Small sectors of Conover intersect Tracts 103.04 and 112, which were also included in the analysis.

ANALYSIS METHODOLOGY

The following methodology explains how Census Tract percentages were determined:

1. United States Census and 2014-2018 American Community Survey (ACS) 5-Year data were used to calculate Catawba County hearing



difficulty, vision difficulty, cognitive difficulty, ambulatory difficulty, self-care difficulty, and independent living difficulty percentages. Percentages were calculated by dividing the total civilian noninstitutionalized population with a disability by the total civilian noninstitutionalized population. The Census defines the civilian noninstitutionalized population as “all U.S. civilians not residing in institutional group quarters facilities such as correctional institutions, juvenile facilities, skilled nursing facilities, and other long-term care living arrangements.”

2. The same Census and ACS data were used to calculate Census Tract level population percentages. The method used in step 1 was repeated in step 2 on a more area-specific scale. Percentages were derived by dividing the Tract’s total civilian noninstitutionalized population with a disability by the total civilian noninstitutionalized population.
3. Conover disability status averages were then compared with overall Catawba County disability status averages to determine concentration levels throughout each Tract. Census Tract level total civilian noninstitutionalized population with a disability percentage exceeding the County’s average disability status population percentages were scored and placed into a 4-level concentration scale based on the six difficulty types (hearing, vision, cognitive, ambulatory, self-care, and independent living).
 - a. No Concentration – Census Tract with zero types exceeding County disability status averages.
 - b. Low Concentration – Census Tract with one to two types exceeding County disability status averages.
 - c. Moderate Concentration – Census Tract with three to four types exceeding County disability status averages.
 - d. High Concentration – Census Tract with more than four types exceeding County disability status averages.
4. The Conover managed facility locations and sidewalk networks were then mapped and overlaid onto the study area. Percentages were calculated to show how many facilities and how much sidewalk exists within the high and low disability population areas.

ANALYSIS STUDY RESULTS

Table 1 shows the total civilian noninstitutionalized population for Catawba County Tracts and their total civilian noninstitutionalized population with disability percentages. The Catawba County percentages create the baseline for the concentration scores. Table 2 shows where the Tracts land on the concentration scale and their disability averages exceeding the County averages.

For Catawba County, approximately seven and a half percent of the population with a disability status have an ambulatory difficulty. Ambulatory difficulties are the most prevalent disability type in the County, followed by independent living difficulty (4.86%), hearing difficulty (4.8%), and cognitive difficulty (4.73%). Approximately 4,367 Catawba County’s noninstitutionalized residents (2.78%) have a self-care difficulty. Self-care difficulty represents the County’s smallest percentage of disability types. Approximately 4,000 persons living in Catawba County have a self-care difficulty (2.59%).

Table 1 Percentages of Civilian Noninstitutionalized Population with a Disability of Function Difficulty

Geography	Total Civilian Noninstitutionalized Population	% Hearing Difficulty	% Vision Difficulty	% Cognitive Difficulty	% Ambulatory Difficulty	% Self-Care Difficulty	% Independent Living Difficulty
Catawba County	157,110	4.80%	2.78%	4.73%	7.56%	2.59%	4.86%
Census Tract 101.01	5,876	6.21%	1.74%	6.30%	10.77%	4.56%	5.09%
Census Tract 101.02	3,944	4.46%	2.38%	3.75%	6.85%	1.45%	6.24%
Census Tract 102.02	8,399	3.32%	2.44%	5.41%	9.92%	3.62%	6.17%
Census Tract 103.04	4,129	4.34%	2.40%	5.64%	6.56%	3.27%	4.60%
Census Tract 112	6,132	6.10%	3.31%	8.04%	6.82%	1.70%	6.28%
Census Tract 113	6,850	3.96%	1.84%	8.73%	10.15%	4.66%	8.77%
Census Tract 114.01	3,605	3.33%	3.22%	3.13%	4.44%	2.19%	3.36%
Census Tract 101.01	5,876	6.21%	1.74%	6.30%	10.77%	4.56%	5.09%
Census Tract 101.02	3,944	4.46%	2.38%	3.75%	6.85%	1.45%	6.24%
Census Tract 102.02	8,399	3.32%	2.44%	5.41%	9.92%	3.62%	6.17%
Census Tract 103.04	4,129	4.34%	2.40%	5.64%	6.56%	3.27%	4.60%
Census Tract 112	6,132	6.10%	3.31%	8.04%	6.82%	1.70%	6.28%
Census Tract 113	6,850	3.96%	1.84%	8.73%	10.15%	4.66%	8.77%
Census Tract 114.01	3,605	3.33%	3.22%	3.13%	4.44%	2.19%	3.36%

Source: United States Census, 2014-2018 American Community Survey (ACS) 5-Year

Table 2 Percentages of Civilian Noninstitutionalized Population with a Disability of Function Difficulty

Geography	Concentration Level	% Hearing Difficulty	% Vision Difficulty	% Cognitive Difficulty	% Ambulatory Difficulty	% Self-Care Difficulty	% Independent Living Difficulty
Census Tract 101.01	High	Higher	Lower	Higher	Higher	Higher	Higher
Census Tract 101.02	Low	Lower	Lower	Lower	Lower	Lower	Higher
Census Tract 102.02	Moderate	Lower	Lower	Higher	Higher	Higher	Higher
Census Tract 103.04	Low	Lower	Lower	Higher	Lower	Higher	Lower
Census Tract 112	Moderate	Higher	Higher	Higher	Lower	Lower	Higher
Census Tract 113	Moderate	Lower	Lower	Higher	Higher	Higher	Higher
Census Tract 114.01	Low	Lower	Higher	Lower	Lower	Lower	Lower

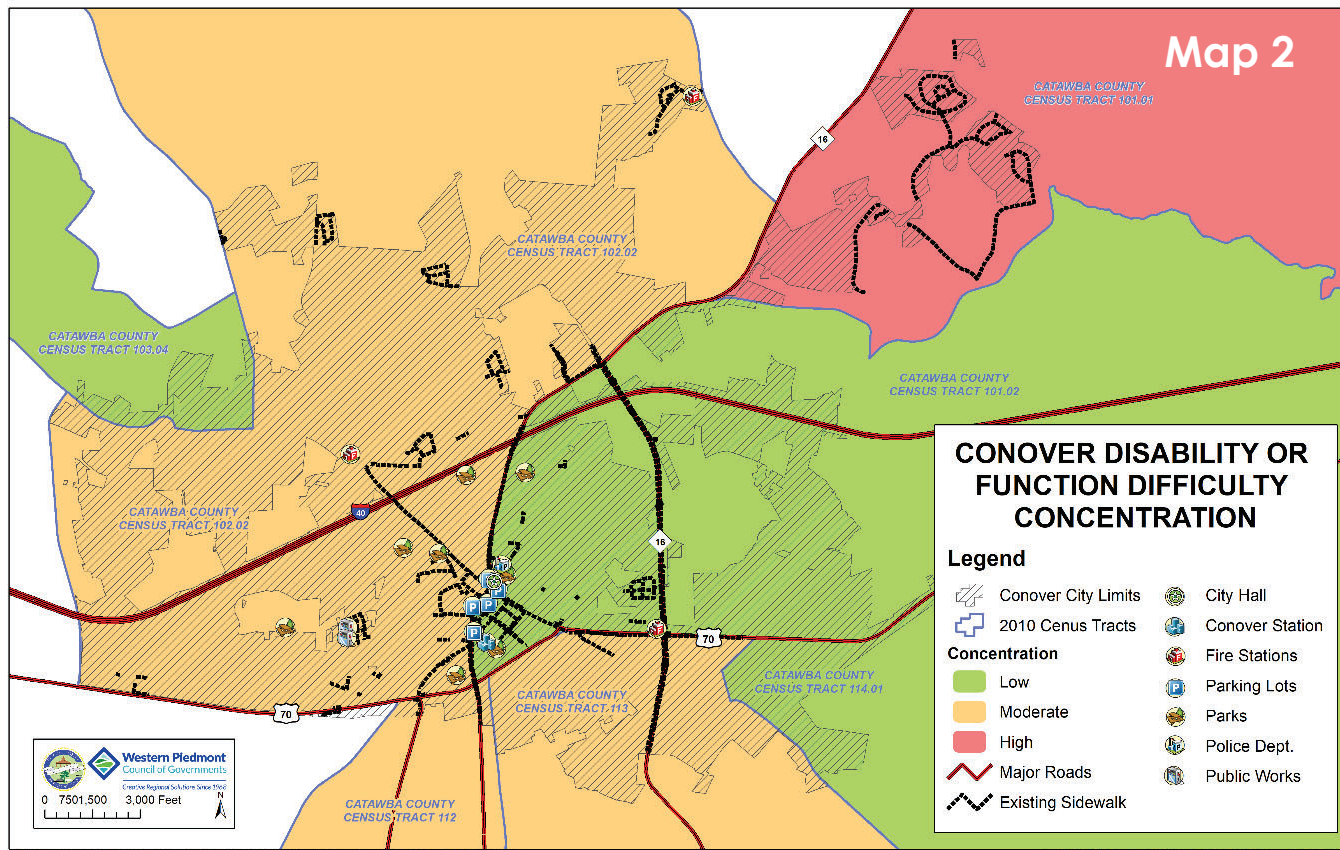
Source: United States Census, 2014-2018 American Community Survey (ACS) 5-Year

Map 2 shows where each Census Tract falls on the 4-Level concentration scale. Each of the seven Census Tracts had at least one disability type exceeding County disability status averages. Cognitive and independent living difficulties are the two highest disability averages in the study area. Five of the Tracts have higher averages than the County where hearing and vision statuses had only two Tracts higher than their respective county baselines—making them the lowest concentration of civilian noninstitutionalized population with a disability.

The most concentrated Census Tract is 101.01. This Tract is 28.3 square miles in size and makes up 33.4% of the study area. Tract 101.01 is the largest (in size) of the seven tracts. It has five averages higher than the County disability status averages. There are an estimated 663 persons of its total civilian noninstitutionalized population (5,876) with an ambulatory disability (10.77%). Approximately 100 persons within the Tract have a vision disability (1.74%). Vision disability was the only difficulty that 101.01 fell below the County's status average.

Tracts 102.02, 112, and 113 are moderately concentrated Tracts. These Tracts have four averages higher than the County disability status averages and makeup 36.1% of the study area. Approximately 833 people (9.92%) in Tract 102.02 (the largest in civilian noninstitutionalized population) have an ambulatory difficulty, 6.17% are reported as having an independent living difficulty (1.32% higher than the County's baseline), and around 450 people have a cognitive problem (0.68% more than the County's baseline). Tract 112 had the highest percentages of cognitive and vision difficulties among the seven tracts. Approximately 493 (8.04%) of the Tract's 6,132 civilian noninstitutionalized populations reported cognitive difficulty, and 374 (6.1%) have a vision disability. Over ten percent of 113's people have an ambulatory difficulty (around two and a half percent higher than the 7.56% County's baseline). Almost 600 people (8.73%) have a cognitive disability, which is approximately four percent higher than the County's cognitive average.

The low concentration level includes Tracts 101.02, 103.04, and 114.01, which represent the smallest space (30.5%) within the study area. Less than seven-percent of 101.02 population has an ambulatory difficulty, and 246 members of the same Tract population have an independent living problem (1.4% higher than Catawba County's average). Even though 103.04 is the smallest in size of the seven Tracts, it has higher cognitive and self-care averages than the County. Where 114.01 is the smallest in the population (3,605), its vision average (3.33%) was the only one greater than Catawba County's baseline of 2.78%.



The twenty-one Conover city facility locations are shown in Map 2. Table 3 lists facilities per Census Tract concentration level. All buildings, parking lots, and parks exist within two Tracts. Twelve of these facilities have addresses within the moderately concentrated Tract 102.02. These facilities include Hines Park, Majestic Park, and Washington Park; and the downtown area west of Main Street (NC 16). The remaining ten facilities are contained inside the low concentrated Tract 101.02, which includes more popular destinations like City Hall, Conover Station; and all the downtown area east of Main Street (NC 16).

City of Conover's 28-miles of sidewalk (drawn in Map2) are dispersed between five of the seven Census Tracts. Conover has sidewalk in 101.01, 101.02, 102.02, 112, and 113. Conover does not have sidewalk in 103.04 or 114.01. Table 4 shows where sidewalk parallels roadways within these Tracts. Approximately five and a half miles of sidewalk exists in the highly concentrated Tract 101.01. Nearly half of the sidewalk network (13.2-miles) was constructed within moderately concentrated Tracts. The remaining 9.6-miles of sidewalk used by pedestrians are inside the low concentrated 101.02.

In conclusion, there are several concentrations ranging from low to high of the civilian noninstitutionalized population with a reported disability or function difficulty within City of Conover. The study area is comprised of three moderately concentrated Tracts, three low concentrated Tracts, and one high concentrated Tract. Five out of the seven Tracts had higher cognitive and independent living averages than Catawba County, where six had lower vision averages. There is a divide in Conover's downtown between moderate and low concentrated Tracts. According to the concentration levels, updated pedestrian facilities should be considered first in higher reported disabled populations (Census Tract 101.01). Eliminating mobility barriers and improving connectivity within City limits will protect the City as well as its citizens.

Table 3 Conover Facilities

Facility Name	Facility Type	Census Tract Concentration Level
City Hall	City Hall	Low
Conover City Park	Park	Low
Conover Station	Conover Station	Low
Downtown Park	Park	Low
Fire Station 1	Fire Station	Low
Fire Station 2	Fire Station	Moderate
Fire Station 3	Fire Station	Moderate
Fleet Maintenance (Division of Public Works)	Public Works	Moderate
Hines Park	Park	Moderate
Hunsucker Park	Park	Low
Majestic Park	Park	Moderate
NE Allwyway Parking Lot	Parking Lot	Moderate
Police Department	Police Department	Low
Post Office Parking Lot	Parking Lot	Low
Public Works	Public Works	Moderate
Rowe Park	Park	Moderate
SE Alleyway Parking Lot	Parking Lot	Low
Sherrod Parking Lot	Parking Lot	Moderate
Travis Park	Park	Moderate
Washington Park	Park	Moderate
Z-Gate Parking Lot	Parking Lot	Low

Source: City of Conover

Table 4 Conover Sidewalks

Geography	Concentration Level	Existing Sidewalk (in Miles)
Census Tract 101.01	High	5.4
Census Tract 101.02	Low	9.6
Census Tract 102.02	Moderate	10.4
Census Tract 103.04	Low	N/A
Census Tract 112	Moderate	0.4
Census Tract 113	Moderate	2.4
Census Tract 114.01	Low	N/A
Study Area	(x)	28.2

Source: City of Conover, Greater Hickory MPO

FACILITY ASSESSMENT INTRODUCTION

As mentioned above, Title II of the ADA only impacts municipally owned facilities. This title does not address employment or issues concerning other sections of the ADA.

Although many situations allow issues of accessibility to be resolved by changes to program accommodation, there are situations where access to programs, services and activities can only be achieved by removal of physical barriers. This report identifies such physical barriers within each building and from the nearest public way and/or accessible parking space(s) to each building.

Relative to Program Access as stipulated in Title II, state and local governments/agencies, “Are not required to take any action that would result in the fundamental alteration in the nature of the service, program, or activity or in undue financial and administrative burdens. However, public entities must take any other action, if available, that would not result in a fundamental alteration or undue burdens but would ensure that individuals with disabilities receive the benefits or services.”

Many think that only new construction and alterations need to be accessible and that older facilities are “grandfathered”. However, because the ADA is a civil rights law and not a building code, older facilities are often required to be accessible to ensure that people with disabilities have an equal opportunity to participate.

The City of Conover contracted with Western Piedmont Council of Governments (WPCOG) to address remaining ADA needs within Conover. Conover, in conjunction with WPCOG, has identified 21 facilities that either are municipally-owned or have heavy use regarding city sponsored programs and services open to the public.

This report was prepared for the City of Conover as part of an effort to:

1. Comprehensively document elements of the built environment which negatively impact individuals with disabilities, and
2. Plan for most important facility improvements in conjunction with the 2010 ADA Standards for Accessible Design. Included in Appendix B.

FACILITY ASSESSMENT PRIORITIES

This report's ADA compliance information is organized to follow the three priorities for barrier removal as recommended by the Department of Justice in the ADA Title II regulations.

The three priorities are included and color coded as follows:

- **RED Priority 1 (High):** Accessible Approach and Entrance
- **ORANGE Priority 2 (Moderate):** Access to goods and services and access to public toilet rooms
- **GREEN Priority 3 (Low):** Access to other items such as water fountains and public telephones

- **BLUE Technically Infeasible or Not Applicable:** Certain standards do not apply to facilities built prior to March 15, 2012. These items have been noted and do not need to be corrected unless the facility is altered. Measurements within a reasonable tolerance range that would involve undue burden to correct and structural or financial infeasibility are covered under technically infeasible.

Red Priority 1 (High) items are more time sensitive mobility barriers that should be corrected first. According to regulations, these items are most unsafe or present more immediate liabilities for municipalities. **Green Priority 3 (Low)** items are less time sensitive. The following methodology is a modified version of the ADA National Network Guidelines (found in Appendix B). This report is meant to be a living document. City of Conover's Public Works Department and/or Engineer review is warranted to document any corrected or technically infeasible items.

FACILITY ASSESSMENT METHODOLOGY

The survey team relied on guidelines approved by the ADA National Network while inventorying facilities and certain items within the pedestrian right of way. The resulting methodology correlates with the methodology found in the facility survey guidelines. A facility survey can be found in Appendix B.

High/Critical Priority – relating to immediate safety hazards or access to a facility. Without proper facility access, the categories below become null. Overall interior and exterior door pressures and closure times are high priorities. Exterior doors relate directly to access to a facility as well as most interior doors. Some interior doors relate more to access to goods and services, however, for consistency, doors are scored using the same criteria. There are no set standards for exterior door pressures, but no more than 10 pounds is recommended. Interior doors have a required pressure of 5 pounds or less. Both interior and exterior doors door closure times cannot take less than 5 seconds to close from a 90 degree open position to 12 degrees from the door latch.

Moderate Priority – relating to less severe safety hazards or access to goods and services and public restrooms (certain issues within service areas or public restrooms may still fall into high or low categories depending on the severity of the issue)

Low Priority – relating to non-compliant issues that do not pose an immediate safety hazard or access to an accessory (items such as water fountains and public telephones). Most items received a "low" score if only 5" or less out of compliance in facilities

Not applicable/technically infeasible – This could be due to changing standards, measurements within a reasonable tolerance range, structural or financial infeasibility, etc.

****Note:** High, moderate, and low recommendations are included in the plan for consideration. Recommendations are not based on standards and, therefore, are not required.



Conover City Hall

General City Hall

High Priority

- » Update all wall-mounted signage pertaining to exits to include Braille – cannot be mounted more than 40” above floor. Signs that are permanent: baseline of lowest character should be at least 48” high and baseline of lowest character no more than 60” high

Moderate Priority

- » Update all directional and service-related signage to include Braille – directional signage cannot be mounted more than 40” above floor. Current directional signage is mounted 51-52” high. Note: Signs designating permanent rooms and spaces not likely to change over time (room names, numbers, etc) should be mounted on the wall on the latch side of the door. Signs that are permanent: baseline of lowest character should be at least 48” high and baseline of lowest character no more than 60” high

No Low Priority

Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

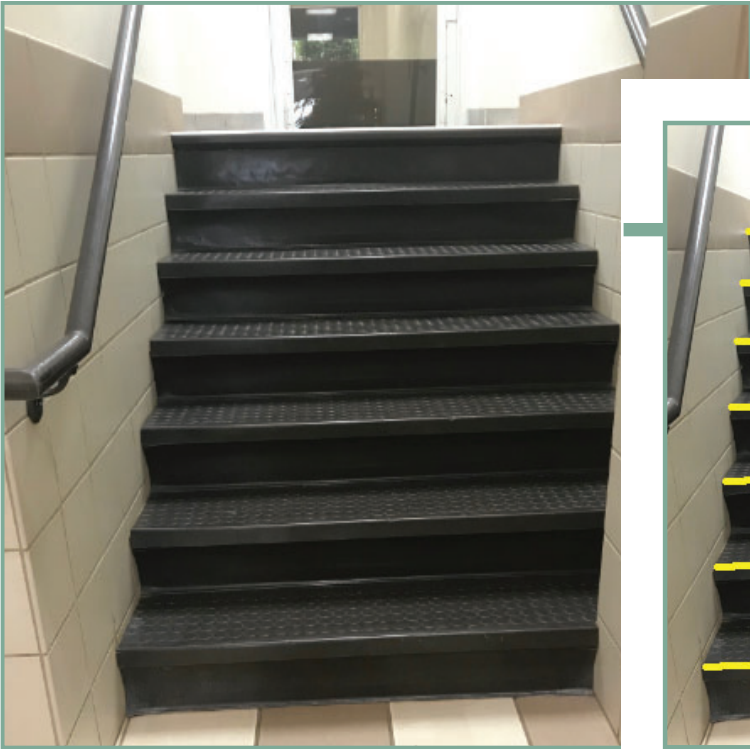
- » When installing devices meant for public use, it is recommended to install operable parts of equipment no higher than 48” above floor (if constructed before 3/15/2012 and a parallel approach is provided, controls can be 54” above floor). Example: hand sanitizing stations

Moderate Recommendation

- » Add striped tape for visual contrast on all stairways

Note: There are no high or low recommendations.





Council Chambers

Moderate Priority

No High
Priority

- » 1 empty wheelchair space is necessary for every 25 seats. Empty space needs to be 36"x48" deep for forward approach. Space must be 36"x60" for parallel approach. Accessible path to wheelchair spaces needs to be 36" wide

No Low
Priority

Note: Currently, there are no high, moderate or low recommendations.



Limited Use Limited Application (LULA) Lift at City Hall

High Priority

- » Update all signage pertaining to exits to include Braille.

Moderate Priority

- » Directional signage for LULA lift should be provided in Braille.
- » Add sign for lift on wall across from double doors in Community Room – sign must be mounted between 48-60" high. Directional signage cannot be mounted more than 40" above floor. Note: Signs designating permanent rooms and spaces not likely to change over time (room names, numbers, etc) should be mounted on the wall on the latch side of the door. Signs that are permanent: baseline of lowest character should be at least 48" high and baseline of lowest character no more than 60" high.

No Low Priority

High Recommendations

**Does not specify pressures and closure times for platform lifts. The following are our recommendations:

- » **Lift Doorway at Community Room (Floor 1):**
 Door Pull: 17 pounds (recommend 5 pounds)
 Door Push: 17 pounds (recommend 5 pounds)
 Closure Time: 3.02 seconds (recommend 5 seconds)
- » **Mid-Level Lift Door at Planning Offices:**
 Door Pull: 10 pounds (recommend 5 pounds)
 Door Push: 11 pounds (recommend 5 pounds)
 Not self-closing
- » **Lift Door at Utility Floor (across from steps):**
 Door Pull: 10 pounds
 Door Push: 13 pounds
 Not self-closing
- » **Lift Door (top):**
 Door Pull: 16 pounds
 Door Push: 16 pounds
 Closure Time: 3.01 seconds
 - (recommend 5 seconds)



Moderate Recommendations

- » Recommend adding more directional signage throughout City Hall leading to LULA lift.
- » Recommend adding accordion gate or removable barrier at the upper lift in front of the stairway for safety (lift leading from the Planning Department to the Utilities Desks). A gate would prevent wheelchair accidents on stairway after exiting lift.



No Low Recommendations

Women's Restroom - at the Community Room

High Priority

- » Entry door into restroom requires 10 lbs of pressure when pulling
- » Entry door into restroom requires 12 lbs of pressure when pushing
- » Entry door into restroom takes 1.73 seconds to close from an open position of 90 degrees to 12 degrees from the latch

Moderate Priority

- » Sign outside of Community Room showing restroom location is not in Braille
- » Restroom sign is located on the door. Restroom signs must be on latch side of the door.

Low Priority

- » Coat hook damaged and 53" high – coat hooks are not required, however, if coat hook is present, it must be between 15-48" high
- » Flush handle is not on the open side of the toilet
- » Door to accessible stall is not self-closing

Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

- » Operable parts of light switch: 49.5" ADA Standards recommend operable parts of light switch no higher than 48" (if constructed before 3/15/2012 and a parallel approach is provided, controls can be 54" above floor)
- » Not 18" of width beside latch side inside stall – due to layout and stall meeting other size requirements, this should not be an issue.
- » Toilet paper dispenser is 13" from front of toilet to centerline of dispenser – recommended between 7-9". This is not applicable since built prior to 2012.

» Currently, there are no high, moderate or low recommendations.

Men's Restroom - at the Community Room

High Priority

- » Entry door into restroom requires 10 pounds of pressure to push open
- » Entry door into restroom requires 12 pounds of pressure to pull open
- » Entry door into restroom takes 1.87 seconds to close from an open position of 90 degrees to 12 degrees from the latch
- » If accessible stall door swings inward, there must be 60x56" (beyond the swing of the door) – due to size restrictions, stall door needs to swing out. Once door swing is adjusted, door pull needs to be added and installed between 34-48" above floor. NOTE: If constructed before 3/15/12, clearances around toilets in stalls can be 48" wide by 66" long or 48" wide by 56" long (depending on approach)

Moderate Priority

- » Directional signage outside of Community Room showing restroom location is not in Braille
- » Restroom sign is located on the door. Restroom signs must be on latch side of the door.
- » Must be clear path to sink at least 36" wide
 - currently only 31" from urinal partition to edge of paper towel dispenser/trash can. Recommend moving urinal partition 4" to right.

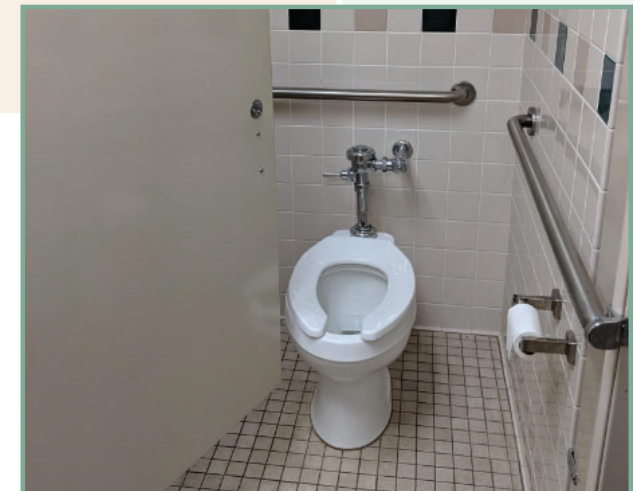
Low Priority

- » The stall door should be self-closing once swing of door is corrected

Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

- » Operable parts of light switch: 49.5" ADA Standards recommend operable parts of light switch no higher than 48" (if constructed before 3/15/2012 and a parallel approach is provided, controls can be 54" above floor)
- » Not 18" of width beside latch side – as mentioned above, due to layout and stall meeting other size requirements, should not be an issue if swing of door is changed.
- » No coat hook present – not required, however, if installed, must be placed between 15-48" above floor
- » Recommended toe clearance under sinks: 9". Spigot under sink 6.75" above floor

» Currently, there are no high, moderate or low recommendations.



Women's Restroom - at the Council Chambers

High Priority	No Moderate Priority	Low Priority
<ul style="list-style-type: none"> » Push pressure of restroom entry door: 8 pounds » Pull pressure of restroom entry door: 7 pounds » Closure time of restroom entry door: 3.55 seconds 		<ul style="list-style-type: none"> » Coat hook not required, however, if present, must be installed 15-48" above floor. Coat hook is currently 53" high » Operable portion of soap dispenser is currently 48" above floor. Since the sink is 21.25" deep, soap dispenser should be mounted less than 44" above floor » Side grab bar in accessible stall should be located 12" from rear wall and extend 54" from rear wall. Grab bar is currently 6" from rear wall and extends 48" total from rear wall » Accessible stall doors should be self-closing » Currently, door pulls only on one side. Install handle 34-48" above floor

Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

- » Operable parts of light switch 50" above floor – recommended height of operable parts: <48" (If constructed before 3/15/2012 and a parallel approach is provided, controls can be 54" above floor)
- » » Side grab bar should be mounted 33-36" high to top of grip. Currently 37" to top of grip
- » » Rear grab bar should be mounted 33-36" high to top of grip. Currently 37.5" high
- » ADA Standards recommend toilet paper dispensers should be located 7-9" from the front of the toilet to the centerline of the dispenser. Currently, the dispenser is 12" from the front of the toilet to the centerline of the dispenser. This is not applicable since built prior to 2012.
- » Restroom sign is located on the door. Restroom signs must be on latch side of the door, however, due to the layout, the sign cannot meet the 18"x18" clear floor space requirements next to the latch side of door.

» Currently, there are no high, moderate or low recommendations.



Men's Restroom - at the Council Chambers

High Priority	Moderate Priority	Low Priority
<ul style="list-style-type: none"> » Push pressure of restroom entry door: 7 pounds » Closure time of restroom entry door: 3.29 seconds 	<ul style="list-style-type: none"> » Restroom sign is located on the door. Restroom signs must be on latch side of the door. 	<ul style="list-style-type: none"> » Operable portion of towel dispenser should be less than 44" above floor currently 46" » Operable portion of soap dispenser (on left) should be mounted less than 44" above floor – currently 47" » Side grab bar in accessible stall should be located 12" from rear wall and extend 54" from rear wall » Accessible stall doors should be self-closing » Currently, door pulls only on one side. Install handle 34-48" above floor

Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

» Operable parts of light switch 49.5" above floor – recommended height of operable parts: <48" (can be 54" above floor if constructed before 3/15/2012)

» Currently, there are no high, moderate or low recommendations.



Family Restroom - at Utility Floor

No High Priority	Moderate Priority	Low Priority
	<ul style="list-style-type: none"> » Coat hook not required – if present, must be 15-48” above floor. Currently 57” above floor – could be a safety hazard and over 5” out of compliance » Sink does not have clear floor space forward approach 30x48” – recommend moving scale and garbage can to become compliant » ADA Standards recommend a rear grab bar 36” long – currently 28” long (12” should extend from centerline of toilet to side wall, 24” from centerline to other open side) 	<ul style="list-style-type: none"> » Stall door not self-closing » For ease of access, move soap dispenser to right side of wall no higher than 44” above floor » ADA Standards recommend flush handle on open side of toilet – currently on wall side of toilet

Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

- » Not 18” width beside latch side of door -14.5” (fine given dimensions)
- » Operable parts of light switch 49” above floor – recommended height of operable parts: <48” (can be 54” above floor if constructed before 3/15/2012)
- » Side grab bar bolts to back of wall – ADA Standards recommend 12” gap from rear wall, however, should be fine since bar extends 54” from rear wall
- » ADA Standards recommend the centerline of toilet should be 16-18” from side wall – currently 14.5” from side wall

» **Currently, there are no high, moderate or low recommendations.**

Other Doors and Entryways*

Community Room Exterior Entry (Floor 1)

High Priority

- » Right Door Pull: 15 pounds
- » Right Door Closure Time: 4.01 seconds
- » Left Door Pull: 15 pounds
- » Left Door Push: 15 pounds
- » Left Door Closure Time: 3.13 seconds (closes too quickly during first 2 seconds before door catches)

No Moderate Priority

No Low Priority

Community Room Interior Entry (Double Doors Floor 1)

High Priority

- » Right Door Pull: 9 pounds
- » Right Door Push: 11 pounds
- » Right Door Closure Time: 2.87 seconds
- » Left Door Push: 10 pounds
- » Left Door Pull: 10 pounds
- » Left Door Closure Time: 2.87 seconds

Each door entry only measures 27" wide when open 90 degrees – must fix closure times and pressures so that both doors can be opened simultaneously when necessary. Doors need to be 32" wide, but both can be opened since no barrier between doors.

No Moderate Priority

No Low Priority

Council Chamber Interior Entry (Closest to Planning Dept)

High Priority

- » Right Door Pull: 8 pounds
- » Right Door Push: 10 pounds
- » Right Door Closure: 2.41 seconds
- » Left Door Pull: 8 pounds
- » Left Door Push: 10 pounds
- » Left Door Closure: 2.14 seconds

No Moderate Priority

No Low Priority

Rear Accessible Exterior Entrance to Council Chambers (Floor 2)

High Recommendations

- » Right Door Pull: 13 pounds
- » Right Door Push: 13 pounds
- » Right Door Closure Time: 2.43 seconds
- » Left Door Closure Time: 2.50 seconds

No Moderate Priority

No Low Priority

Front Exterior Entrance to Council Chambers (Floor 2)

High Recommendations

- » Push: 12 pounds pressure
- » Pull: 12 pounds pressure
- » Closure Time: 2.11 Seconds

No Moderate Priority

No Low Priority

Planning Department Interior Entry (Floor 2)

High Recommendations

- » Pull: 10 pounds
- » Push: 12 pounds
- » Closure Time: 3.22 seconds

No Moderate Priority

No Low Priority

Council Chamber Interior Entry (Closest to Restrooms)

High Recommendations

- » Right Door Pull: 10 pounds
- » Right Door Push: 8 pounds
- » Left Door Pull: 10 pounds
- » Left Door Push: 8 pounds

No Moderate Priority

No Low Priority

Note: Currently, there are no high, moderate or low recommendations.

Note: Currently, there are no high, moderate or low recommendations.

*Right and left doorways are consistently documented from the outside of a building or room looking inward. Please see page 15 under "High/Critical Priority" for interior and exterior doorway standards.

City Hall Accessible Parking

High Priority

- » Parallel Space on 2nd Ave NE must meet ADA Standards.
- » Where accessible parallel parking is provided, a parallel access aisle at least 60 inches wide shall be provided at street level the full length of the accessible parking space. The parallel access aisle shall connect at the head or foot of the parking space to a 60-inch wide minimum perpendicular access aisle that shall extend the full width of the parking space.
- » There must also be proper signage mounted 60" high to the bottom of the sign.
- » City Hall's parking lot (at the accessible space) must have a more gradual transition into the building at the ramp. Please follow Priority 1 – Approach and Entrance for ramp standards.
- » Accessible parking space signage must be mounted 60" to the bottom of the sign.
- » Vegetation must be cut for sign visibility.
- » At least one space must be signed for a van accessible space.

No Moderate Priority

No Low Priority



» Note: Where the width of the public pedestrian right-of-way between the extension of the normal curb and boundary of the public right-of-way is less than 12 feet, a parallel access aisle is not required at parallel parking spaces.



Conover Station

General Recommendations

High Priority

- » Update all signage regarding exits to include Braille.
- » There should be a clear path at least 36" wide to all fire exits and leading to any fire extinguishers/pull alarms and defibrillators.
- » The "EXIT" signs on the third floor could be confusing in an emergency. One exit on the third floor leads to an area that will not allow an individual to access the ground floor during an emergency. Review the signs and correct where necessary.

Moderate Priority

- » There should be directional signage showing accessible restrooms, elevators, exits, meeting rooms, Career Works, and the Library. This signage should include Braille.

No Low
Priority

High Recommendations

- » In case of an emergency, all doors should unlock automatically.

No Moderate Recommendations

No Low Recommendations



Library

High Priority

- » The top shelf of books is 63" high. All shelves exceeding 48" should have signage indicating that visitors can ask for assistance to reach higher material.
- » Interior Entry to Library (door without alarm):
Push pressure: 14 lbs
Pull pressure: 9 lbs
Closure Time: 3.94 seconds
- » Interior Entry to Library (door with alarm):
Push pressure: 13 lbs
Pull pressure: 11 lbs

Moderate Priority

- » According to ADA standards, the aisles/pathways must be 36" wide between all furniture and displays. Remove all obstructions to make aisles and pathways 36" wide.
- » Wheelchair space must be accounted for in all seating and/or lobby areas. This space must be 36"x48".

No Low
Priority

Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

- » The self-service station is 39" tall and cannot be accessed due to obstructions. ADA standards require counters no higher than 36" with adequate knee space for wheelchair accessibility. The help desk in the center is accessible. Visitors can utilize the center help station if necessary (this should negate the need for a modified self-service station).
- » Make sure all thresholds stay below 1/4" in height. Monitor the wooden threshold where separated from the carpet.

Low Recommendations

- » Recommend adding a single wheelchair accessible desk comparable to the desk pictured below. Accessible desk must have a clear 36"x36" wide approach and adequate knee space (generally 19" in depth). Desks should not exceed a height of 27-36". There are other tables that meet the height requirements; however, wheelchair access is blocked by multiple chairs.

Note: There are no high or moderate recommendations.



NCWorks – Help Desk/Main Office Open to Public

High Priority

Interior Doors to Career Works:

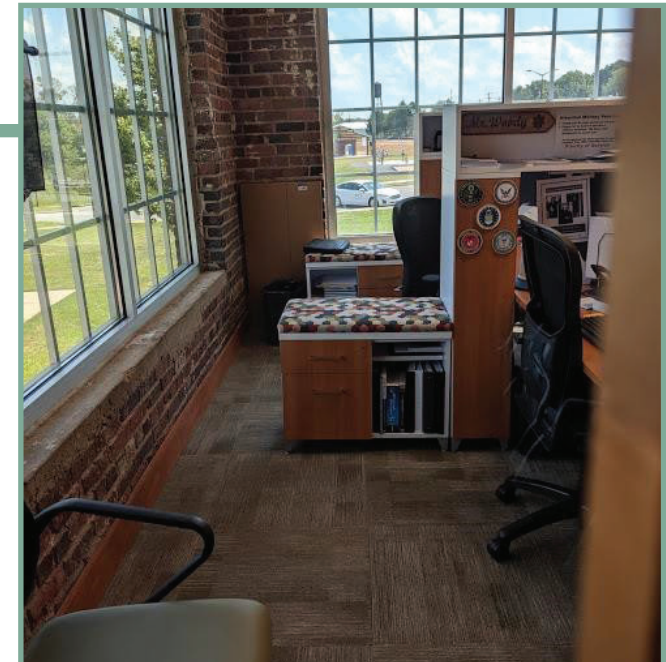
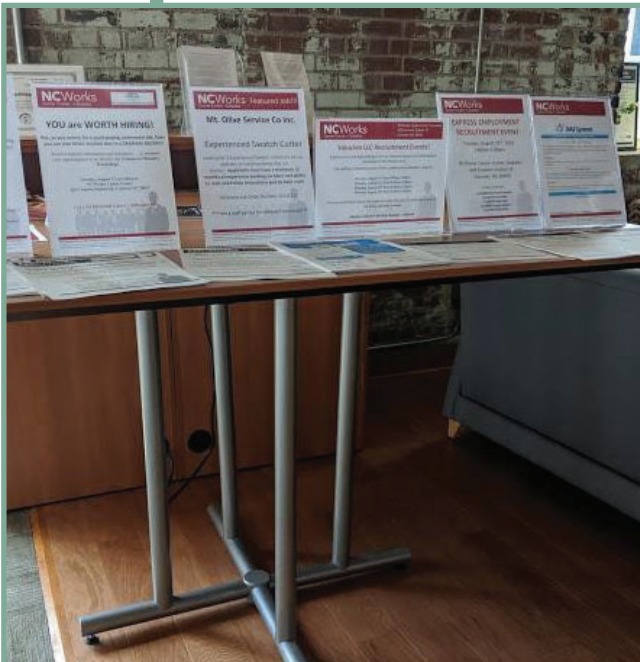
- » **Right Door (from outside)**
Push Pressure: 16 lbs
Pull Pressure: 10 lbs
Closure Time: 4.12 seconds
- » **Left Door (from outside)**
Push Pressure: 16 lbs
Pull Pressure: 10 lbs
Closure Time: 2.68 seconds
- » **Door to Computer Area**
Push Pressure: 16 lbs
Pull Pressure: 11 lbs

Moderate Priority

- » Information station cannot be higher than 36”
- » Help desk currently has a counter 43” high – ADA requires a 36” high and a 36” long counter for wheelchair access.
- » The waiting area needs to have a wheelchair space 36” wide by 48” long and an accessible aisle 36” wide to waiting area.
- » Place “Employees Only” sign in the center of the room where employee stationary, etc. is located. This area is not compliant in regard to counter heights.
- » If the public generally needs to access office areas, allow 36” minimum aisles to each office area.

No Low
Priority

Note: There are no high, moderate, or low recommendations.



NCWorks - Workroom

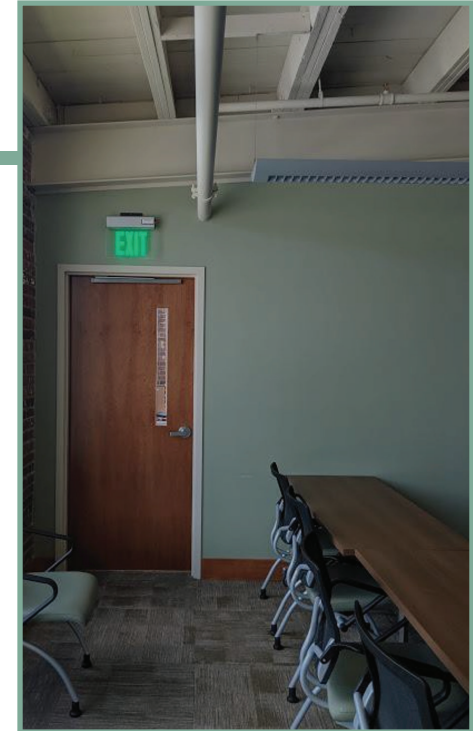
High Priority

- » Allow 36" aisle to all exits without obstructions

Moderate Priority

- » Move podium to allow for 36" pathway to seats.
- » Wheelchair accessible spaces at tables need to be 36" wide (recommend spaces on the end of each row). There needs to be 1 space for every 25 seats.

No Low Priority



Note: There are no high, moderate, or low recommendations.

NCWorks - Offices and Meeting Rooms

High Priority

- » Interior Door to Community Room:
Push Pressure: 15 lbs
Pull Pressure: 10 lbs
- » Exterior Door to Community Room (right door from outside – other door locked)
Push Pressure: 16 lbs

*All door closure times should be 5 seconds or more. Please see page 15 under "High/Critical Priority" for interior and exterior doorway standards.

Moderate Priority

- » Back of meeting room: aisle not 36" wide
- » Allow for 36" wide wheelchair spaces in meeting room (1 wheelchair space for every 25 seats)
- » <36" at corner of meeting room at time of inventory
- » Waiting areas should have wheelchair space 36" wide by 48" long

No Low Priority



Note: There are no high, moderate, or low recommendations.

Parking Lot Spaces

Spaces in Front of Drop-off

High Priority



- » There should be an accessible parallel space at the front of Conover Station as close to the ramp as possible. A curb ramp should be installed that connects to the space in the picture at the bottom right (please see curb ramp measurements in application).
- » There is currently not an accessible space that meets the proper dimensions of an accessible van space at the Library Dropoff. A van accessible space must be at least 11 feet wide with an access aisle at least 5 feet wide OR at least 8 feet wide with an access aisle at least 8 feet wide. There must be at least one accessible van space (can be the same space as the regular accessible space). Van sign mounted 60" above the ground is required.

No Moderate Priority

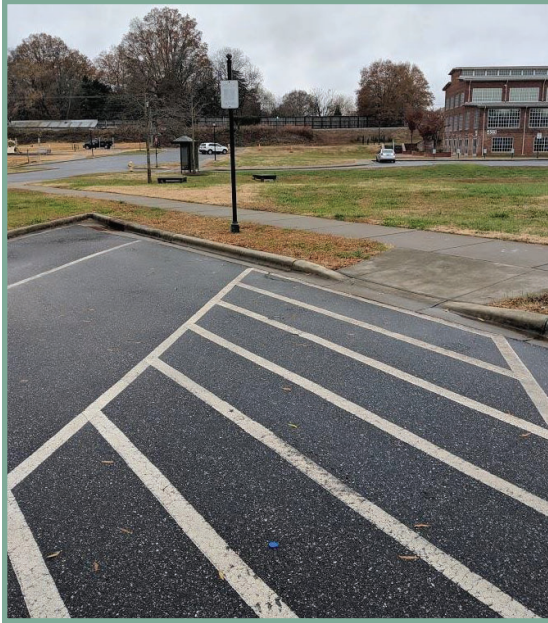
No Low Priority

Notes: **The running slope and cross slope of each accessible space and accessible aisle is measured at the top (area closest to the concrete parking block), middle and bottom. According to ADA Standards, the slope of accessible parking spaces and access aisles should be no greater than 2% in all directions.

» Currently, there are no high, moderate or low recommendations.



Accessible space closest to Conover City Park Sign



High Priority

- » Evaluate the ratio of standard parking spaces to accessible spaces. For every 25 spaces there should be 1 accessible space present. For every 6 accessible spaces, 1 should meet the dimensions and have the proper signage for a van accessible space. If there are not 6 accessible spaces, at least one must still be van accessible. Spaces should be evenly dispersed at park and building entry points.
- » Sign is faded and needs to be replaced. The space meets the proper dimensions for an accessible van space – recommend signing accordingly.
- » There should also be an accessible space at the entrance of the park to make the entrance of the park as close as possible to the space.

No Moderate Priority

Low Priority

- » Top of space: 2.6% cross slope
- » Bottom of access aisle: 2.9% running slope

Notes: **The running slope and cross slope of each accessible space and accessible aisle is measured at the top (area closest to the concrete parking block), middle and bottom. According to ADA Standards, the slope of accessible parking spaces and access aisles should be no greater than 2% in all directions.

- » Currently, there are no high, moderate or low recommendations.

Accessible spaces at end of Conover Station SE overlooking upper section of park



High Priority

- Left Space (when looking at park):**
- » 7 foot wide – ADA Standards require 8 foot width with a 5' access aisle
 - » No access aisle – the access aisle can be shared but is required of all accessible spaces
 - » No van accessible space

No Moderate Priority

Low Priority

- » **Left Space (when looking at park):**
Middle of space: 3.6% running slope
- » **Right Space (when looking at park):**
Top of Space: 3.3% running slope
Top of Aisle: 5.2% cross slope, 4.1% running slope
Middle of Space: 2.7% running slope
Middle of Aisle: 3% cross slope
Bottom of Space: 2.7% running slope

Notes: **The running slope and cross slope of each accessible space and accessible aisle is measured at the top (area closest to the concrete parking block), middle and bottom. According to ADA Standards, the slope of accessible parking spaces and access aisles should be no greater than 2% in all directions.

- » Currently, there are no high, moderate or low recommendations.



Conover Police Department

Community/Accessible Restroom

No High Priority	Moderate Priority	Low Priority
	<ul style="list-style-type: none"> » Bathroom sign not in Braille 	<ul style="list-style-type: none"> » ADA Standards recommend that restroom doors self-close. Currently, the door is not self-closing » Move trash can from under sink to provide adequate wheelchair space under sink » ADA Standards recommend that side grab bars extend 54" from rear wall – current grab bar extends 50" from rear wall

Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

- » Operable parts of light switch: 49.5" above floor (in restroom and lobby) – ADA Standards recommend less than 48" above floor (can be 54" above floor if constructed before 3/15/2012)
- » No coat hook present. Coat hooks are not required, however, if installed, must be placed 15-48" above floor.
- » ADA Standards recommend a minimum of 12" clearance between grab bars and protruding objects above the bar. The soap dispenser is currently 8.5" above the grab bar. Not applicable – if built prior to 2012

Note: There are no high, moderate, or low recommendations.

**There must be a 36" wide unobstructed pathway that extends from the lobby to the interview rooms.*



Accessible Entry – Accessible Parking Space and Entry at Police Department

High Priority

- » The accessible space needs to be moved – ADA Standards require that accessible spaces be as close to the accessible entry as possible. The closest entry for the public is at the front of the building. The accessible space is located next to the side door – the side door is an employee entrance only.
- » If accessible space is moved, curb ramp must be installed and accessible entry/access aisle restriped (as pictured below).
- » **Main Exterior Entry:**
Right Door Closure Time: 3.15 seconds
Left Door Closure Time: 3.60 seconds

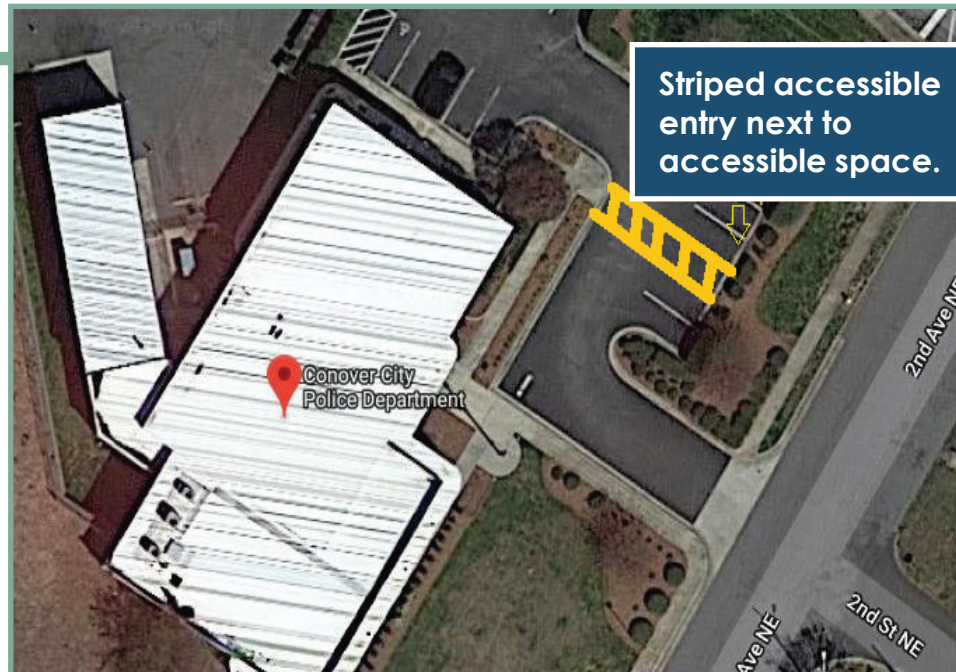
Moderate Priority

- » Clear space 36"x48" needs to be open in waiting area for wheelchair use. Space cannot intersect 36" accessible pathway (from doorway to service counter)

No Low
Priority

Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

- » When installing devices meant for public use (such as the hand sanitizer dispenser), it is recommended to install operable parts of equipment no higher than 48" above floor (if constructed before 3/15/2012 and a parallel approach is provided, controls can be 54" above floor)



Note: There are no high, moderate, or low recommendations.



Conover Public Works

Interior and Exterior Entries

High Priority	No Moderate Priority	Low Priority
<ul style="list-style-type: none"> » Door Pressures (Exterior Entrance): Closure Time: 1.71 seconds 		<ul style="list-style-type: none"> » The service counter is currently 40" high. ADA Standards recommend service counters no higher than 36".

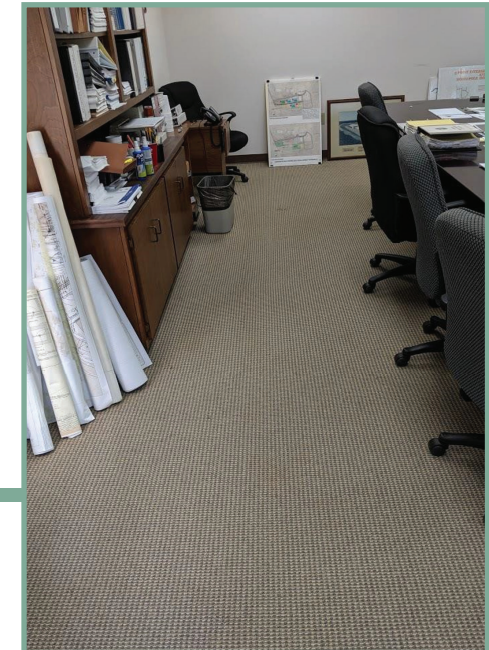
Notes: Inventoried areas include: the breakroom, conference room, restrooms, parking/access, and main lobby area. ****All future fire pulls and light switches need to be installed no higher than 48" high (to the operable parts).**

» **Currently, there are no high, moderate or low recommendations.**

Conference Room

No High Priority	Moderate Priority	No Low Priority
	<ul style="list-style-type: none"> » Make sure there is a clear 36" wide circulation path around the table and adequate room for wheelchair spaces at the table. Generally, allow 1 wheelchair space per every 25 seats. The wheelchair spaces need to be 36" wide and 48" deep. If the space can only be entered from the side, then the space needs to be 60" deep. The spaces cannot overlap circulation paths. 	

Note: There are no high, moderate, or low recommendations.



Break Room

High Priority

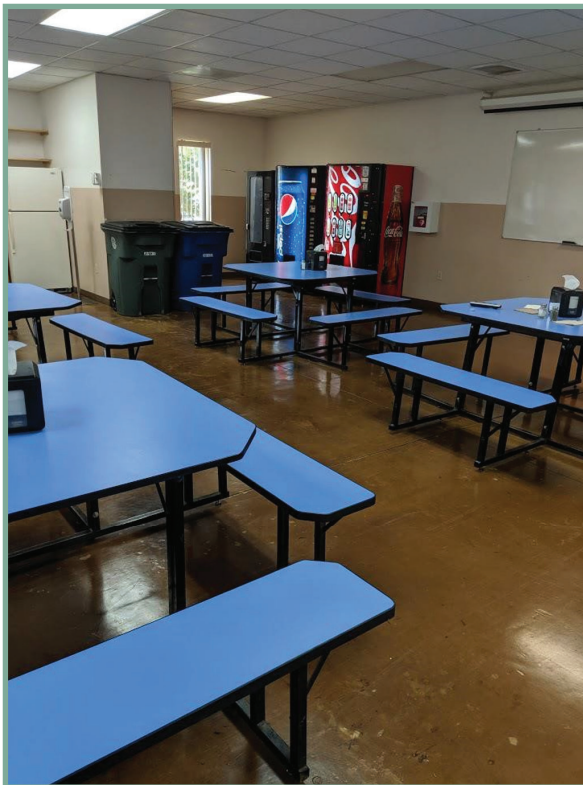
- » **Interior Door to Break Room:**
Push Pressure: 9 pounds
Pull Pressure: 9 pounds
Closure Time: 3.09 seconds
- » **Exterior Door to Break Room:**
Closure Time: 2.23 seconds

Moderate Priority

- » There should be adequate spaces for wheelchairs throughout the break room. The design of the tables in the break room make access to tables difficult. The table at the side of the room (29" high) has plenty of knee room for wheelchair access. Recommend adding accessible tables for meetings and evenly dispersing wheelchair resting areas. The wheelchair spaces need to be 36" wide and 48" deep. If the space can only be entered from the side, then the space needs to be 60" deep. The spaces cannot overlap circulation paths. Circulation paths must be at least 36" wide. Generally, there needs to be 1 space per every 25 seats.
- » The fire pull in the break room is located above a counter and would be difficult to access for someone in a wheelchair. Recommend moving to an unobstructed location and mounting 48" high (to operable parts).

No Low
Priority

Note: There are no high, moderate, or low recommendations



Men's Restroom

High Priority

- » **Door Pressures**
Door Push: 9 pounds
Door Pull: 8 pounds
- » Coat hooks are not required, however, if present, must be 15-48" high. The current coat hook is 66" high – could be a safety hazard for someone in a wheelchair.

Moderate Priority

- » The pipes below the sink need to be insulated.

Low Priority

- » When soap dispensers are not located over sinks, they can be no higher than 48". The current soap dispenser is 51"s high.
- » ADA Standards require the stall door to be self-closing.



Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

- » 2010 ADA Standards require a 12" clearance between the grab bar and protruding objects above. There are 7.5" between the side bar and the toilet paper dispenser above the side bar. If the facility was built prior to 2012, there are no space requirements above or below bars.
- » Door pulls on stalls (both sides) are recommended but not required if the facility was constructed prior to 3/15/12.

Note: There are no high, moderate, or low recommendations.

Women's Restroom

High Priority

- » The stall door/circulation path cannot be fully accessed due to obstructions. Recommend moving the obstructions for wheelchair access.
- » **Door Pressures**
Push Pressure: 9 pounds
Pull Pressure: 8 pounds
Closure Time: 2.81 seconds
- » Coat hooks are not required, however, if present, must be 15-48" high. The current coat hook is 65" high and could be hazardous to safety.

No Moderate Priority

Low Priority

- » ADA Standards require the stall door to be self-closing.
- » **Water Fountain:**
ADA Standards require drinking fountains have a clear floor space at least 30" wide by 48" long centered in front of the fountain for a forward approach. The fountain currently has a 23" wide cubby and a 45" long forward approach.
- » According to ADA Standards, the flush handle must be on the open side of the toilet. The flush toilet is on the closed side of the toilet

Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

- » 2010 ADA Standards require a 12" clearance between the grab bar and protruding objects above. There are 9" between the side bar and the toilet paper dispenser above the side bar. If the facility was built prior to 2012, there are no space requirements above or below bars.
- » Door pulls on stalls (both sides) are recommended but not required if the facility was constructed prior to 3/15/12.



Note: There are no high, moderate, or low recommendations.

Public Works Parking Lot

High Priority

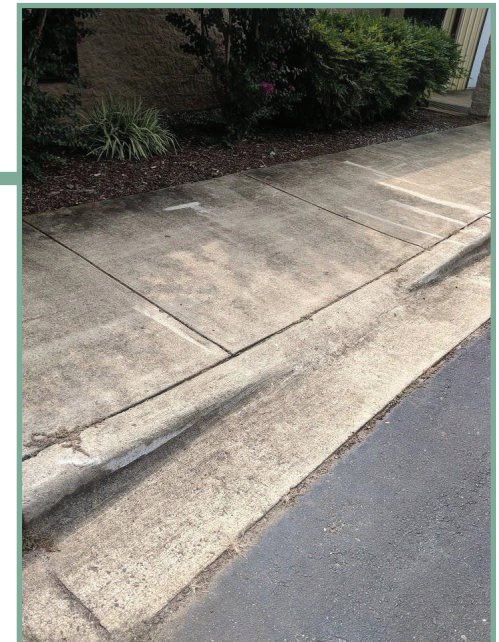
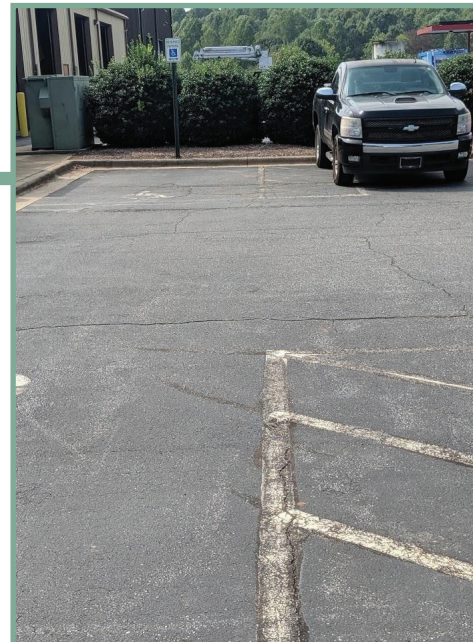
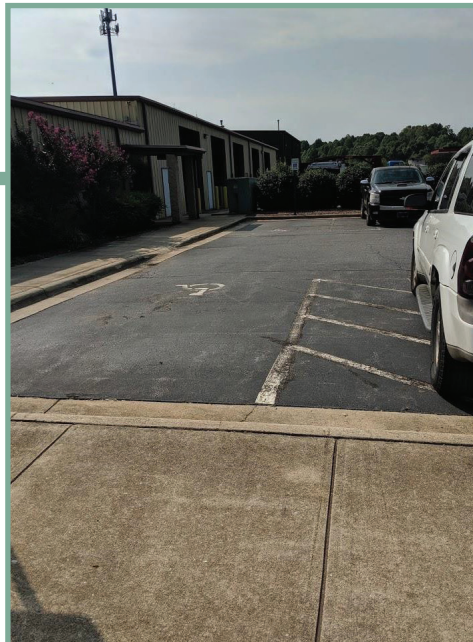
- » Access aisles are supposed to connect to the accessible route. Recommend switching spaces and access aisles so they connect to the curb ramp.
- » The accessible spaces are not signed for van parking but are the proper dimensions for an accessible van space. One space must have accessible van signage. Van sign mounted 60" above ground is required.
- » There should be a smoother transition for the curb ramp leading from the spaces to Public Works. The standards for curb ramps leading from parking lots to facilities differ slightly from curb ramps within the right-of-way. Please see Priority 1 – Approach and Entrance standards 1.19 – 1.24 for proper curb ramp standards.

No Moderate Priority

Low Priority

- » Seal any cracks exceeding 1/2". There were no notable ones that were obvious safety hazards.
 - » The top and middle of the access aisle closest to Public Work's main entry exceed a 2% cross slope. Top cross slope: 2.9%, Middle cross slope: 3.1% All other measurements meet proper dimensions.
 - » Space closest to break room:
Cross slope at top of space: 2.8%
Cross slope at top of aisle: 2.8%
Cross slope at middle of space: 2.7%
Cross slope at middle of aisle: 2.8%
- All other measurements meet proper dimensions. The listed ones are not far out of compliance.

Notes: **The running slope and cross slope of each accessible space and accessible aisle is measured at the top (area closest to the concrete parking block), middle and bottom. According to ADA Standards, the slope of accessible parking spaces and access aisles should be no greater than 2% in all directions. **Currently, there are no high, moderate or low recommendations.**





Conover Fleet Maintenance

Parking/Access

High Priority

- » **Door Pressures (Exterior Entrance):**
Closure Time: 1.83 seconds
- » To prevent wheelchair casters and crutch tips from falling off, ADA Standards require either the surface of the ramp to extend at least 12" beyond the inside face of the handrail OR place a curb or barrier that prevents the passage of a 4" diameter sphere. Install a 4" barrier above concrete ramp.
- » ADA Standards require that all accessible spaces have a sign posted at least 60" high to the bottom of the sign. Since there is one accessible space, the sign needs to also include accessible van signage. The dimensions fit the requirements for an accessible van space.
- » There is a raised area in the center of the accessible aisle that could present a trip hazard.

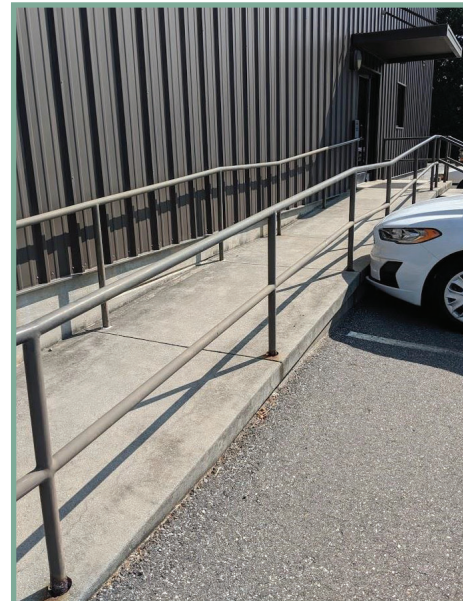
Notes: Fleet Maintenance is not generally open to the public. The lobby, restroom, and parking/entrance areas were inventoried. These areas were generally very accessible. For any area not recommended for public use, add signage stating "Employees Only". **The running slope and cross slope of each accessible space and accessible aisle is measured at the top (area closest to the concrete parking block), middle and bottom. According to ADA Standards, the slope of accessible parking spaces and access aisles should be no greater than 2% in all directions.

- » Currently, there are no high, moderate or low recommendations.

No Moderate
Priority

Low Priority (Fleet Maintenance Accessible Parking Space)

- » Fill in all pavement cracks that exceed 1/2". This does not present immediate safety hazard.
- » The running slope at the top of the accessible space measures 3%. The running slope in the middle of the space measures 3.3%. All other measurements are within range and does not pose an immediate safety hazard.
- » The running slope in the middle of the accessible aisle measures 3.4%. The running slope at the bottom of the accessible aisle measures 3.1%. All other measurements are within range and do not pose an immediate safety hazard



Men's/Women's Room

High Priority

- » Main entry door into the restroom: the door swings inward and cannot be opened 90 degrees due to items behind the door. Items need to be removed and placed in an area not blocking the door or circulation path.
- » Door Pressures:
Push Pressure: 14 pounds
Pull Pressure: 13 pounds
Closure Time: 3.8 seconds

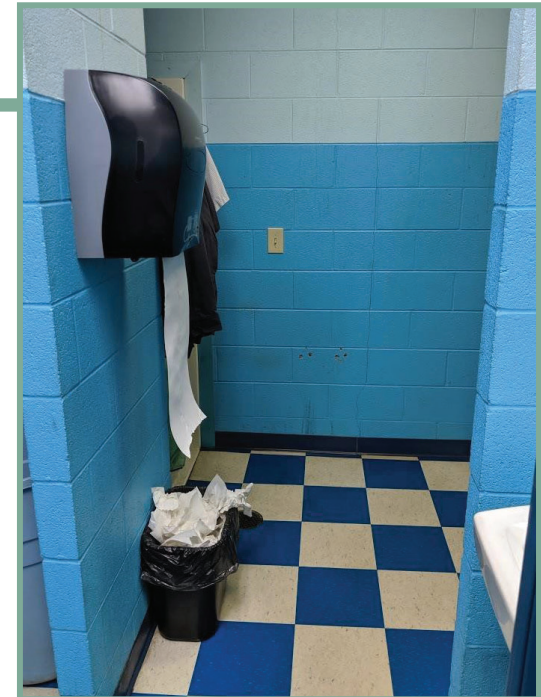
Moderate Priority

- » When soap dispensers are located above sinks less than 20" deep, they must be located no more than 48" high (to the operable parts). The current soap dispenser is located above a sink that is less than 20" deep. The sink is 55" high to the operable parts.

No Low
Priority

Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

- » If the door swings in, ADA Standards require at least 24 inches of maneuvering clearance beyond the door latch side. Due to how the restroom is set up, there is not 24" of maneuvering clearance. Not applicable, the stall within the restroom can be reconfigured, however, not necessary due to the amount of maneuverable room within the stall.
- » If the towel dispenser is not located over the sink, then it must be no higher than 48" high. The towel dispenser is 52" high. Since the towel dispenser is automatic, this should not be an issue.
- » 2010 ADA Standards require a 12" clearance between the grab bar and protruding objects above. There are 10.5" between the side bar and the toilet paper dispenser above the side bar. If the facility was built prior to 2012, there are no space requirements above or below bars.
- » Currently there are no door pulls on the stall door. If constructed before 3/15/2012, door pulls do not need to be added.





Conover Fire Station 1

Approach & Entry Area

High Priority	Moderate Priority	Low Priority
<ul style="list-style-type: none"> » Front Exterior Entrance: Door Push: 15 pounds Door Pull: 13 pounds » Back Exterior Exit: Push: 15 lbs Pull: 15 lbs Closure Time: 3.79 Seconds » Fire alarm pull cannot be blocked - move all obstructions from in front of the pull. 	<ul style="list-style-type: none"> » Be sure to include a space large enough for someone in a wheelchair to sit in the lobby area. This space should be 36 inches wide by at least 48 inches long. 	<ul style="list-style-type: none"> » The help desk is 39" high. There should be a portion of counter no higher than 36" above the floor and 36" long. » The water fountain is currently inoperable for all users.

Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

- » **Install all future pulls no higher than 48". Current alarm pulls are 50.5" high.**

Note: There are no high or moderate recommendations.



Multi-Purpose Room

High Priority

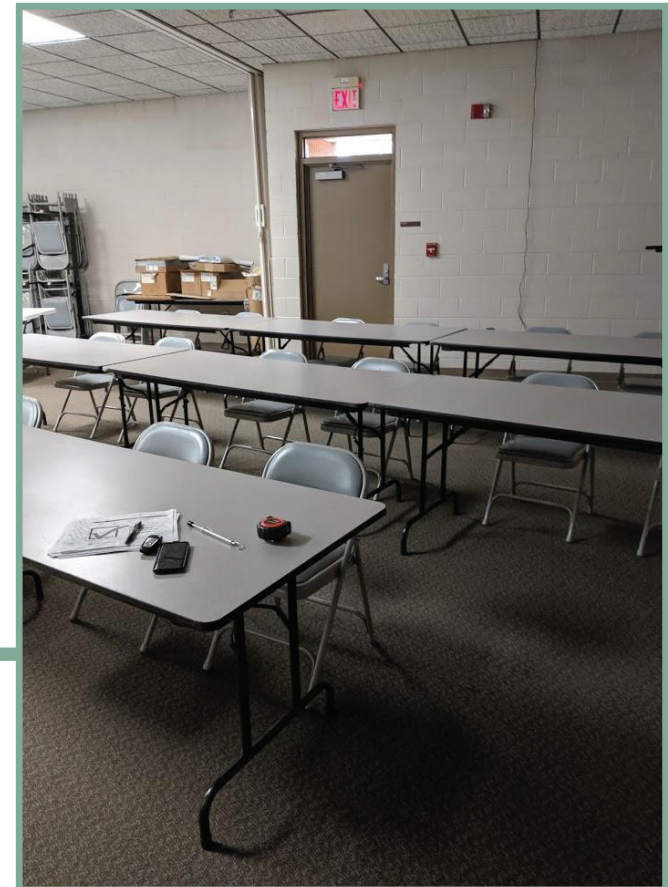
- » Interior Entrance to Multipurpose Room:
Push: 9 lbs
Pull: 10 lbs
Closure Time: 4.12 Seconds

Moderate Priority

- » Multi-purpose room sign should be mounted on the latch side of the door .
- » There is supposed to be one accessible space for every 25 seats within the Multi Purpose Room. These spaces need 17-25" of knee space under the table and a total of 48" of depth for each spot, as well as 30" of width.
- » There should be wider accessible aisles between tables in the Multi-Purpose Room. There is currently only 24" between the backs of chairs and tables. There needs to be an accessible pathway 36" wide.

No Low Priority

Note: There are no high, moderate, or low recommendations.



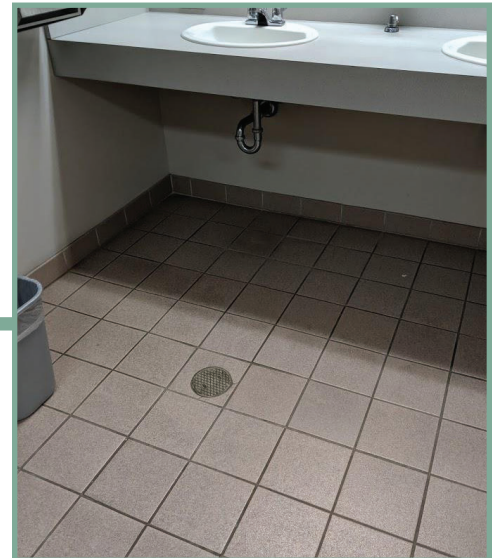
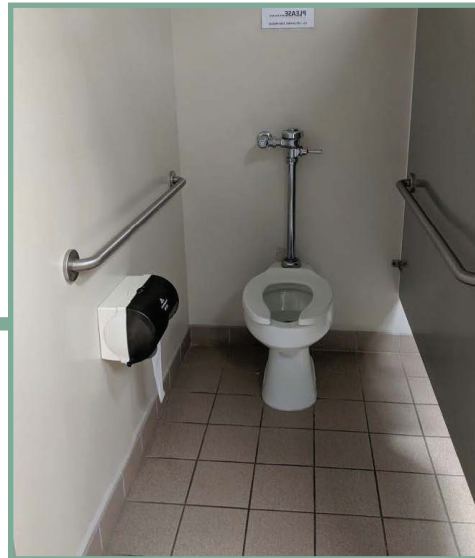
Accessible Restroom in Lobby

High Priority	Moderate Priority	Low Priority
<ul style="list-style-type: none">» Interior Bathroom Entry: Push: 10 lbs Pull: 10 lbs Closure Time: 3.33 seconds	<ul style="list-style-type: none">» The sink should have a clear space 30" wide and 48" long. The towel dispenser protrudes 9.5" into the pathway and partially obstructs access to the sink.» The pipes below the sink are not insulated. ADA requires that pipes are insulated or otherwise configured to protect against contact.» The handles for the sink are difficult to turn and exceeds a force of 5 pounds to operate.	<ul style="list-style-type: none">» The operable portion of the soap dispenser is 51" high. ADA Standards require dispensers be installed no higher than 48".

Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

- » No coat hook present, however, if installed, needs to be between 15-48" above the floor.
- » The rear grab bar is 25" long due to space restrictions. ADA Standards require a rear grab bar 36" long.
- » ADA Standards require that the toilet paper dispenser be installed 7-9" from the front of the toilet to the centerline of the dispenser. The dispenser is currently 16" from the toilet to the center of the dispenser.
- » Operable portion of light switch 50" high – in the future, install operable parts no higher than 48" above the floor.

Note: The restrooms in the back (at the Multi-Purpose Room) should not be open to the public. There is accessible signage present, however the restrooms do not meet ADA Standards. Recommend signage either discouraging public use or stating "accessible restroom in lobby." There are no high, moderate, or low recommendations.



Accessible Parking

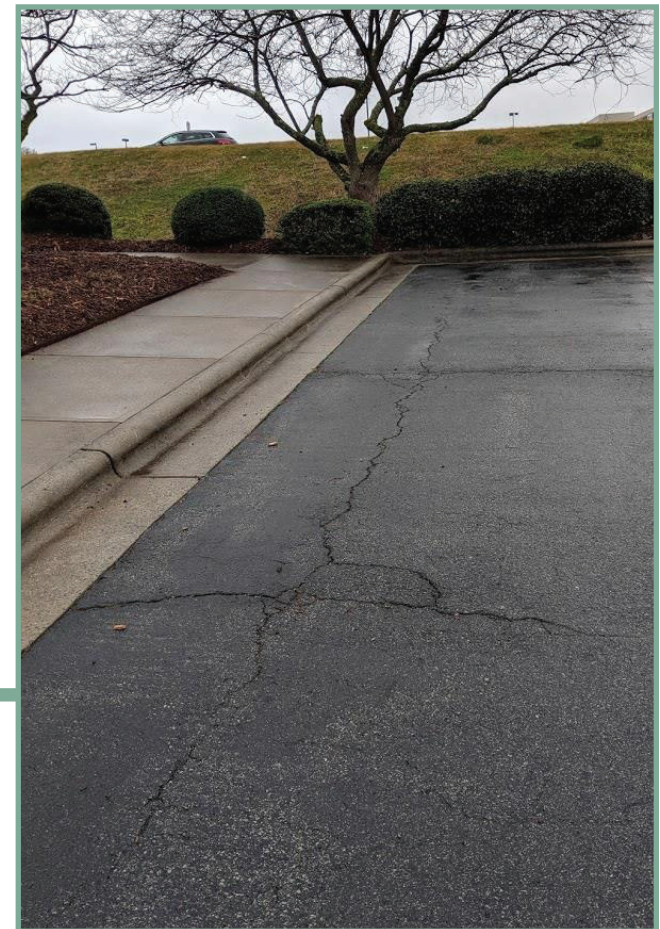
High Priority

- » The accessible parking is not located close to the main entrance of the building and the sidewalk is very steep. The space needs to be moved as close to the main entrance as possible and a curb ramp should be installed. The bottom right picture is the recommended space location.
- » The accessible aisle leading onto the walkway is blocked by trash receptacles.
- » The space and access aisle need to be as flat as possible. ADA Standards require the slope measure less than 2% in all directions.

No Moderate Priority

No Low Priority

Note: **The running slope and cross slope of each accessible space and accessible aisle is measured at the top (area closest to the concrete parking block), middle and bottom. According to ADA Standards, the slope of accessible parking spaces and access aisles should be no greater than 2% in all directions. There are no high, moderate, or low recommendations.





Conover Fire Station 2

Interior and Exterior Door Pressures

High Priority

» **Exterior Door at Accessible Parking Space:**

Push Pressure: 11 pounds
 Pull Pressure: 11 pounds
 Closure Time: 4.07 seconds

» **Interior Door (after entering from accessible space):**

Push Pressure: 7 pounds
 Pull Pressure: 6 pounds

» **Interior Door (from hallway leading into lounge):**

Push Pressure: 9 pounds
 Pull Pressure: 7 pounds
 Closure Time: 3.99 seconds

» **Interior Door (Lounge at phone next to Kitchen):**

Push Pressure: 9 pounds
 Pull Pressure: 9 pounds
 Closure Time: 3.95 seconds

» **Interior Door to "Exercise Room":**

Push Pressure: 12 pounds
 Pull Pressure: 6 pounds
 Closure Time: 2.43 seconds

» **Exterior Door of "Exercise Room":**

Push Pressure: 15 pounds
 Pull Pressure: 11 Pounds
 Closure Time: 2.42 seconds

No Moderate Priority

No Low Priority

Note: There are no high, moderate, or low recommendations.

Lounge

Moderate Priority

No High Priority

» There should be one accessible space for every 25 seats within the Lounge. These spaces need 17-25" of knee space under the table and a total of 48" of depth for each spot, as well as 30" of width.

No Low Priority

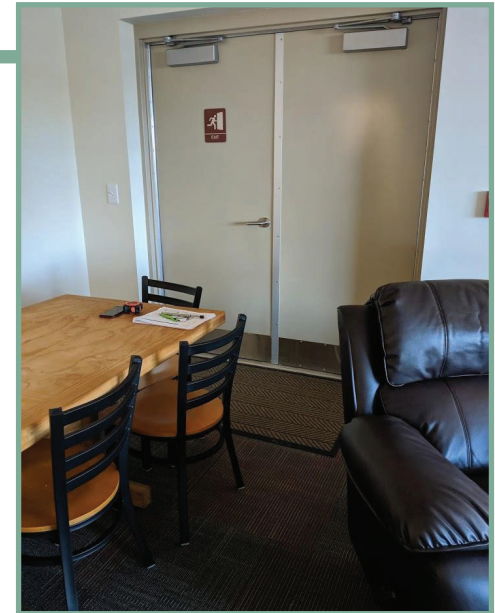
Note: There are no high, moderate, or low recommendations.



Exercise Room

High Priority	Moderate Priority	No Low Priority
<ul style="list-style-type: none"> » The exit is difficult to access due to the table. There should be an accessible path leading to the doorway for safe entering/exiting. 	<ul style="list-style-type: none"> » Be sure to include a space large enough for someone in a wheelchair to sit in the furniture area and at the table. This space should be 36 inches wide (30 inches wide at the table) by at least 48 inches long. 	

Note: If this room is not open to the public, there should be an “Employees Only” sign. There are no high, moderate, or low recommendations.



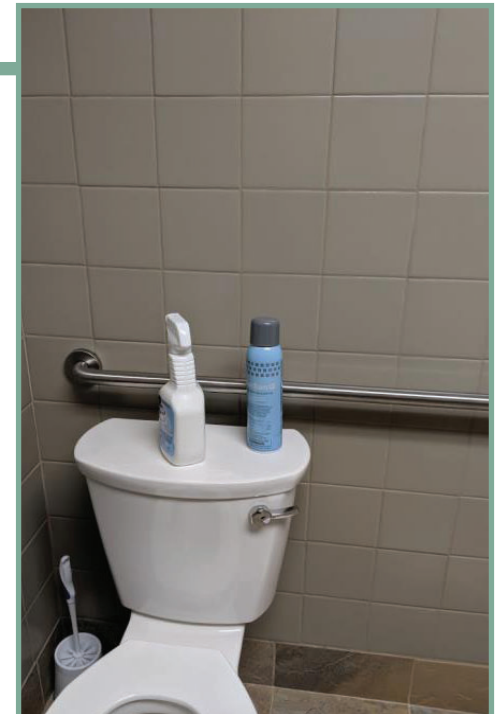
Women’s Restroom (Single Compartment)

High Priority	Moderate Priority	No Low Priority
<ul style="list-style-type: none"> » Women’s Restroom Door Pressures: Push Pressure: 12 pounds Pull Pressure: 10 pounds Closure Time: 2.49 Seconds 	<ul style="list-style-type: none"> » Move cleaning supplies from the back of the toilet so the rear grab bar isn’t blocked. 	

Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

- » The highest grab bar is located 6” above the side grab bar. ADA Standards require a 12” clearance between the grab bar and protruding objects above. If the facility was built prior to March 15, 2012, there are no space requirements above or below bars.
- » There is no hook present. Hooks are not required, however, if installed, must be placed 15-48” high.

Note: There are no high, moderate, or low recommendations.



Men's Restroom (Single Compartment)

High Priority	Moderate Priority	No Low Priority
<ul style="list-style-type: none"> » Men's Restroom Door Pressures: Push Pressure: 12 pounds Pull Pressure: 10 pounds 	<ul style="list-style-type: none"> » Move cleaning supplies from the back of the toilet so the rear grab bar isn't blocked. 	



Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

- » The highest grab bar is located 6" above the side grab bar. ADA Standards require a 12" clearance between the grab bar and protruding objects above. If the facility was built prior to March 15, 2012, there are no space requirements above or below bars.
- » There is no hook present. Hooks are not required, however, if installed, must be placed 15-48" high.

Note: There are no high, moderate, or low recommendations.

Women's Locker Room

High Priority	No Moderate Priority	Low Priority
<ul style="list-style-type: none"> » If the showers are not open to the public, signage ("employees only") and a barrier need to be installed. » Women's Locker Room Door Pressures: Push Pressure: 12 pounds Pull Pressure: 9 pounds Closure Time: 2.82 seconds 		<ul style="list-style-type: none"> » The flush handle is not located on the open side of the toilet.



Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

- » The highest grab bar is located 6" above the side grab bar. ADA Standards require a 12" clearance between the grab bar and protruding objects above. If the facility was built prior to March 15, 2012, there are no space requirements above or below bars.

Note: There are no high, moderate, or low recommendations.

Men's Locker Room

High Priority

- » If the showers are not open to the public, signage "employees only" and a barrier need to be installed.
- » Men's Locker Room Door Pressures:
 Push Pressure: 12 pounds
 Pull Pressure: 10 pounds
 Closure Time: 2.82 seconds

Moderate Priority

- » The soap dispenser is in a location that would be difficult for someone in a wheelchair to access.

Low Priority

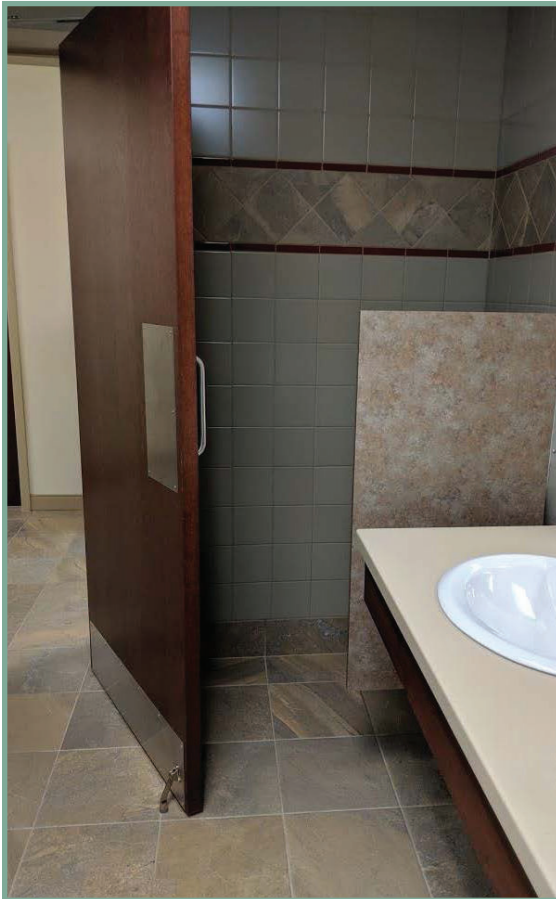
- » Door to stall is not self closing.

High Recommendations

- » Urinal location could be hazardous (in very close proximity to the door).

No Moderate Recommendations

No Low Recommendations



Technically Infeasible or Not Applicable (due to changing standards or measurements within tolerance range)

- » The highest grab bar is located 6" above the side grab bar. ADA Standards require a 12" clearance between the grab bar and protruding objects above. If the facility was built prior to March 15, 2012, there are no space requirements above or below bars.



Conover Fire Station 3

Door Pressures

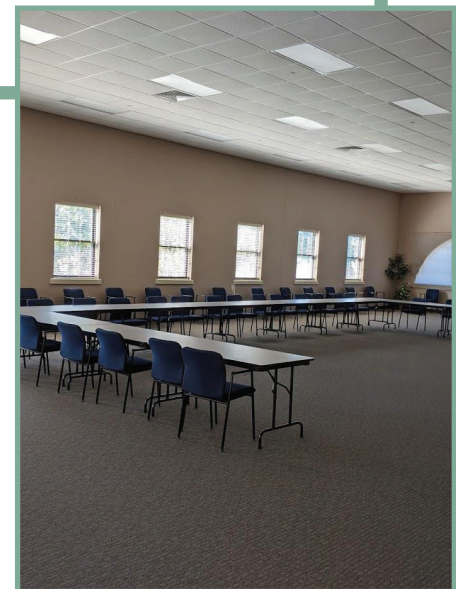
High Priority	No Moderate Priority	No Low Priority
<ul style="list-style-type: none"> » Left Door (when outside looking at the building) 11 lbs pull pressure 15 lbs push pressure 3.4 second closure time » Right Door (when outside looking at the building) 7 lbs pull pressure 12 lbs push pressure 3.81 second closure time » Door to Bay Apparatus (only necessary to correct if open to the public) 17 lbs push pressure 16 lbs pull pressure 4.06 second closure time 		

Multi-Purpose Room

High Priority	Moderate Priority	No Low Priority
<ul style="list-style-type: none"> » Door pressure to multi-purpose room: 16 lbs push pressure 15 lbs pull pressure 5 second closure time 	<ul style="list-style-type: none"> » Must be signage in Braille on the latch side of the door. » Be sure to allow for wheel chair spaces within multi purpose room. There should be one space per every 25 seats. » If the Bay Apparatus is open to the public or tours, there should be a 36" accessible route around trucks and equipment. 	

Parking Lot

No High Priority	No Moderate Priority	<p data-bbox="310 1219 516 1256">Low Priority</p> <ul style="list-style-type: none"> » Cross slope at curb ramp connecting to accessible parking space has a cross slope of 4.3% and needs a smoother transition.
------------------	----------------------	---



Men's Restroom

High Priority

» No functioning light – safety hazard to all users.

No Moderate
Priority

No Low
Priority

Note: There are no high, moderate, or low recommendations.



Women's Restroom

Moderate Priority

» Hand towel dispenser needs to be repaired for all users – ADA Standards do not allow for motions that involve tight grasping, pinching, or twisting of the wrist.

No High Priority

No Low Priority

Note: There are no high, moderate, or low recommendations.





Parking Lots

NE Alleyway Parking Lot – 109 1st Ave N

High Priority

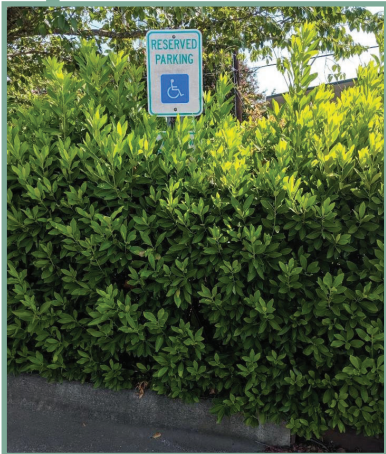
- » Cut vegetation for sign visibility
- » Of the accessible spaces, at least one must be van accessible. A sign needs to be placed at least 60" high (to the bottom of the sign) reading "Van Accessible". Van spaces must be at least 11 feet wide with an access aisle of at least 5 feet wide for a total of 16 feet, or at least 8 feet wide with an access aisle at least 8 feet wide for a total of 16 feet. Currently, the 2nd space and access aisle (the 1st space next to the storm drain) is 17 feet wide. The spot could be designated as a van accessible spot.
- » Restripe accessible aisle for greater visibility. Accessible aisles need to connect to accessible routes - connect restriped aisle to the brick pedestrian crossing

No Moderate Priority

Low Priority

- » The cross slope at the top of the accessible space (next to the storm drain) measured 4%. The running slope of the same space measured 3.4% at the bottom of the space. All other measurements met requirements. This does not pose an immediate safety hazard.
- » The cross slope at the bottom of the 2nd accessible space measured 4.4% at the bottom of the space and 2.8% at the top. All other measurements met requirements. This does not pose an immediate safety hazard.

Note: **The running slope and cross slope of each accessible space and accessible aisle is measured at the top (area closest to the concrete parking block), middle and bottom. According to ADA Standards, the slope of accessible parking spaces and access aisles should be no greater than 2% in all directions. There are no high, moderate, or low recommendations.



Z-Gate Parking Lot – 501 1st Ave S

High Priority

- » The bottom of all accessible signs must be posted at least 60" high. The current accessible space signs closest to the railroad tracks are 35-36" high.
- » Of the accessible spaces, at least one must be van accessible. A sign needs to be placed at least 60" high (to the bottom of the sign) reading "Van Accessible". Van spaces must be at least 11 feet wide with an access aisle of at least 5 feet wide for a total of 16 feet, or at least 8 feet wide with an access aisle at least 8 feet wide for a total of 16 feet. Currently, there is no van accessible signage; however, most accessible spaces meet van accessible space dimensions.

No Moderate Priority

Low Priority

- » Fill holes in accessible spaces and aisle-ways that could be hazardous to mobility.
- » The running slope of the center of the space connecting to the sidewalk (closest to the utility pole) measured 3%."

Moderate Recommendations

No High Recommendations

- » The accessible space connecting to the sidewalk (closest to the charging station) is uneven and could be hazardous to mobility. Resurfacing is recommended. As shown in the picture on the bottom right, most uneven sections are where cars would be parked. This would not present an immediate safety hazard except to those traveling through an empty space.

No Low Recommendations

Note: **The running slope and cross slope of each accessible space and accessible aisle is measured at the top (area closest to the concrete parking block), middle and bottom. According to ADA Standards, the slope of accessible parking spaces and access aisles should be no greater than 2% in all directions.



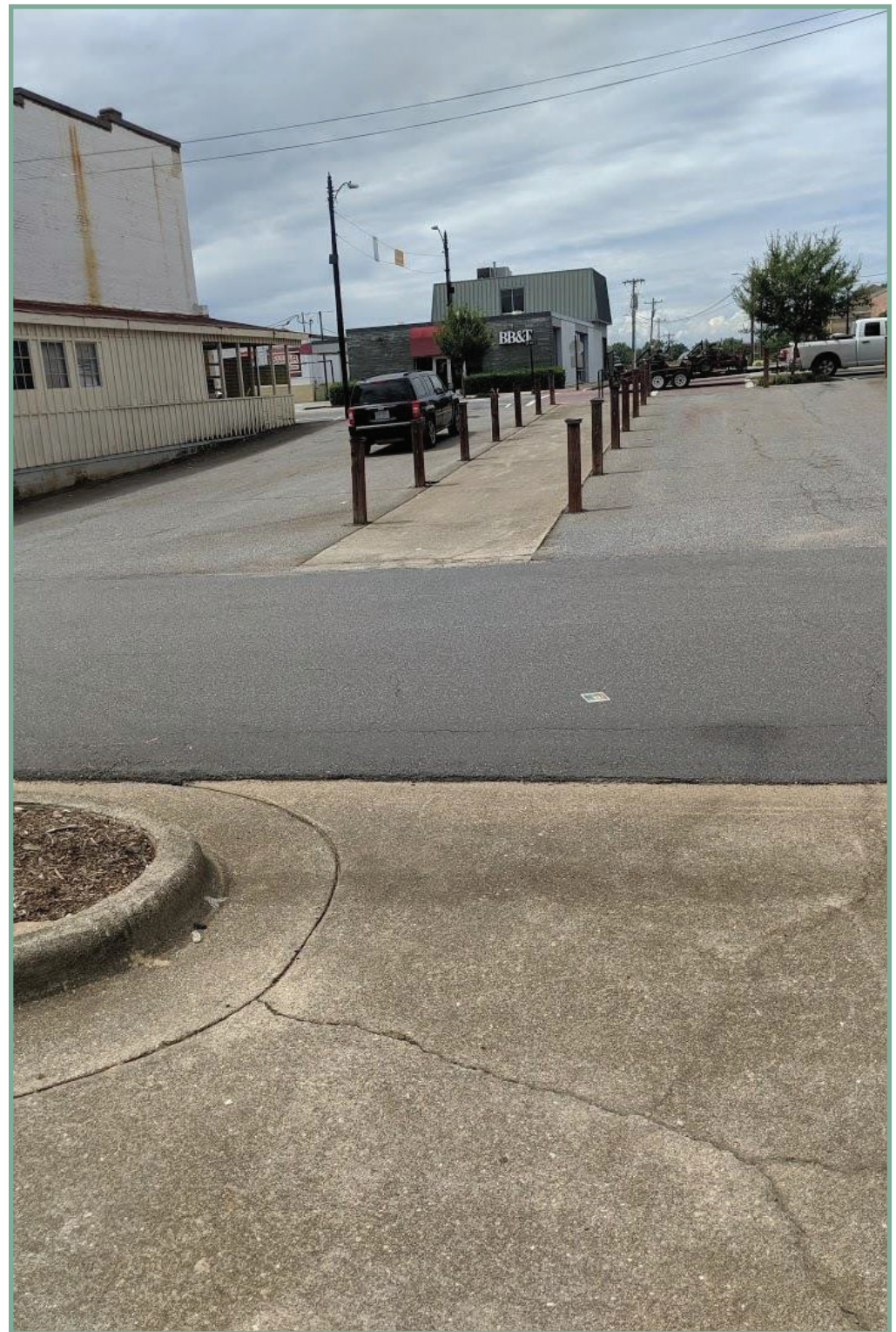
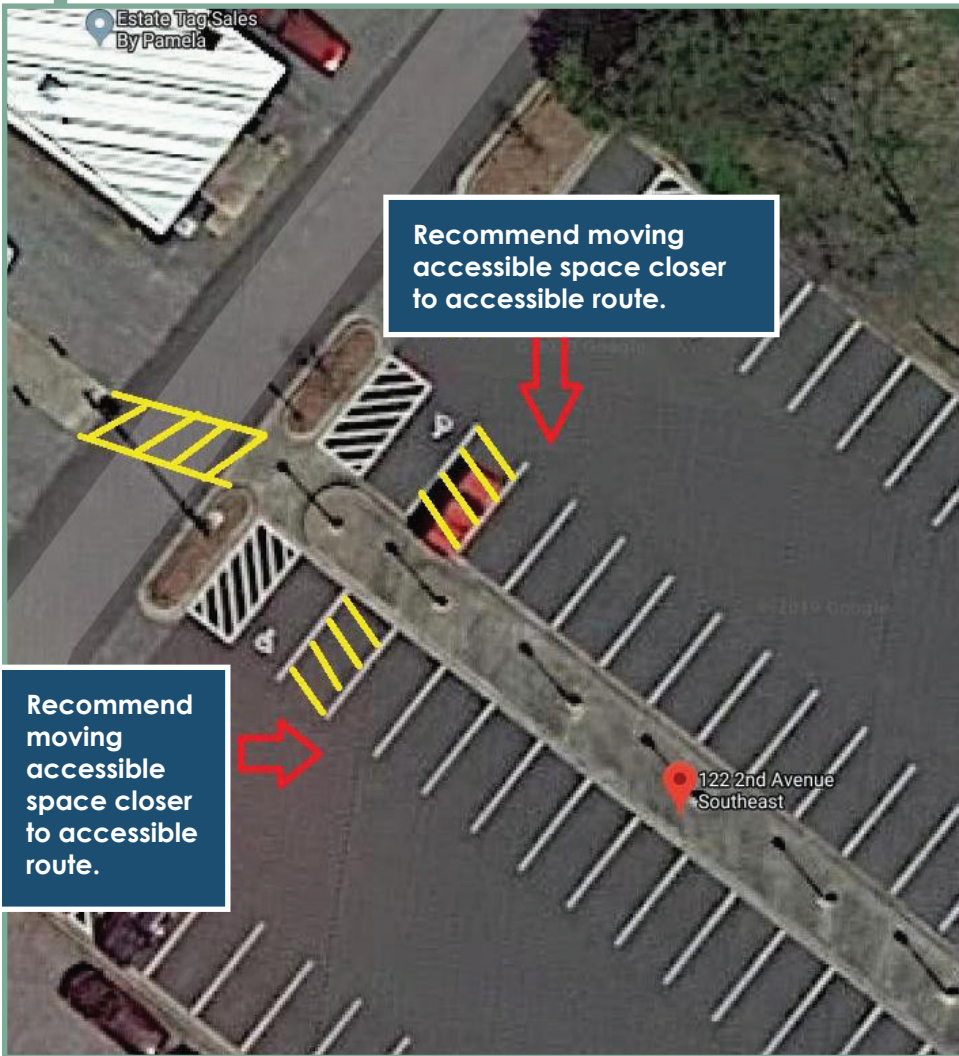
SE Alleyway Parking Lot – 122 2nd Ave SE

High Priority	Moderate Priority	Low Priority
<ul style="list-style-type: none"> » Cut vegetation for sign visibility 	<ul style="list-style-type: none"> » Adjoin access aisle (striped area next to accessible space) to a striped accessible route or follow high recommendation below: 	<ul style="list-style-type: none"> » Fill any gaps that exceed .5" – most cracks did not exceed .5" » The running slope of the accessible space closest to Wright and Associates is currently 5% when measured near the top of the space. The running slope of the accessible aisle next to the space is 4.1% when measured near the top of the aisle. All other measurements were correct. This does not pose and immediate safety hazard. » The running slope is currently 4.6% in the accessible van space closest to Pamela's Resale Shop and 3.6% in the accessible aisle. These were the only measurements that exceeded ADA standards. The middle and bottom of the space and aisle were correct.

High Recommendations	Moderate Recommendations	No Low Recommendations
<ul style="list-style-type: none"> » Recommend moving spaces closer to the accessible route. This would involve curb cuts at the access aisles. Space should be moved to connect to cemented area in center of parking lot. The space should have a curb ramp at the access aisle connecting to the sidewalk. This is only possible if there are 36" around the light poles. If moving spaces is not feasible, then ADA requires a striped aisle connecting to the accessible route. 	<ul style="list-style-type: none"> » Add pedestrian crossing and signage at road crossing adjoining to sidewalk. This is not a busy road, but this recommendation helps to identify the accessible route. 	

Note: **The running slope and cross slope of each accessible space and accessible aisle is measured at the top (area closest to the concrete parking block), middle and bottom. According to ADA Standards, the slope of accessible parking spaces and access aisles should be no greater than 2% in all directions.





Sherrod Parking Lot

No High Priority	No Moderate Priority	Low Priority
		<ul style="list-style-type: none"> » Regular Accessible Space: Middle of the space running slope: 2.7% Bottom of access aisle running slope: 3.2% » Van Accessible Space: Bottom of access aisle running slope: 3.2% (shared access aisle)

Note: **The running slope and cross slope of each accessible space and accessible aisle is measured at the top (area closest to the concrete parking block), middle and bottom. According to ADA Standards, the slope of accessible parking spaces and access aisles should be no greater than 2% in all directions.

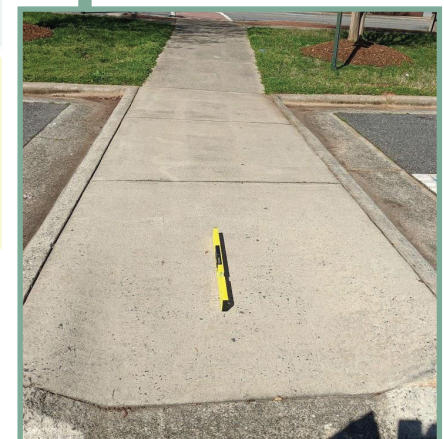
There are no high, moderate, or low recommendations.



Post Office Parking Lot

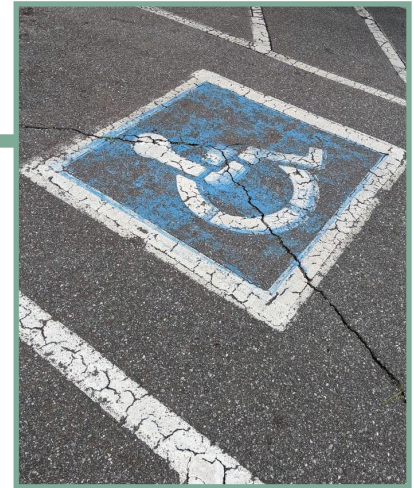
High Priority	No Moderate Priority	Low Priority	Low Recommendation
<ul style="list-style-type: none"> » The running slope of the walkway leading out of the parking lot and to the cross walk measures 10.6%. Sidewalks not running parallel to a roadway cannot exceed a running slope of 5%. 		<ul style="list-style-type: none"> » The accessible pathway leading down the middle of the parking lot: The curb ramp (leading into the parking lot) closest to City Hall has a running slope of 9.4%. Curb ramps cannot exceed a running slope of 8.33%. 	<ul style="list-style-type: none"> » Recommend smoother transitions of curb ramps along the accessible pathway throughout the parking lot.

Note: **The running slope and cross slope of each accessible space and accessible aisle is measured at the top (area closest to the concrete parking block), middle and bottom. According to ADA Standards, the slope of accessible parking spaces and access aisles should be no greater than 2% in all directions. There should be 1 accessible space for every 25 spaces. Every 6th accessible space must be van accessible. If there are less than 6 accessible spaces, one still must be van accessible. If there are 120 spaces in this lot, there should be one additional accessible space. There are no high or moderate recommendations.

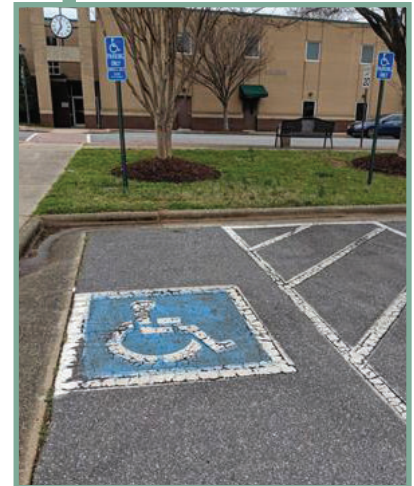


PO Parking Lot - Accessible Space 1 (Closest to Post Office)

No High Priority	Moderate Priority	Low Priority
	» Access aisle does not connect to an accessible pathway.	<ul style="list-style-type: none"> » Middle of Space: 3.6% running slope; Middle of Access Aisle: 3.2% running slope » Bottom of Space: 2.6% running slope; Bottom of Access Aisle: 4.2% running slope » Fix cracks within space and aisle.

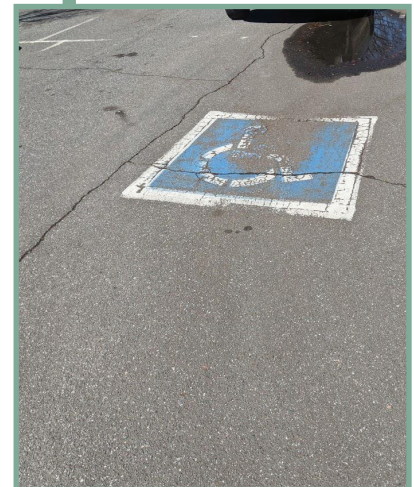


Note: **The running slope and cross slope of each accessible space and accessible aisle is measured at the top (area closest to the concrete parking block), middle and bottom. According to ADA Standards, the slope of accessible parking spaces and access aisles should be no greater than 2% in all directions. **There are no high or moderate recommendations.**



PO Parking Lot - Accessible Space 2

No High Priority	Moderate Priority	Low Priority
	» Access aisle does not connect to an accessible pathway.	<ul style="list-style-type: none"> » Top of Space: 2.9% running slope » Middle of Space: 3.5% running slope; Middle of Access Aisle: 3.1% running slope" » Bottom of Access Aisle: 2.6% running slope



Note: **The running slope and cross slope of each accessible space and accessible aisle is measured at the top (area closest to the concrete parking block), middle and bottom. According to ADA Standards, the slope of accessible parking spaces and access aisles should be no greater than 2% in all directions. **There are no high or moderate recommendations.**

PO Parking Lot - Accessible Space 3

High Priority	Moderate Priority	Low Priority
<ul style="list-style-type: none"> » Van Accessible Space: 6 feet; Aisle: 8 feet – a van accessible space must measure at least 8 feet wide. (see Priority 1 – Approach and Entrance) 	<ul style="list-style-type: none"> » Access aisle does not connect to an accessible pathway. 	<ul style="list-style-type: none"> » Top of Access Aisle: 2.8% running slope » Middle of Access Aisle: 3% running slope » Bottom of Space: 3.3% cross slope; » Bottom of Access Aisle: 2.5% running slope

Note: There are no high, moderate or low recommendations.

PO Parking Lot - Accessible Space 4 (Closest to Dentist Office)

High Priority	Moderate Priority	Low Priority
<ul style="list-style-type: none"> » Accessible signage is 43" high – must be at least 60" high to the bottom of the sign. » Lines are fading and need to be repainted. 	<ul style="list-style-type: none"> » Access aisle does not connect to an accessible pathway. 	<ul style="list-style-type: none"> » Noticeable drainage issues within space could present a safety hazard - drainage issues are not in the access aisle where unloading occurs. » Repair cracks within space and access aisle.

High Recommendations

» Recommend signing space as a van accessible space. The dimensions meet the requirements and the space is far from all other accessible spaces. Someone in an accessible van could not park closely to the dental office.

No Moderate Recommendations

No Low Recommendations



Parks

The ADA National Network guidelines for play areas can be found in Appendix C. This checklist was used by the project team while inventorying play areas. While a checklist is provided to ensure compliance, items are not prioritized in the same manner as the previous facilities. Priorities and scoring systems are not provided by the standards found in Appendix C. In discussions with ADA Specialists, items within parks and play areas should be addressed with the following points as guidance:

- Safety and accessibility are the most important items to consider in play areas.
- Focus less on the ratio of elevated components to ground components and focus more on accessible yet safe surface material and accessible pathways to play components.
- Some materials, though accessible, can be unsafe and can cause liability concerns (for example, concrete surfaces at elevated play components could be a safety hazard). This is known as “Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment”.
- Accessibility is just as important for a disabled parent/grandparent/caregiver of a child visiting the playground as it is for a child with a disability. Therefore, accessible pathways are very important to play areas regardless of the type of play element.
- Making play areas compliant can be very expensive. ADA Specialists recommend prioritizing one entire playground at a time as opposed to making small improvements to several playgrounds.
- Sources to approved accessible sources can be found in Appendix D.

Items to note within the play area checklist:

- An elevated play component is defined as a component approached above or below grade that is part of a structure of two or more play components providing more than one play activity. Play components that are attached to a composite play structure and that can be approached from a platform or deck area are considered elevated play components.
- Ground level play components are components that can be approached and exited at ground level. For example, a child approaches a spring rider at ground level via the accessible route. The child may ride then exit directly back onto the accessible route. The activity is considered ground level because the child approaches and exits it from the ground-level route.

- Play components can be stand alone or part of a composite play structure. Different types of play components are based on the general experience provided by the play component. Different types include, but are not limited to, experiences such as rocking, swinging, climbing, spinning, and sliding. The number of steps/ladders does not come into play when inventorying the number of play elements. What is looked at is the number of different types of play experiences on the composite play structure.
- It is best practice to have at least one of each ground level play component on an accessible route.
- An accessible route is at least 36" wide and is stable, firm, and slip-resistant. The compliant surface must extend to the play element for safe access for all users.

If there are elevated play components:

- To make things equal for persons unable to access elevated play components, ADA Standards use the following chart to determine the number of additional ground play components required to be on an accessible route. The chart uses a ratio of elevated play components to ground components. If more than one ground play element is deemed necessary by the chart, the ground play elements must offer different play experiences and must be dispersed throughout the play area on an accessible route.
- To simplify, there are two requirements addressing how many ground-level play components must be on an accessible route. One of each type of ground level play components must be accessible and the ground-level requirements based on the number of elevated play components according to the chart. For example, if a play area has swings and rockers ground level and one elevated play component, there must be one rocker and one swing on an accessible route as they offer different play experiences. The chart will then determine if any additional ground play components must be accessible.

Number of Elevated Play Components Provided	Minimum Number of Ground Level Play Components Required to be on an Accessible Route	Minimum Number of Different Types of Ground Level Play Components Required to be on an Accessible Route
1	n/a	n/a
2 to 4	1	1
5 to 7	2	2
8 to 10	3	3
11 to 13	4	3
14 to 16	5	3
17 to 19	6	3
20 to 22	7	4
23 to 25	8	4
26 and over	8, plus 1 for each additional 3, or fraction thereof, over 25	5

⚠ Park items are not prioritized in the same manner as the previous facilities. Prioritize one entire play area at a time as opposed to making small improvements to several play areas.

Downtown Park (Behind the Post Office)

Non-compliant Issues

- » There is an accessible route to the entrance of the main play area. There is no accessible route to the ADA (Jennswing) swingset or to items within the play area. The current surface of both play areas around ground level play elements are not ADA approved. The surface does not have to be concrete, however, it does have to be firm and stable around ground level play elements.
- » There should be handrails on both sides of both ramps at the center shelter. If the rise exceeds 6", ADA requires handrails on both sides as well as a barrier 4" from the ramp surface.
- » Considering the number of elevated play elements present in the composite play structure, 1 ground element is required to be located on an accessible route. It is best practice to also provide an accessible route to the ground elements already connected to the composite structure. The Jennswing counts as the one required ground element, however, must be linked by an accessible route.

High Recommendations

- » Striped tape and wheel chair stops are recommended safety features for the terraced areas.

No Moderate
Recommendations

No Low
Recommendations

Note: **Location specific areas pertaining to the sidewalk within the park will be included on the sidewalk and right-of-way inventory application.



± Park items are not prioritized in the same manner as the previous facilities. Prioritize one entire play area at a time as opposed to making small improvements to several play areas.

Hines Park

Non-compliant Issues

- » Install a shaded area comparable to the gazebo that is wheelchair accessible or a ramp into the gazebo. Please follow ramp standards in Priority 1 – Approach and Entrance. This is impassable to wheelchair users and a safety hazard.
- » Vegetation needs to be cut out of the path of travel (the tree poses a safety hazard). Trees must be trimmed as high as 7’.
- » Move the trash receptacle to an area that is wheelchair accessible.
- » The wooden swing needs to be located on an accessible pathway with 60” by 60” of clear accessible space next to the swing. Recommend a paved and level area (<2% slope in all directions)
- » Install a paved and level (<2% slope in all directions) resting area next to the bench (along the walkway) large enough for a wheelchair (2.5’x4’). This is not a busy park and persons in wheelchairs could rest on the path if necessary. This relates more to equal access to an accessory.

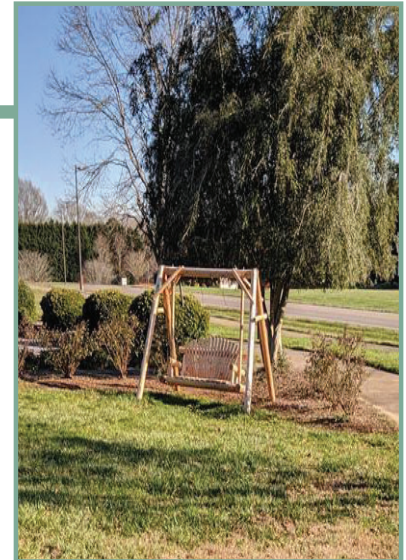
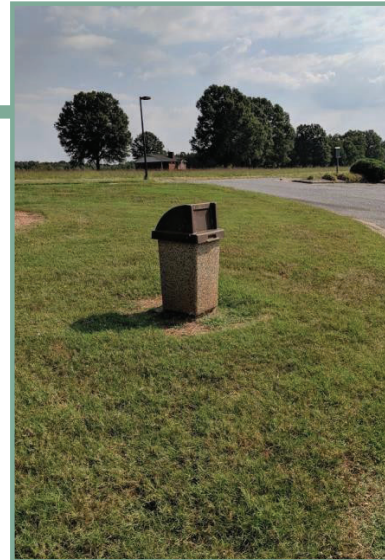
High Recommendations

- » Add visually contrasting reflective tape on the step up into the gazebo. This tape will also be recommended on any installed ramp.

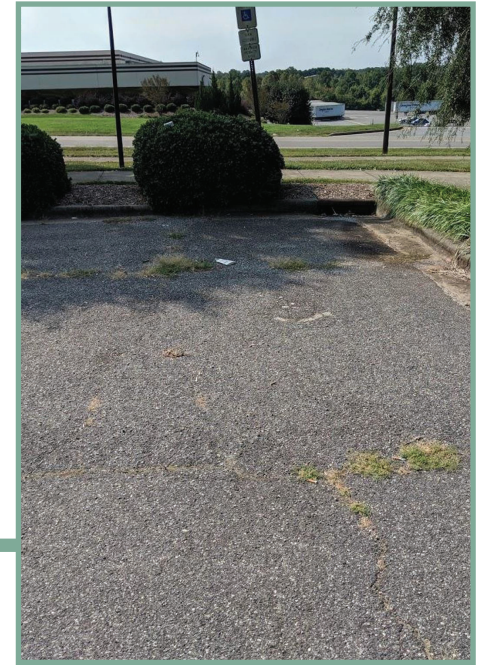
No Moderate
Recommendations

No Low
Recommendations

Note: **Location specific areas pertaining to the sidewalk within the park will be included on the pedestrian right-of-way application.



‡ Park items are not prioritized in the same manner as the previous facilities. Prioritize one entire play area at a time as opposed to making small improvements to several play areas.



Hines Park - Parking Lot

Non-compliant Issues

- » The lot needs to be resurfaced. The accessible spaces are uneven and present mobility hazards.
- » The lot needs to be restriped. There are no visible lines/access aisle for an accessible space. The accessible space should have the dimensions and signage for a van accessible space. Please follow the standards in Priority 1 – Approach and Entrance in Appendix B.
- » Middle of accessible space running slope: 3.1%
- » Bottom of accessible space running slope: 4%
- » Bottom of accessible space cross slope: 2.7%
- » Bottom of accessible aisle cross slope: 3.6%
- » Bottom of accessible aisle running slope: 3.7%

Note: **The running slope and cross slope of each accessible space and accessible aisle is measured at the top (area closest to the concrete parking block), middle and bottom. According to ADA Standards, the slope of accessible parking spaces and access aisles should be no greater than 2% in all directions. Though the spot is not striped, the slope measurements below are based on the dimensions of where an accessible spot would go.

There are no high, moderate, or low recommendations.

‡ Park items are not prioritized in the same manner as the previous facilities. Prioritize one entire play area at a time as opposed to making small improvements to several play areas.

Non-compliant Issues

- » There should be a means for someone wheelchair bound to access the play area from 1st Avenue. There are a number of surface materials that are considered accessible. The surface is currently too difficult for a person in a wheelchair to access. Since not following a roadway, accessible pathways can have a maximum running slope of 5% and a maximum cross slope of 2%. It is best practice to make pathways 5' wide. This park is currently not accessible to someone in a wheelchair.
- » Accessible pathways should connect one of each ground play element to the entrance of the park and entrance/exit of the play area. This includes the merry go round, one swing (the jennswing), the ground play elements attached to the bottom of the composite play structure, the basketball hoop, picnic table, gazebo, and motorcycle rocker. This is the only way persons in wheelchairs (guardians or children) can safely access these elements.
- » The ramps at the entrance and exit of the play area must be flush with the surface upon entering and exiting the ramp. They need to connect to an accessible route. Currently there are gaps on either side and not conducive for wheelchair use.
- » The running slope at the back of the ramp closest to the gazebo is 6.3%. This still meets the slope requirements for a ramp, however if the playground is altered and the ramp rise exceeds 6", handrails will need to be added.
- » The gazebo is not accessible – there should be either a ramp or a comparable accessible shade structure on an accessible route.
- » The top of the transfer platform at the composite play structure is not 11-18" above the ground.
- » Trash receptacles should be included on accessible routes.
- » The picnic table does not allow for knee space for wheelchair users (accessible tables have longer table tops).

High Recommendations

- » Any ground level playground components added in the future must be on an accessible route, dispersed throughout the play area, and integrated with other play components.
- » Since this is a neighborhood park with no parking for anyone, accessible parking is not required. If parking is added, accessible street spaces will need to be added.
- » With future alterations, there should always be a clear 60x60" turning space at ground level play components on an accessible route.

Moderate Recommendations

- » Due to safety concerns, signage and/or a barrier is recommended at the stream bed stating "Danger – Keep Out."

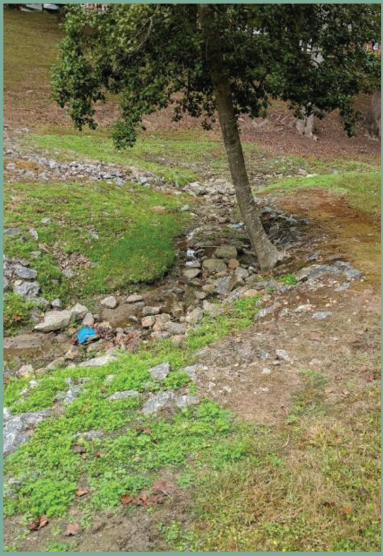
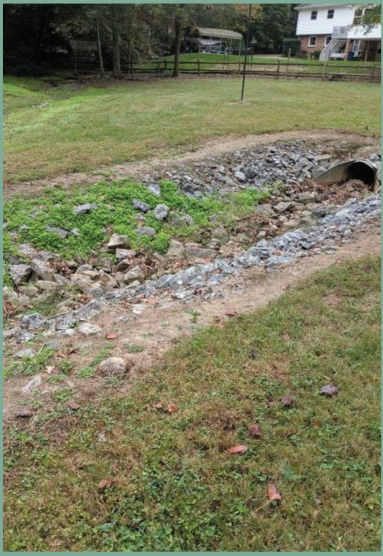
No Low Recommendations

‡ Park items are not prioritized in the same manner as the previous facilities. Prioritize one entire play area at a time as opposed to making small improvements to several play areas.

Hunsucker Park - Images



Hunsucker Park - Images Cont.



Non-compliant Issues

- » There should be a means for someone wheelchair bound to access the play area from 2nd Street. Accessible surface materials are included in Appendix C. The surface is currently too difficult for a person in a wheelchair to access. Since not following a roadway, accessible pathways can have a maximum running slope of 5% and a maximum cross slope of 2%. It is best practice to make pathways 5' wide.
- » The entrance needs to connect to the play area. The accessible path should connect to the entry ramp.
- » Accessible pathways should connect one of each ground play element or park accessory to the entrance of the park and entrance/exit of the play area. This includes one swing (the jennswing), the composite play structure (at the transfer platform and wider steps), one bench, grill, and shelter.
- » There are ground elements along the bottom of the composite play structure. The pathway should also access one (or more) if possible.
- » The ramps at the entrance and exit of the play area must be flush with the surface upon entering and exiting the ramp. Currently there are gaps on either side and not conducive for wheelchair use. They should connect to an accessible route.
- » The entry ramp closest to the swings has a running slope of 13% and a cross slope of 3.7%. Running slopes on ramps cannot exceed 8.33% and cross slopes should not exceed 2%. “
- » The ramps should have handrails since the rise exceeds 6”.
- » There is an 8' wide gravel path around the perimeter of the park. This is not a compliant surface material. Crushed cinder or other surfaces listed in Appendix C are potential alternatives. The cross slope is compliant on the walking path, however, the running slope is steep and exceeds 5% in places.
- » There are deep ruts in the pathway that exceed .5” vertical discontinuity.
- » There are no accessible parking spaces or compliant surface materials. Considering the parking lot size, there must be one space and access aisle that meet the dimension requirements of a van accessible space.
- » There is no signage for accessible parking or marked spaces/access aisles.
- » The current pathway at the shelter is not accessible and does not connect to any accessible route. This is not safe and should be removed.
- » Cracks in pavement and/or pathways cannot exceed 1/2”.
- » The picnic tables do not allow for knee space for wheelchair users (accessible tables have longer table tops).

High Recommendations

- » Recommend moving the parking area entrance to the side of the parking area where the ground is more level and closer to the play area.
- » Recommend placing accessible parking spots at the bottom of the lot where the parking area is more level. An accessible pathway must connect to the accessible space access aisle.
- » Signage stating “Danger – No Public Access” and/or a barrier should be placed at the outfall next to the play area.

No Moderate
Recommendations

No Low
Recommendations

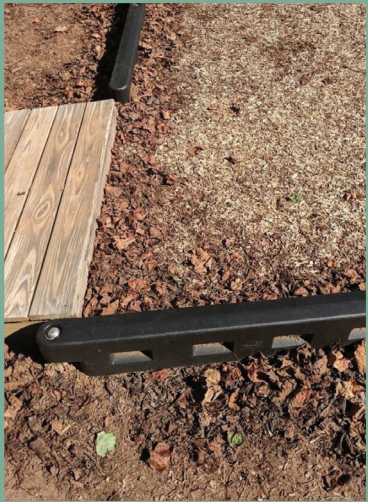
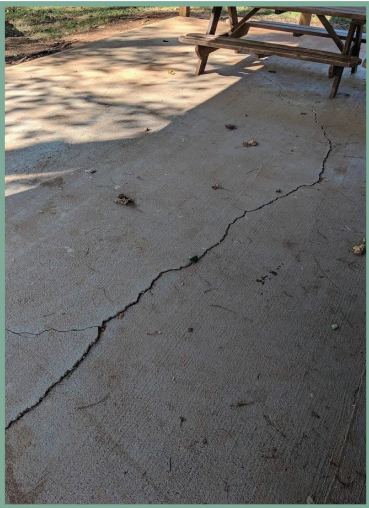
‡ Park items are not prioritized in the same manner as the previous facilities. Prioritize one entire play area at a time as opposed to making small improvements to several play areas.

Majestic Park - Cont.

Technically Infeasible or Not Applicable
(Due to changing standards or measurements within tolerance range)

Future concerns: Any ground level playground components added in the future must be on an accessible route, dispersed throughout the play area, and integrated with other play components.

± Park items are not prioritized in the same manner as the previous facilities. Prioritize one entire play area at a time as opposed to making small improvements to several play areas.





Non-compliant Issues

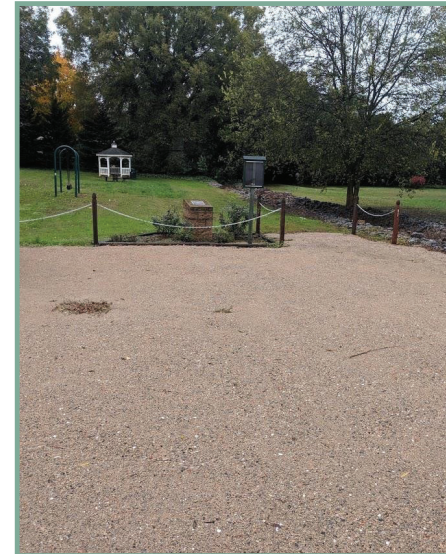
- » The surface is currently too difficult for a person in a wheelchair to access and requires an accessible path. Since not following a roadway, accessible pathways can have a maximum running slope of 5% and a maximum cross slope of 2%. It is best practice to make pathways 5' wide.
- » An accessible pathway should connect one of each park item to the entrance of the parking area. This includes the gazebo, picnic table, trash can, and swingset.
- » There is currently no accessible parking. The surface of the existing parking area is too difficult for a person in a wheelchair to access. There should be one accessible space that also meet the proper dimensions for an accessible van space. The left of the parking area is more level and appropriate for accessible parking. The running slope is 2-3% and the cross slope is <2%. Please follow Priority 1 – Approach and Entrance Parking of the ADA Checklist. The accessible path through the park should connect to the access aisle of the accessible space.
- » The gazebo is not accessible – there needs to be either a ramp or a comparable accessible shelter on an accessible route. All ramps need to follow the guidelines in Priority 1 – Approach and Entrance.

High Recommendations

- » Recommend placing signage at the culvert stating “Danger – No Public Access” or a gate better separating the culvert from the play area.
 - » Currently there are no accessible play components on an accessible route. Since there is a swingset, there should be one accessible swing or comparable accessible play element.
 - » The seat should be 11-24” above the clear ground space. There should be an open circle 60” in diameter or a T-shaped space within a 60” square immediately adjacent to the accessible swing.
- ‡ Park items are not prioritized in the same manner as the previous facilities. Prioritize one entire play area at a time as opposed to making small improvements to several play areas.

No Moderate
Recommendations

No Low
Recommendations



Rowe Park Cont.



Travis Park

Non-compliant Issues

- » There is no accessible route connecting the parking area to one of each ground level play element. The terrain is very steep and would exceed a 5% running slope. The current stairs are very unsafe and not accessible. If possible, recommend moving the parking area to the lower area next to the creek and connecting the lot to the road where it dead ends. There are no elements in this park accessible from the current parking area. There is no safe way for anyone to access the play components, especially those who are visually impaired or in wheelchairs.
- » The route should connect from the accessible parking space to at least one picnic table (needs to have adequate knee space for wheelchair use), one bench (with a paved area next to the bench), trash receptacle, rocker, playtube, and swingset.
- » If the parking area cannot be moved to the lower level, the bottom portion of the play area should be closed. Play items and picnic areas should be located on level areas accessible to all users.
- » Water is currently not draining properly at the bottom section of the park with all of the play elements. This creates a hazardous surface for all users, but is impassable for individuals with disabilities.
- » The entry point or seat to all play elements must be 11-24" from the clear ground space. The rockers do not comply in their current condition.

High Recommendations

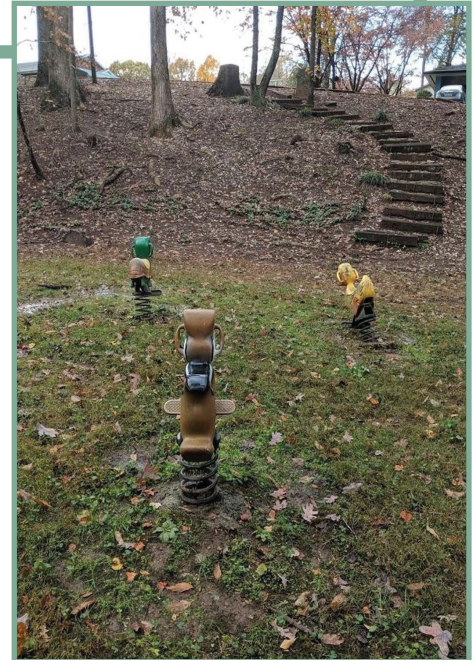
- » The slope of the stairway is very steep. The steps should be replaced. The new stairway could be improved with handrails, steps with a better gripping surface, and tape at the edge of each step for individuals with visual impairments. This would still not improve access for persons in wheelchairs. An accessible pathway is necessary per ADA Standards.
- » The play elements are very dated and could be hazardous. Recommend replacing play elements that could present a safety threat.
- » Recommend a sign next to the streambed stating "Danger - No Public Access" and/or a barrier.

No Moderate
Recommendations

No Low
Recommendations

‡ Park items are not prioritized in the same manner as the previous facilities. Prioritize one entire play area at a time as opposed to making small improvements to several play areas.

Travis Park - Cont.





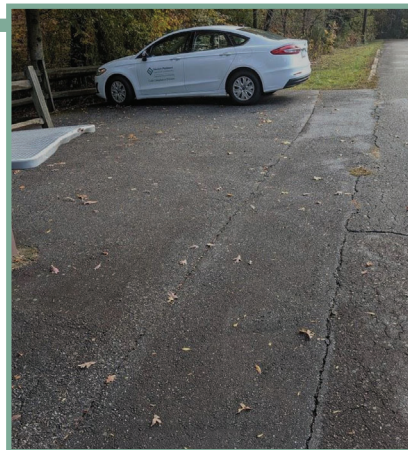
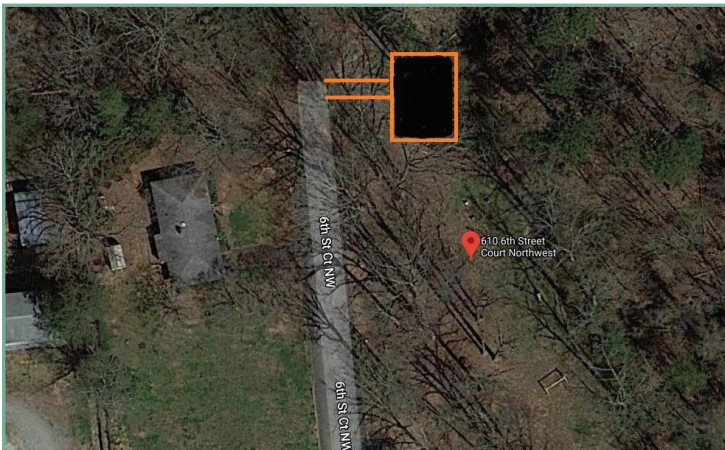
Travis Park Parking Area

‡ Park items are not prioritized in the same manner as the previous facilities. Prioritize one entire play area at a time as opposed to making small improvements to several play areas.

Non-compliant Issues

- » There are currently no accessible spaces or access aisles. A van accessible space must be at least 11 feet wide with an access aisle at least 5 feet wide OR at least 8 feet wide with an access aisle at least 8 feet wide. There must be at least one accessible van space (can be the same space as the regular accessible space). Van sign mounted 60" above the ground is required. According to ADA Standards, the slope of accessible parking spaces and access aisles should be no greater than 2% in all directions.
- » ADA Standards require a vertical clearance of 98" at accessible parking spots. At the time of inventory, there was approximately 75" to the tree limbs.
- » Space to the left (when looking at the park):
 - Top of space: 2.5% cross slope, 4.5% running slope
 - Middle of space: 5.8% cross slope, 2.4% running slope
 - Bottom of space: 4.5% cross slope
- » Space to the right (when looking at the park):
 - Top of space: 6% running slope
 - Middle of space: 3.5% cross slope, 4.7% running slope
 - Bottom of space: 4.5% cross slope
- » As mentioned previously, the parking area should be moved to an area that is easily accessed by all users from the play area. An accessible pathway should connect the accessible van space to the play area.

Note: There are no high, moderate or low recommendations.



Non-compliant Issues

- » There is no designated accessible space at the bottom access to the park (next to the City Park sign)
- » The space to the left of the sign meets the proper size dimensions and slope requirements of a van or standard accessible space – signage should be added
- » The ramp leading into the playground for smaller children does not meet ADA Standards. The transition from the ramp to the mulched area exceeds the 1/2" vertical discontinuity limit. Please refer to Priority 2 – Access to Goods and Services for ADA Standards regarding ramps.
- » The ramp leading into the lower adolescent playground does not meet ADA Standards. The transition from the ramp to the mulched area exceeds the 1/2" vertical discontinuity limit. Please refer to Priority 2 – Access to Goods and Services for ADA Standards regarding ramps.
- » No accessible route within 2 of the 3 play areas
- » Mulched surface is too difficult for mobility. Mulch should be replaced with an accessible surface along accessible pathways and next to accessible play elements. Please note that while surfaces such as cement are accessible, they can also pose as a safety hazard in play areas if located too close to elevated and some ground level components.
- » The playground for small children has accessible play elements but no accessible routes to them. The accessible route must connect the play element to the entrance of the play area. The route cannot exceed 2% cross slope and 5% running slope.
 - (Per ADA Standards, one of the ground level play components is required to be on an accessible route within this play area.)
- » The lower adolescent playground has several elevated play components provided. Per ADA Standards, there should be 2 ground level play items on an accessible route throughout this play area. The 2 play items must offer 2 different play experiences (for example, swinging, rocking, digging, etc.) The accessible route must connect the play element to the entrance of the play area. The route cannot exceed 2% cross slope and 5% running slope.
- » The upper play area at the cemented adult area has several elevated play components provided. Since the adult area is age restricted (ages 14+), the items in that area cannot be included as accessible play elements for the area meant for smaller children. Per ADA Standards, there should be 2 ground level play items on an accessible route throughout this play area. One play element is already covered by the accessible swingset. The second play item must offer a different play experience (for example, rocking, digging, etc.) An accessible route can connect to any of the existing ground elements already within the play area. The accessible route must connect the play element to the entrance of the play area. The route cannot exceed 2% cross slope and 5% running slope.
- » The accessible swingset in the picture below does not function properly. This cannot count as an accessible play element until fixed.
- » There should be a level cement pad next to at least one of the benches in the park. The cement pad should have a connecting accessible route. The pad should be large enough to serve as a resting space for someone in a wheelchair. To allow for maneuvering, it is best practice to plan for a 60"x60" space. If this is not possible, a standard 33"wide by 48" deep space can be used as long as it can be easily entered from the front or back of the space.
- » There should be a better transition from the asphalt path to the bridge. There is more than a 1/2" vertical discontinuity creating a mobility hazard.

Note: There are no high, moderate or low recommendations.

‡ Park items are not prioritized in the same manner as the previous facilities. Prioritize one entire play area at a time as opposed to making small improvements to several play areas.



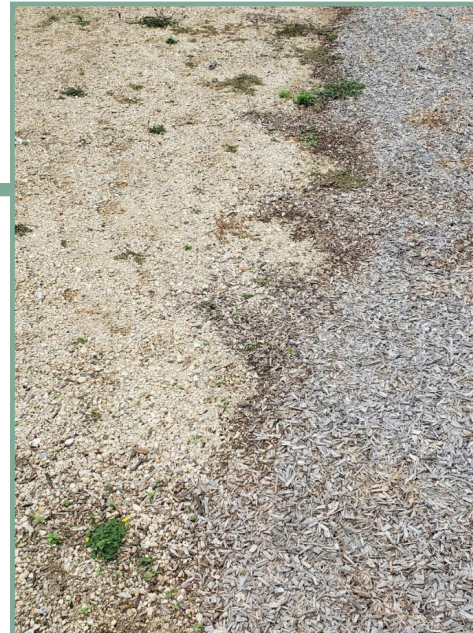


Non-compliant Issues

- » Access to one entrance of the park is obstructed due to non-compliant surface blocking the gate.
- » There is no accessible route connecting accessible play elements to the entrance of the park.
- » Mulched and gravel surface is too difficult for mobility. Mulch should be replaced with an accessible surface along accessible pathways and next to accessible play elements. Please note that while surfaces such as cement are accessible, they can also pose as a safety hazard in play areas if located too close to elevated and some ground components.
- » Because of the number of elevated play components, there should be 1 accessible (ADA approved) ground element in addition to the basketball court and ball field.
- » Recommend installing an ADA accessible swing as the accessible ground play element.
- » Accessible path should extend to benches overlooking the play area. There is a paved existing resting area between the benches where the accessible path could connect.
- » Recommend replacing some of the more dated play elements.
- » The basketball court is currently not accessible to all users due to the surface between the park gate and the court. This could easily be linked to the entrance of the park.
- » The ball field should be accessible for games. An accessible route should connect the field to the park entrance, with a resting area for wheelchairs next to the bleachers. There should be one wheelchair space per 25 bleacher spaces.

Note: There are no high, moderate or low recommendations.

‡ Park items are not prioritized in the same manner as the previous facilities. Prioritize one entire play area at a time as opposed to making small improvements to several play areas.





Pedestrian Right of Way Collector Application

To document mobility hazards within City of Conover's pedestrian right of way, the study team published a pedestrian right-of-way collector application for documenting mobility hazards within municipalities. Because ADA covers a broad range of criteria, the application covers criteria for sidewalks, curb ramps, driveway cuts, intersections, railroad crossings, bus stops, crosswalks, and pedestrian islands.

This application uses the most updated set of proposed PROWAG technical ADA standards from the US Access Board and is meant to serve as an overall inventory for City of Conover Public Works Department. Using GPS and GIS software, the application is a living document that provides locations and descriptions of mobility hazards or items not complying with standards. All items that are corrected or infeasible can be documented in the application. Items from the application are used in this report.

Note: Age of streets and sidewalks were not noted in the pedestrian application. As this application is utilized, it is important to note the following:

Requirements vary depending on the age of a highway, road, street, or sidewalk and whether it was paved, repaved, resurfaced beyond maintenance, or otherwise altered.

Street, sidewalks, roads, and highways that were built before January 26, 1992, and have not since been altered are considered "pre-ADA". There were no standards in place when these were built and do not have to become compliant unless altered.

"Alterations" to roadways and new construction must comply with current ADA Standards. A street or sidewalk is included in this category if it was constructed prior to January 26, 1992 and has since been altered. Alterations made after January 26, 1992 must also comply with the latest ADA Standards. An alteration is a change that affects usability. Resurfacing a roadway beyond general maintenance is an alteration, however, filling potholes would not be considered an alteration since it does not affect usability.

Pedestrian Right of Way Methodology

Since the application is for Department of Public Works use, the following explains the methodology and ranking system used within the application. Most pedestrian infrastructure images used in this document are considered Priority 1 issues.

Priority 1 (Red) High: This category includes anything considered an immediate safety hazard according to standards. Many high priority items in the application can be corrected or improved by adding detectable warnings. Curb ramps or crosswalks leading pedestrians into roadways without detectable warnings (or truncated dome mats) automatically rank high priority. Detectable warnings are visually contrasting, colored mats with raised domes. This serves to warn pedestrians that are about to enter roadways. Detectable warnings are not necessary at driveway cuts, however, if not present at roadways and crosswalks, could present a dangerous mobility hazard for the visually impaired. Location, lighting, speed limits, and traffic

volumes are also factors in determining which items should be ranked high priority. In addition to lack of detectable warnings, dangerous mobility examples include but are not limited to impassable sections of sidewalk due to obstruction or damage, narrow driveway cuts with improper flares, inaccessible pedestrian signals, cross slopes exceeding 10%, dangerous pedestrian crossings, etc.

Priority 2 (Orange) Moderate: This category includes less severe, but still hazardous safety issues according to standards. Location, lighting, speed limits, and traffic volumes are also factors in determining moderate priority issues. Mobility hazards in this category include but are not limited to vertical discontinuities resulting in potentially dangerous transitions, smaller obstructions that do not completely block accessible paths, cross slopes ranging from 5-10%, unsafe pedestrian crossings, etc.

Priority 3 (Green) Low: This category includes non-compliant issues that do not pose an immediate safety hazard according to standards. Location, lighting, speed limits, and traffic volumes are also factors in determining low priority issues. Mobility hazards in this category include but are not limited to small vertical discontinuities exceeding .5", small cracks in sidewalks that could exceed .5" wide, most cross slopes ranging from 2-5%, etc.

Introduction to Collector Application Categories and Technical Standards

The following images represent examples from each category covered within the pedestrian right of way collector application. This does not represent all items within the application. Images in green boxes represent pedestrian elements within City of Conover that comply with ADA Standards. These images show how each pedestrian element should look within City of Conover. Images in red boxes represent pedestrian elements within City of Conover that do not comply with ADA Standards. Technical standards from the US Access Board are listed beside pictures as guidance for how items should be built or corrected in alterations and new construction.

The pedestrian right of way collector application covers each issue not complying with standards. The entire pedestrian network is mapped and addressed in the application. City of Conover's Public Works Department has access to this application and will correct issues in accordance with safety concerns, the Capital Improvement Program (CIP), and feasibility. Any corrected issue can be easily updated within the application to track improvements or technically infeasible items.

Curb Ramps



- » No detectable warning – detectable warnings, or truncated dome mats, are what warns visually impaired individuals that they are about to enter a roadway with vehicular traffic. These mats must visually contrast with the surrounding pavement and be placed at the back of the curb, right before the gutter. There are exceptions where back of curb is not always feasible, however, detectable warnings must be present when entering roadways. Detectable warnings must cover the entire depressed segment of curb and must be 24 inches wide. There should be a smooth surface around detectable warnings so that mats are more easily noticed. Detectable warnings are not necessary at residential driveway cuts. They are recommended at busy commercial driveway cuts.
- » The depressed curb must be at least 48 inches wide to allow for wheelchair accessibility.
- » If one curb ramp serves two adjoining crosswalks at two adjoining streets, there must be a space 48 inches wide and 48 inches deep that is outside of vehicle travel lanes and within the crosswalks. This space must be as level as possible. This is known as a diagonal curb ramp. While diagonal curb ramps are allowed, they are not recommended. New construction is advised against using diagonal curb ramps.
- » The cross slope of each curb ramp is measured parallel to the back of each detectable warning. The cross slope must not exceed 2%.
- » The running slope, or running grade, is measured perpendicular to the back of the detectable warning, where the ramp slopes downward towards the gutter. The running slope of curb ramps cannot exceed 8.33%.
- » The cross slope at the gutter, or foot, of the curb ramp cannot exceed 5%. The cross slope in this location is measured parallel to the front of each detectable warning.
- » If the curb ramp has flares that encroach on the pedestrian path of travel, the slope of each flare must measure 10% or less. This is measured parallel to the curb.
- » Curb ramps must have a level turning space that is 48 inches wide and 48 inches deep. Most turning spaces are at the top of the curb ramp. Turning spaces cannot exceed a 2% slope in all directions. If the turning space is constrained, the level turning space must be 48 inches wide by 60 inches deep. Turning spaces are considered constrained if taller curbs or other items block the area needed for proper foot space while turning in a wheelchair.
- » The transition between the ramp and walkway or street must be smooth and flush with the adjacent pavement or asphalt. There cannot be abrupt level changes or obstructions.
- » Curb ramps should have proper alignment. Curb ramps should align on either side of the intersection and/or roadway and lead pedestrians in the proper direction. In some cases, due to drainage or other issues, this is not always feasible. These instances should be noted in the pedestrian right of way application.

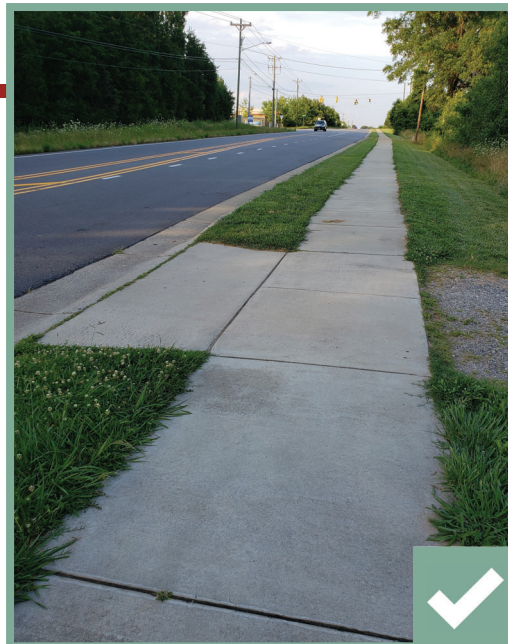
Note: There are many different types of curb ramps. Standards can differ slightly depending on curb ramp type. The following are general requirements for curb ramps using US Access Board technical standards.

Crosswalks



- » Crosswalks must be 6-10 feet wide.
- » There must be a running grade of less than 5%. This is measured perpendicular to the curb.
- » The cross slope must be less than 2% if the crosswalk requires a stop or yield. This is measured parallel to the curb.
- » The cross slope must be less than 5% if the crosswalk is signalized or uncontrolled on approach. As stated above, the cross slope of crosswalks is measured parallel to the curb.
- » Mid-block crossings require equal street grade.
- » Markings are not required, however, recommended in areas with high traffic volumes. NCDOT requests that marking be present at intersections with pedestrian signals. As stated above, markings must be 6-10 feet wide if present. Crosswalks are present at stop signs and intersections regardless of markings.
- » Textured surfaces are not recommended. Smooth surfaces such as asphalt or concrete without patterns are recommended.
- » High visibility crosswalks are recommended at midblock crosswalks. This includes proper signage, rectangular rapid flashing beacon if applicable, high visibility markings, and overhead lighting.

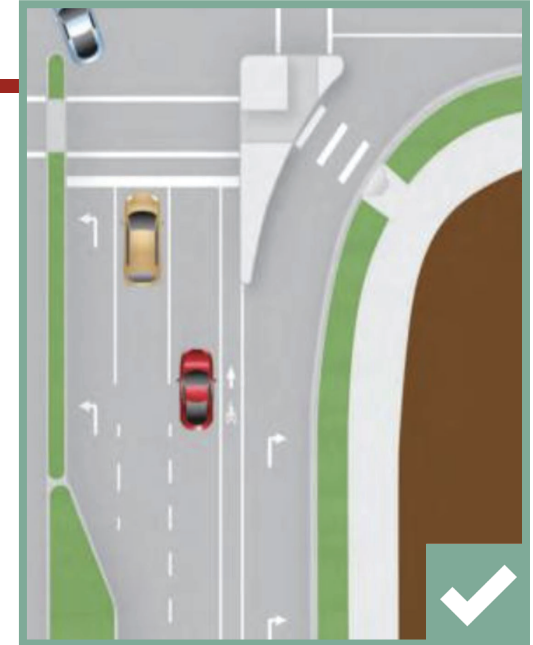
Driveway Cuts



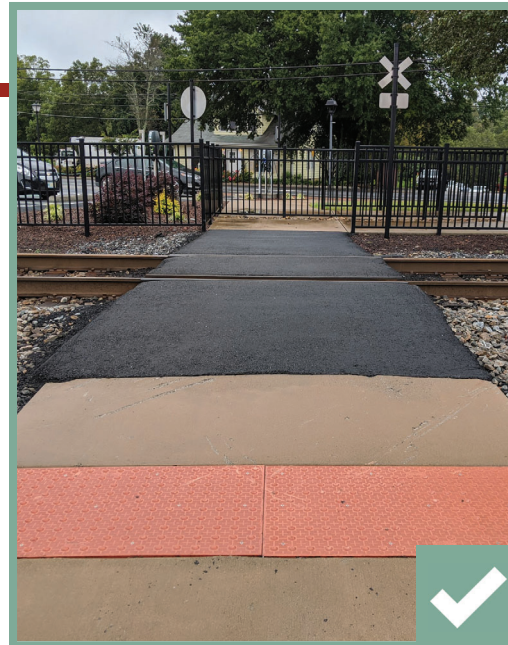
- » Driveway cuts must maintain a 4 foot wide, level pedestrian path of travel surface for the entire driveway cut.
- » Driveway cuts cannot exceed a 2% cross slope. The cross slope is measured perpendicular to the pedestrian path of travel.
- » Driveway cuts cannot have a rapid grade change at the flare. Flares at the beginning and end of each driveway cut should be out of the 4 foot wide pedestrian path of travel.

Pedestrian Islands

- » There must be at least 2 feet between detectable warnings.
- » Detectable warnings must be 24 inches in length at both openings. Detectable warnings are only required if the pedestrian island exceeds 6 feet in width.
- » The clear width of pedestrian access routes within medians and pedestrian refuge islands should be 5 foot minimum.
- » A slip lane is a traffic lane provided at an intersection to allow vehicles to turn at the intersection before merging and interfering with through traffic. The island must be raised at slip lanes except for at accessible openings.
- » Crosswalks must be one car length back at slip lanes as shown in the illustration.



Railroad Crossings



- » The pedestrian path must be at least 4 feet wide for the entire crossing. The surface between and on either side of the rails must be aligned with the top of the rails.
- » The flangeway gap can be a maximum of 2.5 inches. Flangeway gaps can be 3 inches wide on freight rail tracks.
- » A detectable warning (or truncated dome) must be located 6-15 feet from the centerline of the nearest rail. The detectable warning must extend the full width of the pedestrian crossing.

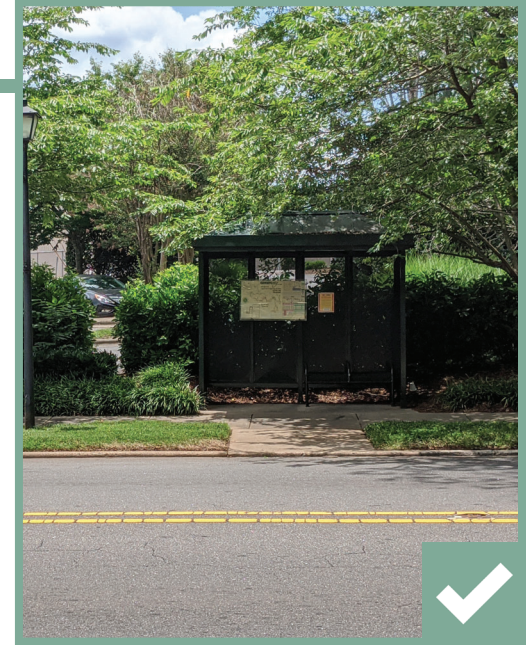
Pedestrian Signals

- » When facing the intersection, the push button for the crosswalk on your left should also be located to your left on the outside edge of the crosswalk, and the push button for the crosswalk on your right should be located to your right on the outside edge of the crosswalk. The push button face should also be aligned parallel with the direction of travel.
- » Some of the below standards only apply to new pedestrian signal installations. All signals, however, should be easily accessed by all users.
- » The push button should have a 4' X 4' landing with less than a 2% cross slope in all directions. The landing must be unobstructed and an all-weather surface. The landing can be 30" by 48" for a parallel approach.
- » The push button should be offset up to 5 feet maximum from the lateral projection of the outside edge of the cross walk.
- » The push button should be 1.5 feet to 10 feet from the back of curb. It is ideal to space it approximately 6 feet from the back of curb.
- » The push buttons should have at least 10 feet of separation between them. If located on a pork chop/island, the minimum separation between the push buttons should be at least 6 feet.
- » The face of the push button should be parallel to the crosswalk to be used.
- » The push button(s) shall be at a height of 15-48". The ideal height is 42".
- » The push button can have a 10 inch maximum horizontal reach. For example, a push button can be located up to 10" away from an accessible path/resting area.
- » There must be speakers at the pushbutton
- » There must be a tactile arrow showing pedestrians which direction the pedestrian signal serves. The MUTCD recommends that the tactile arrow vibrate.
- » A pushbutton locator tone is a repeating sound that informs approaching pedestrians that a pushbutton to actuate pedestrian timing or receive additional information exists, and that enables pedestrians with visual disabilities to locate the pushbutton. Standards indicate that alerts should be set to one tone per second.
- » The visual signal head should be mounted 7-10 feet high.



Transit Stops

- » If a shelter is present, there must be a clear space measuring 2.5 feet by 4 feet, 1.5 feet from the seats within the shelter.
- » The slope must be less than 2% perpendicular to the shelter.
- » A firm stable surface including concrete, asphalt, brick, stone, tile and wood. Loose material such as gravel or stone dust do not meet the requirements unless properly treated with binders, consolidates, compaction or grid forms. Grass is not considered a firm stable surface.
- » ADA landing pad – an area that is clear of obstructions and measures eight feet (perpendicular to the curb) by five feet (parallel to the curb). The landing pad can include part of the sidewalk. This allows for full extension of the ramp on the bus.
- » Accessible connections to a street, sidewalk, path etc.
- » Note: Design of Bus Stops recommends for rural areas that a shelter be placed in locations where there are 10 or more boardings per day. Other criteria used to evaluate the potential for a shelter include the number of routes that serve the stop, high percentage of elderly or disabled individuals in the area, proximity to major activity centers and the availability of space to install a shelter.



Sidewalks

- » Sidewalks must be at least 4 feet wide for the pedestrian path of travel. 5 feet of width is recommended.
- » There cannot be vertical discontinuities exceeding ½ inches. Vertical discontinuities include cracks, height differences in concrete slabs, etc.
- » Walkway joints, grate openings, and cracks cannot exceed ½ inches wide. If grate openings exceed ½ inches wide, they should be turned perpendicular to the pedestrian path of travel.
- » Objects measuring 2.25-6.7 feet high cannot protrude more than 4 inches into the pedestrian path of travel. Certain signage and other fixtures are marked within the collector application.
- » Guardrails or barriers must be 2.25 feet maximum above the surface.
- » The pedestrian path of travel cannot exceed a 2% cross slope. The cross slope is measured perpendicular to the pedestrian path of travel.
- » If the sidewalk is NOT following a roadway, the running slope cannot exceed 5%. The running slope is measured parallel to the pedestrian path of travel. Sidewalks following roadways can have the same running grade as the roadway.
- » There must be a smooth travel surface with solid, compliant surface material such as concrete.
- » Sidewalks cannot be buckled or cracked. As stated above, cracks that do not exceed ½ inches in width are permissible but still noted in the collector application.
- » Sidewalks should not have uneven or depressed segments. Depressed segments do not meet proper slope requirements and can cause drainage issues.
- » Sidewalks should not have overgrown vegetation. Any vegetation encroaching on the pedestrian path of travel should be removed. This includes trees or foliage protruding more than 4 inches into the pedestrian path of travel.
- » Sidewalks should not have noticeable drainage issues. Pooled water can create mobility barriers.
- » Trees incorporated into the sidewalk design should be covered by grates. As noted above, grate openings cannot exceed ½ inches in width. If wider than ½ inches, grate openings must be perpendicular to the pedestrian path of travel.
- » Sidewalks should have a designated furniture zone in areas with benches, trash bins, light poles, etc. The furniture zone should be placed on the same side of the sidewalk throughout the municipality for consistency.



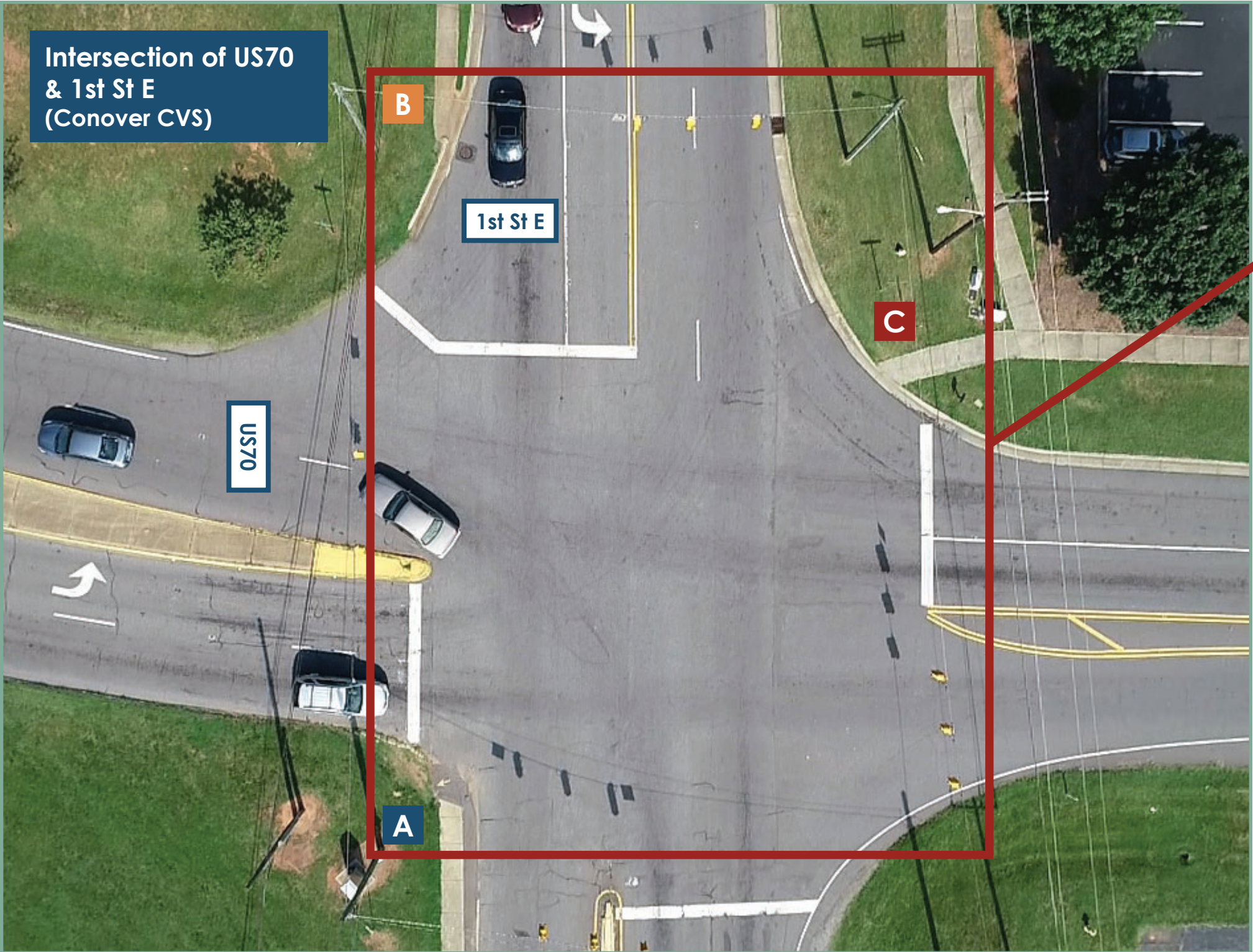
Problematic Areas within the Pedestrian Right of Way

The following images should be addressed first within the pedestrian right of way collector application. This does not represent all items within the application. These images pose the biggest safety concerns and/or liability threats to City of Conover. All image recommendations were reached in coordination with NCDOT. While the recommendations comply with the latest proposed PROWAG standards from the US Access Board, this document is meant for guidance. Engineer approval is still warranted for best safety and feasibility practices.

This page is blank to accommodate the following pages and spreads.



**Intersection of US70
& 1st St E
(Conover CVS)**



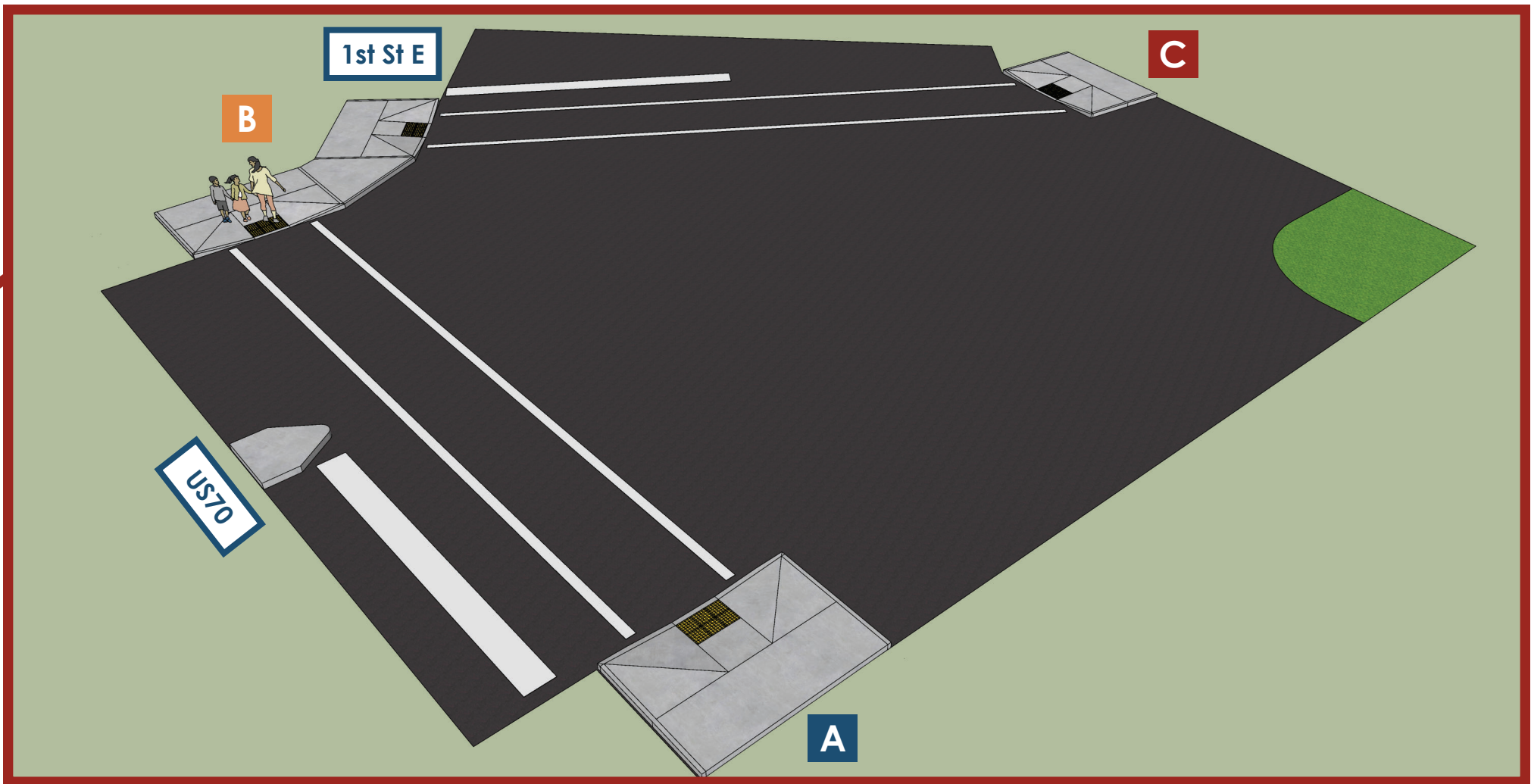
US70

1st St E

B

C

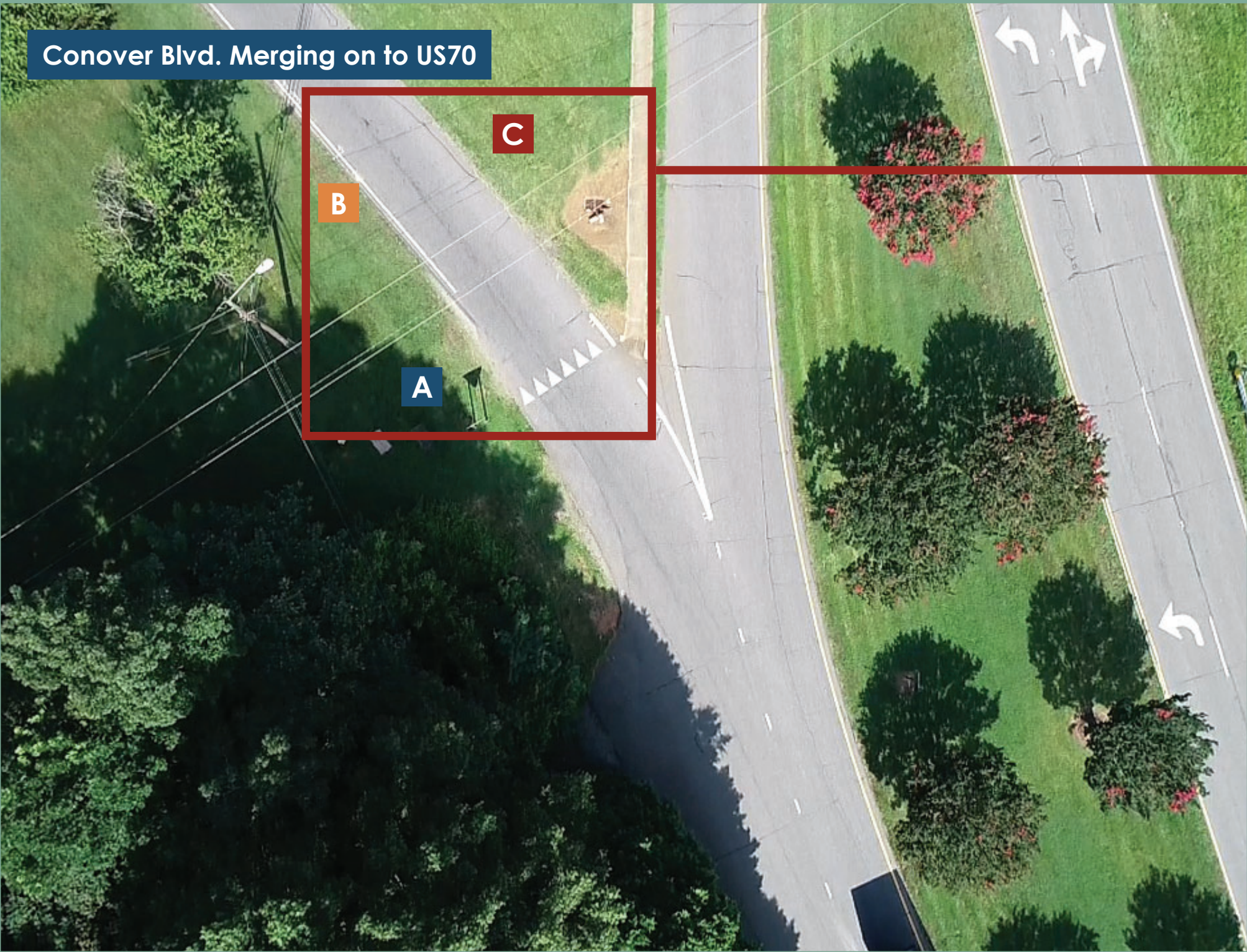
A

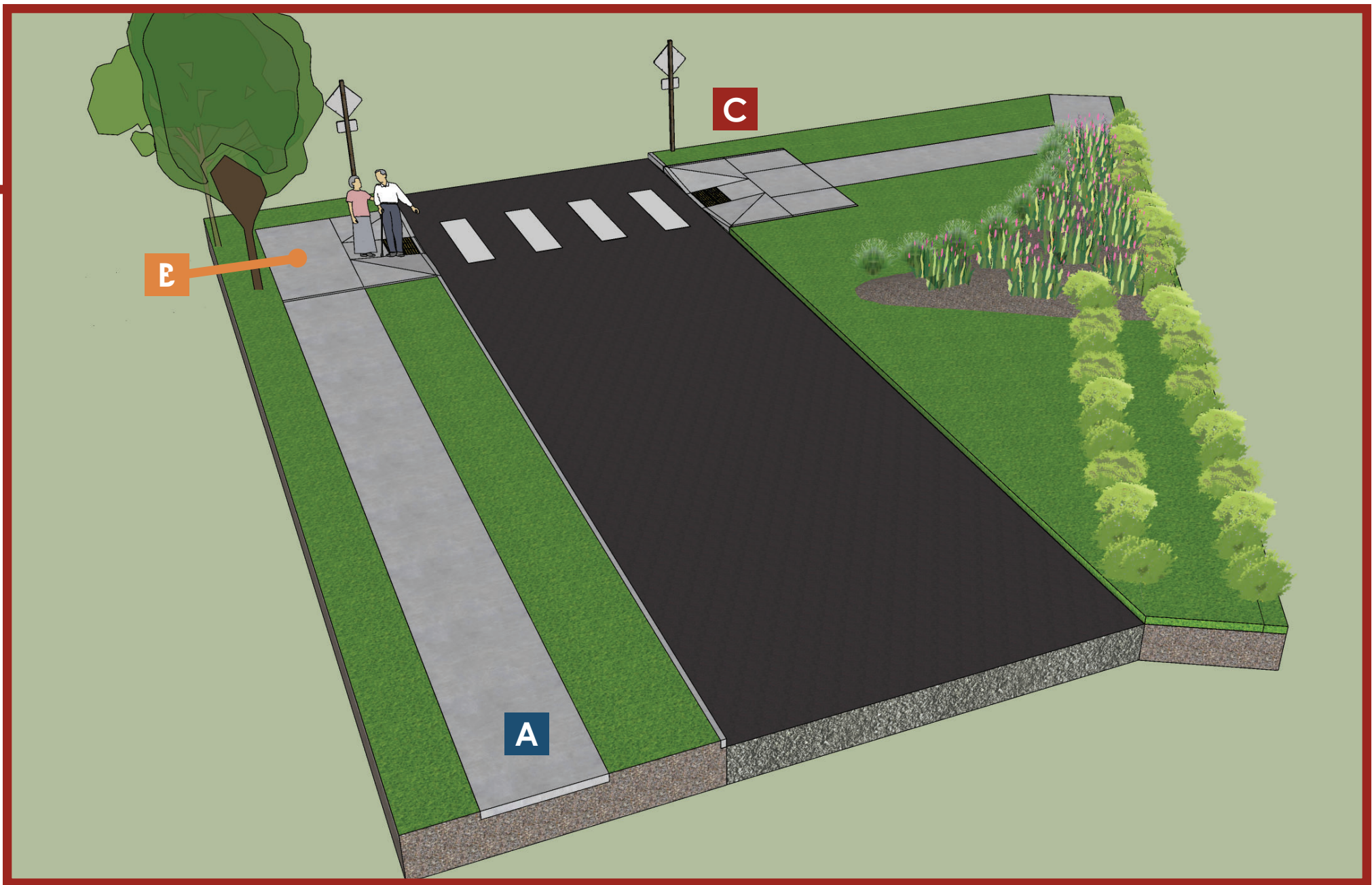


- » NW quadrant extend sidewalk up to intersection
- » Stop bar moved back 4 feet behind the designated crossing
- » NW quadrant curb ramp has detectable warning at the curb ramp
- » NW quadrant curb ramp aligns with curb ramp on NE quadrant
- » NW quadrant has additional curb ramp to align with curb ramp in SW quadrant – additional curb ramp should also have a detectable warning
- » Recommend marking crosswalks – crosswalks are needed where sidewalk is on either side of road/intersection. If crosswalks are marked at signalized intersections, NCDOT requests pedestrian signals.

- » NE quadrant curb ramp aligns with NW quad curb ramp and has detectable warning (only need one curb ramp here since sidewalk is only on NW side)
- » SW quadrant has curb ramp with detectable warning
- » SW and NW quadrant ramps align with 4 feet of space between vehicle stop bar and crosswalk
- » If feasible, a pedestrian refuge island is recommended where the traffic median is currently. Refuge islands wider than 6 feet need detectable warnings on either side of the crossing. If an island is not feasible, the current median and stop bar should be reduced to allow for proper pedestrian crossing. Evaluate green times for traffic signals to ensure all pedestrians have sufficient crossing time

Conover Blvd. Merging on to US70

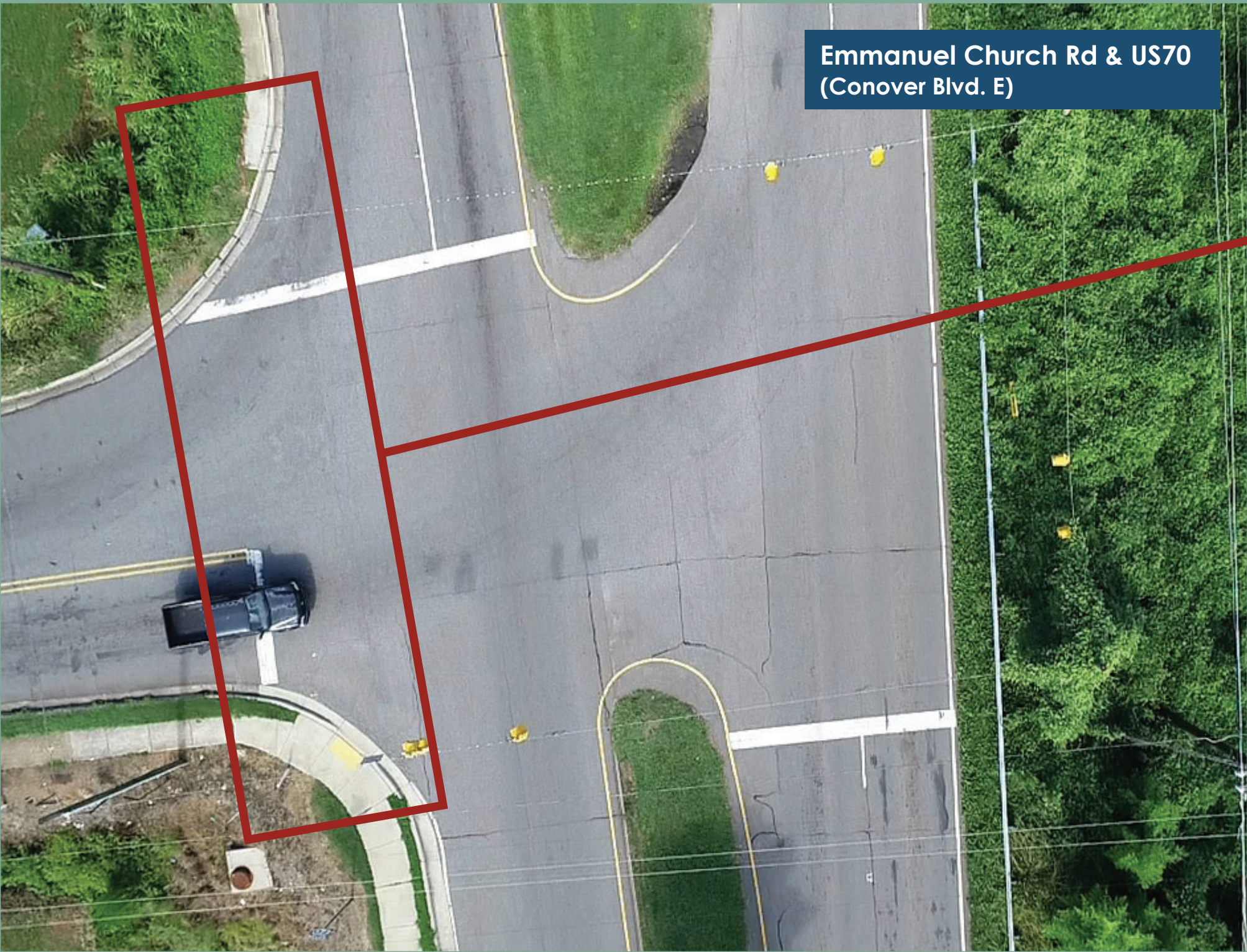




- » Improved, high visual pedestrian crossing
- » Sidewalk that is hidden by the trees extended up to align with visible sidewalk on the other side of the road
- » Detectable warnings on either side of crossing and flat resting areas for pedestrians

- » Advanced crosswalk signage and rapid flash beacon recommended for this location
- » Sidewalk width is 4-5 feet wide

**Emmanuel Church Rd & US70
(Conover Blvd. E)**



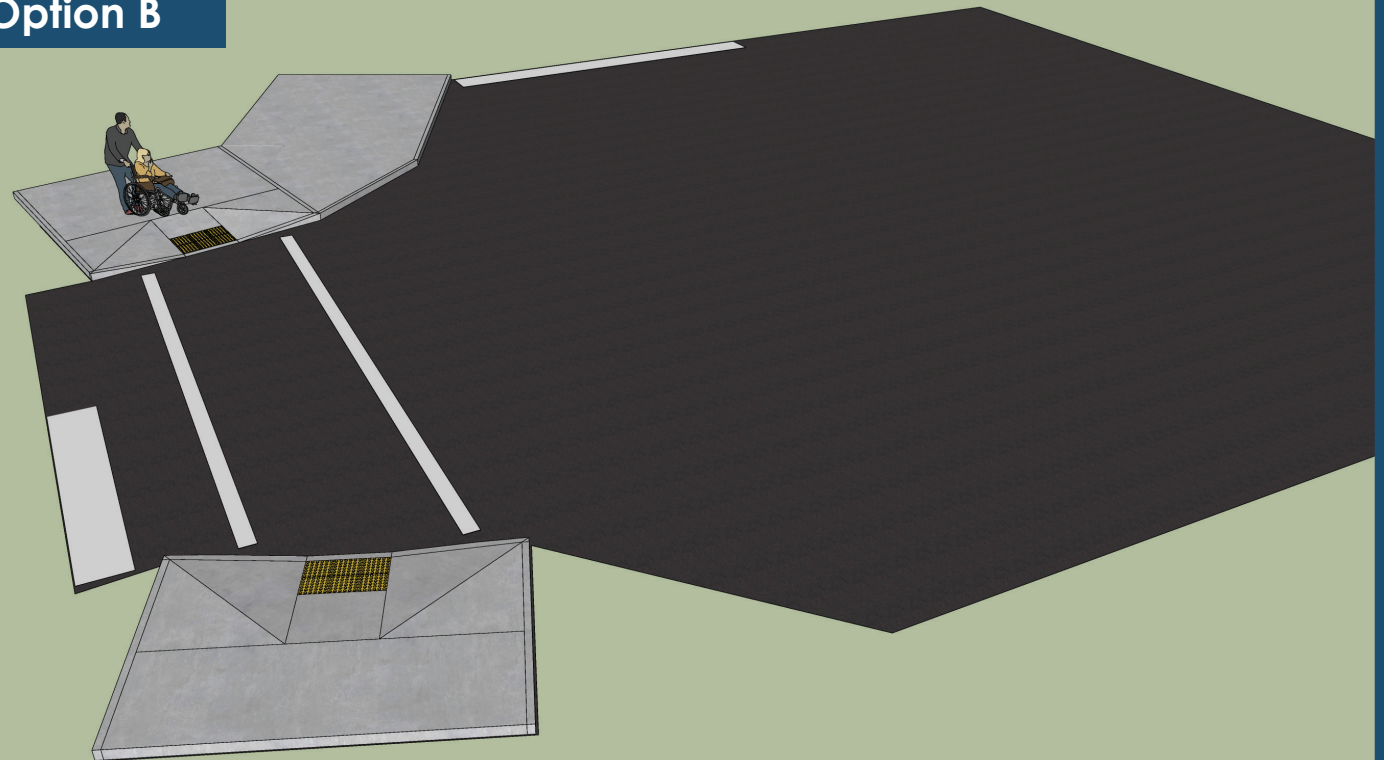
Option A



Option A

- » NW quadrant sidewalk extended all the way to squared intersection beyond stop bar
- » NW quadrant sidewalk ends in curb ramp with detectable warning
- » Stop bar 4 feet behind new curb ramp in NW quadrant
- » Wider sidewalk in the NW quadrant (at least 4 feet wide, however, 5 feet recommended)
- » SW curb ramp realigned to align with sidewalk across the road
- » SW curb ramp 4 feet ahead of stop bar

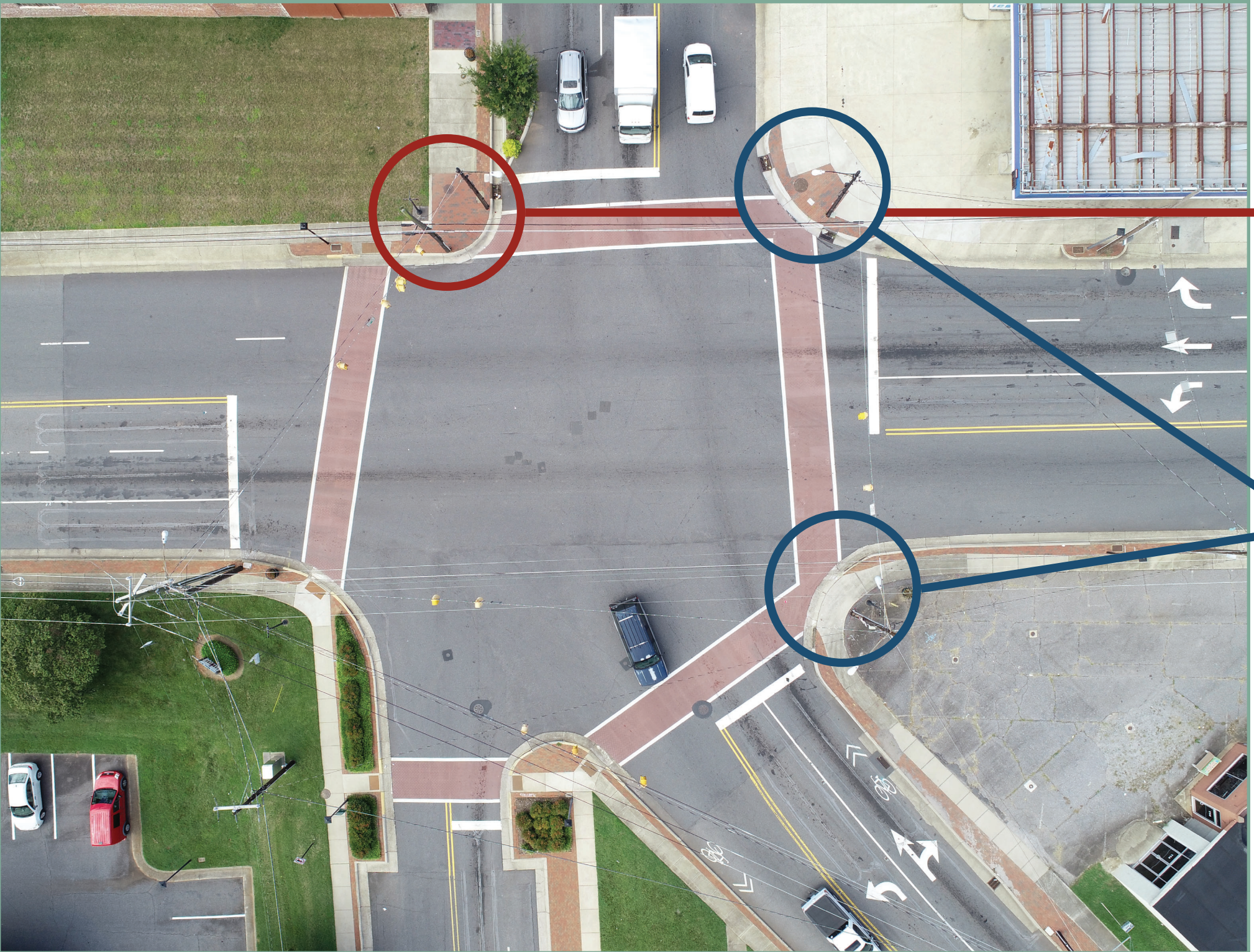
Option B

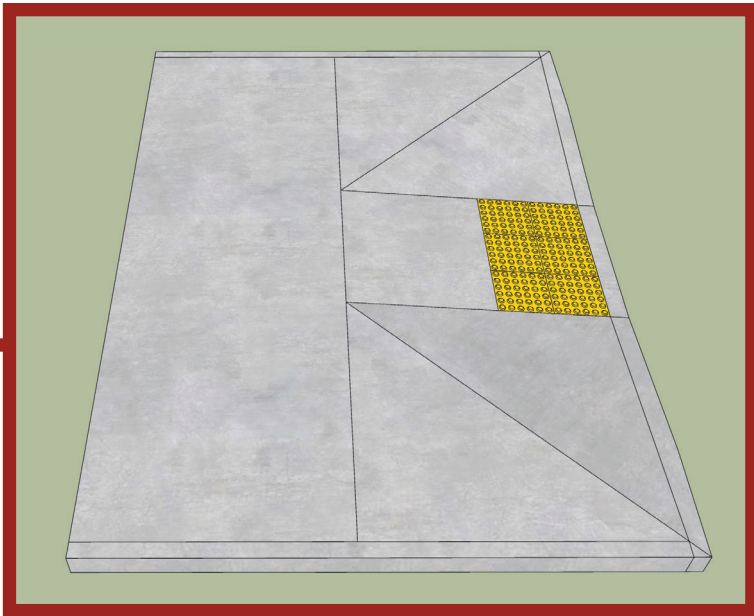


- » marked crosswalk at curb ramps (crosswalks must be 6-10 feet wide)
- » Pedestrian signals are advised at marked crosswalks
- » Evaluate green times for traffic signals to ensure all pedestrians have sufficient crossing time

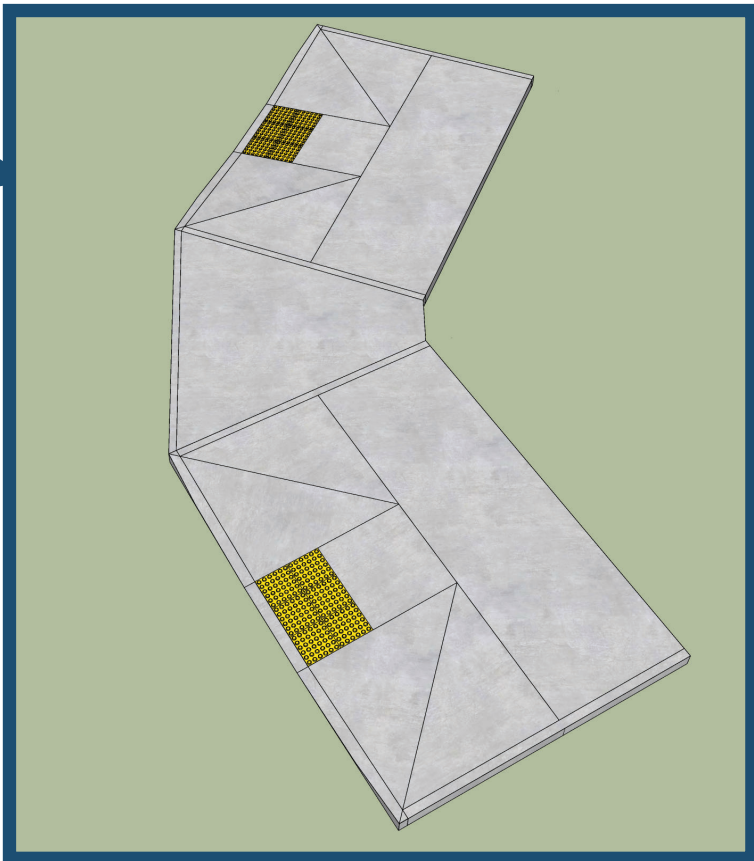
OR Option B

- » Curb extension in NW quadrant to tighten turn radius and shorten distance for pedestrians in crosswalk



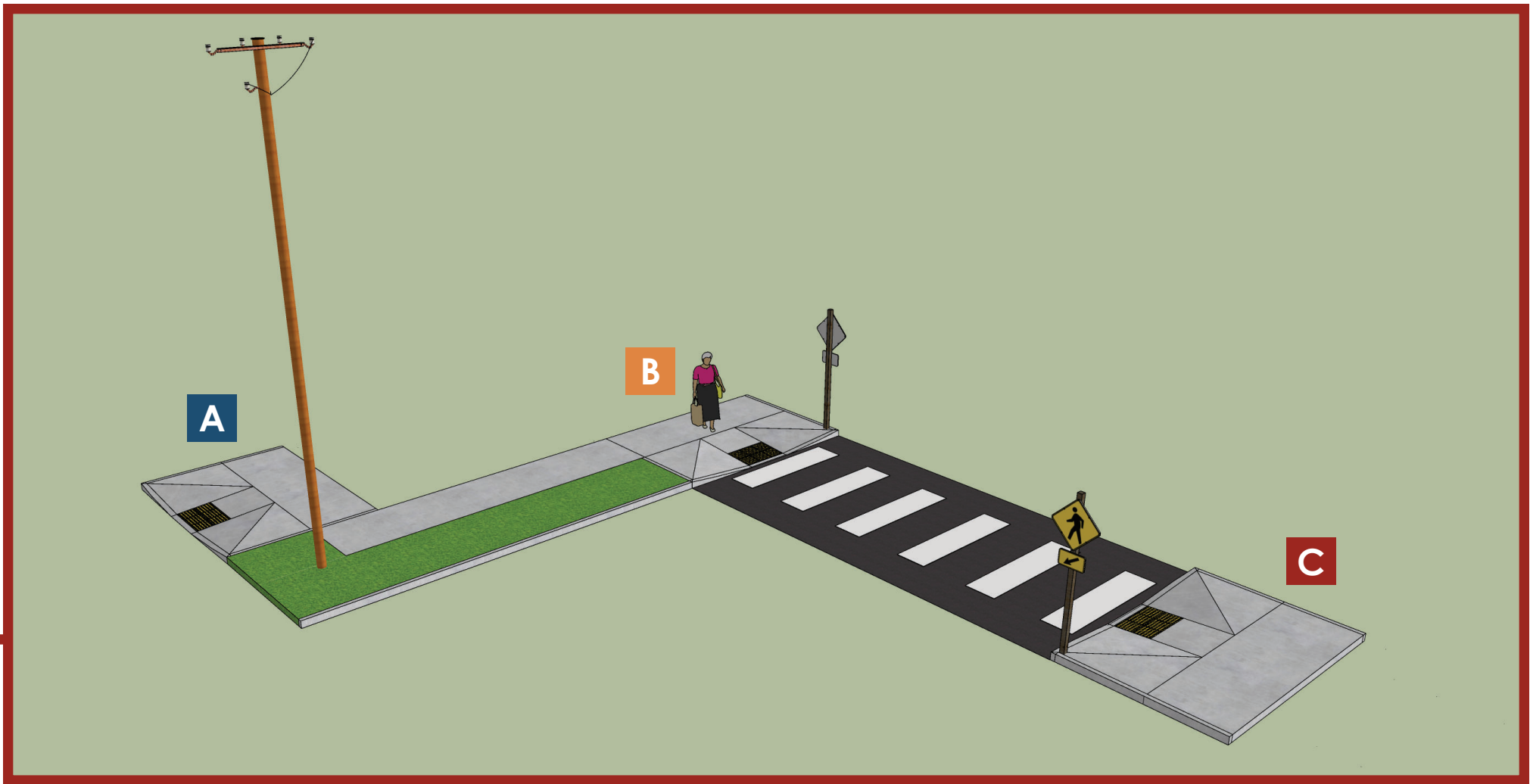


- » NW quadrant with visually contrasting detectable warnings and compliant curb ramps
- » NE quadrant with two separate curb ramps and two detectable warnings for crossing at each direction at intersection
- » SW quadrant with visually contrasting detectable warnings and compliant curb ramps
- » SE quadrant with two separate curb ramps and two detectable warnings for each direction at intersection
- » Pedestrian signals
- » Evaluate green times for traffic signals to ensure all pedestrians have sufficient crossing time



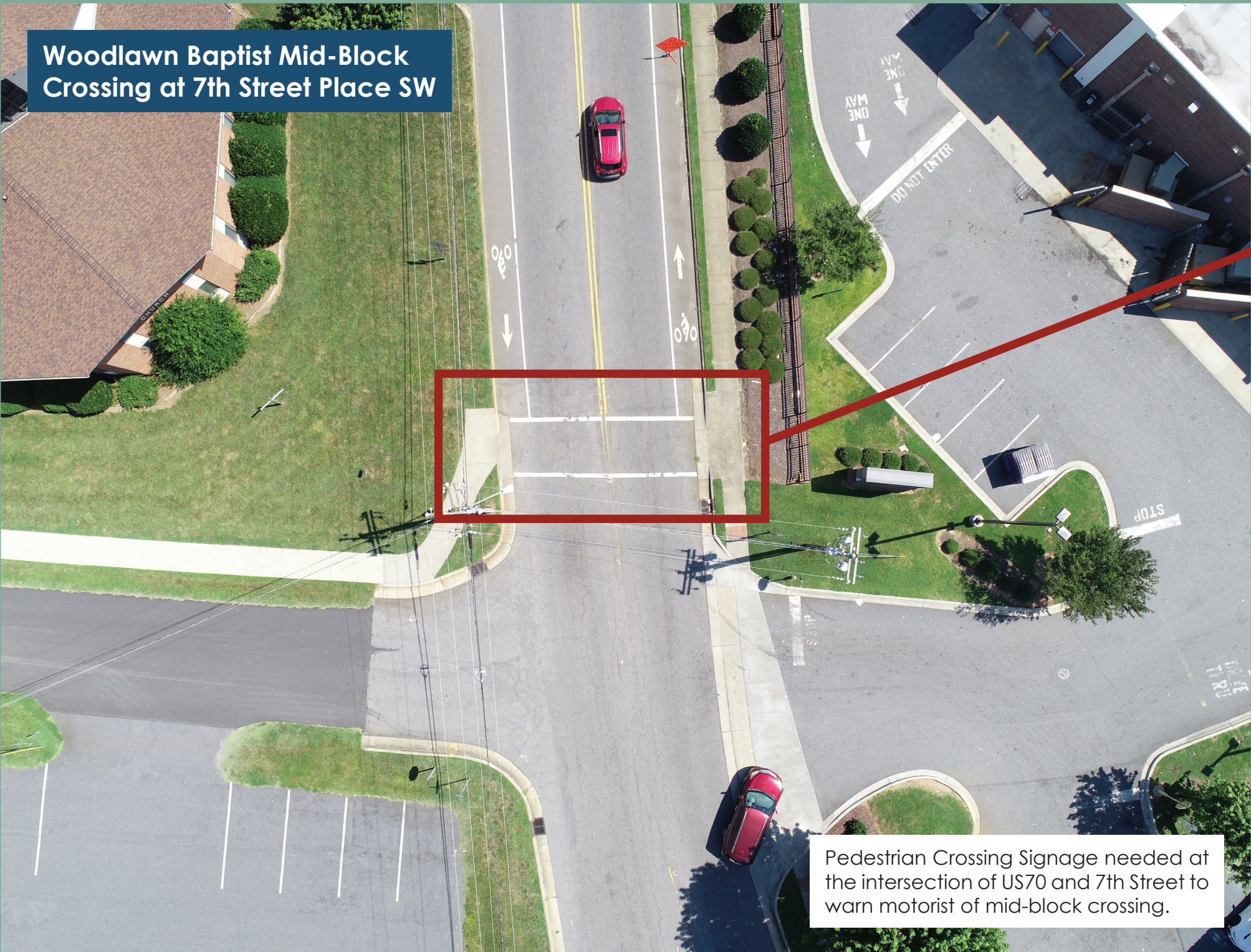
Mid-Block Crossing Emmanuel Church Rd. at YMCA Back Entrance



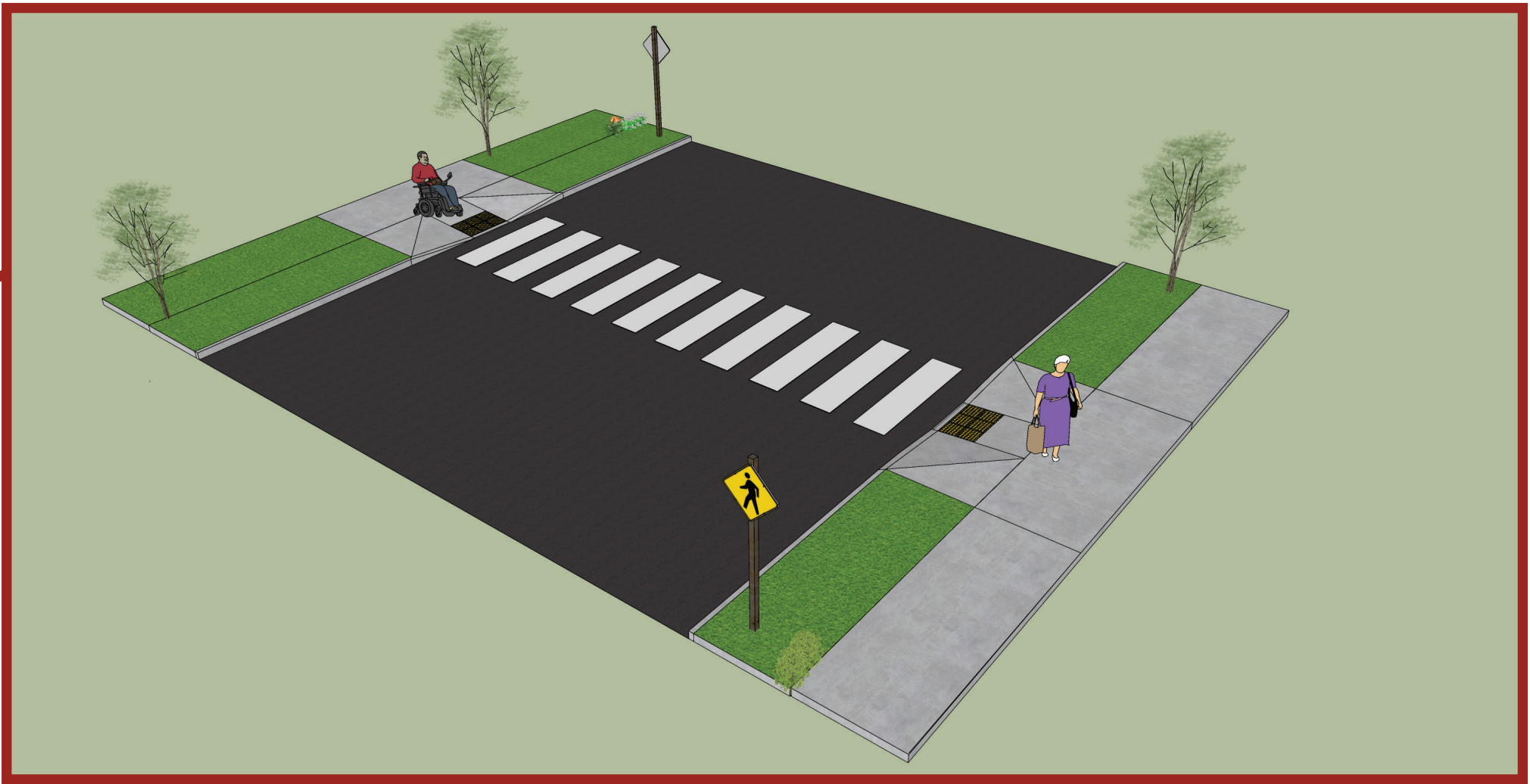


- » High visual pedestrian crossing
- » Level pedestrian landings on either side of crossing with detectable warnings
- » Pedestrian landings connect to accessible routes and/or provide accessible connections to the roadway – pedestrian landing connecting to asphalt is designed to go next to utility pole
- » Rapid flash beacon and advanced pedestrian crossing signage

Woodlawn Baptist Mid-Block Crossing at 7th Street Place SW



Pedestrian Crossing Signage needed at the intersection of US70 and 7th Street to warn motorists of mid-block crossing.



- » Detectable warnings present on either side of crosswalk
- » Extend curb ramps out to inside edge of the bike lanes to shorten the walking distance for pedestrians
- » High visual crosswalk to improve visibility
- » Advanced signage at intersection of US 70 warning motorists of midblock crossing
- » Rapid flashing beacon recommended

**Mid-Block Crossing
at 7th Street Place SW**





- » **Compliant curb ramps extend to the edge of the grassy area**
- » **Each curb ramp has a detectable warning**
- » **Crosswalk is high visual – must be 6-10 feet wide**
- » **Pedestrian signage**
- » **Rapid flashing beacon recommended but not required**



1st Ave S & 2nd St SW
Midblock Crossing

- » Needs visually contrasting detectable warnings on either side
- » Detectable warnings should cover the entire depressed section of curb
- » Compliant curb ramps provide a level resting pad
- » Strongly recommend rapid flashing beacon that alerts motorists when pedestrians are utilizing the crosswalk
- » The crosswalk should visually contrast from the surrounding pavement – the imprinted brick should only be present in the crosswalk
- » On street parking is too close to the crosswalk and blocking pedestrian visibility – see the Manual on Uniform Traffic Control Devices (MUTCD) 2009 Edition for proper distance



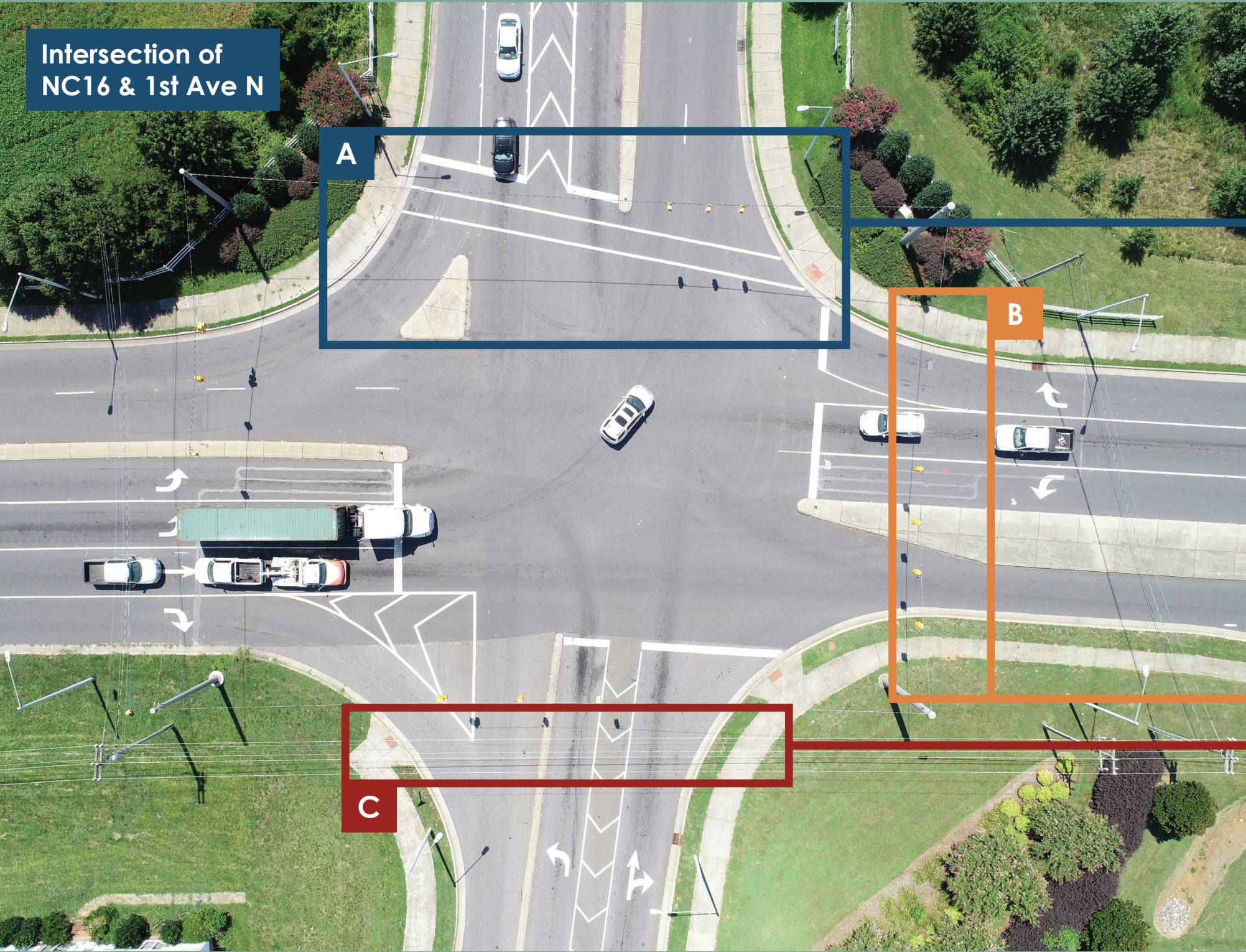
- » This is a very unsafe railroad crossing for all pedestrians. Engineer guidance is warranted for best safety solutions. Sidewalk is present on either side of the railroad on 1st Ave South as well as on 4th St Southwest. This creates legal crossings for pedestrians that are required to be compliant. The sidewalk ends before the railroad track, leaving large, impassible gaps for most users. Motorists turning from 1st Ave South onto 4th St Southwest cannot see pedestrians crossing from 4th St Southwest to the continuing sidewalk on 1st Ave South. This is due to the grade change at that intersection. The cross slope is too steep for persons in wheelchairs to cross at the intersection of 4th St Southwest and 1st Ave South.
- » There is currently a compliant railroad crossing at Conover Station Southeast. Until this issue can be resolved, advanced directional signage on 1st Ave South and 4th St Southwest showing accessible street and railroad crossings is highly recommended.

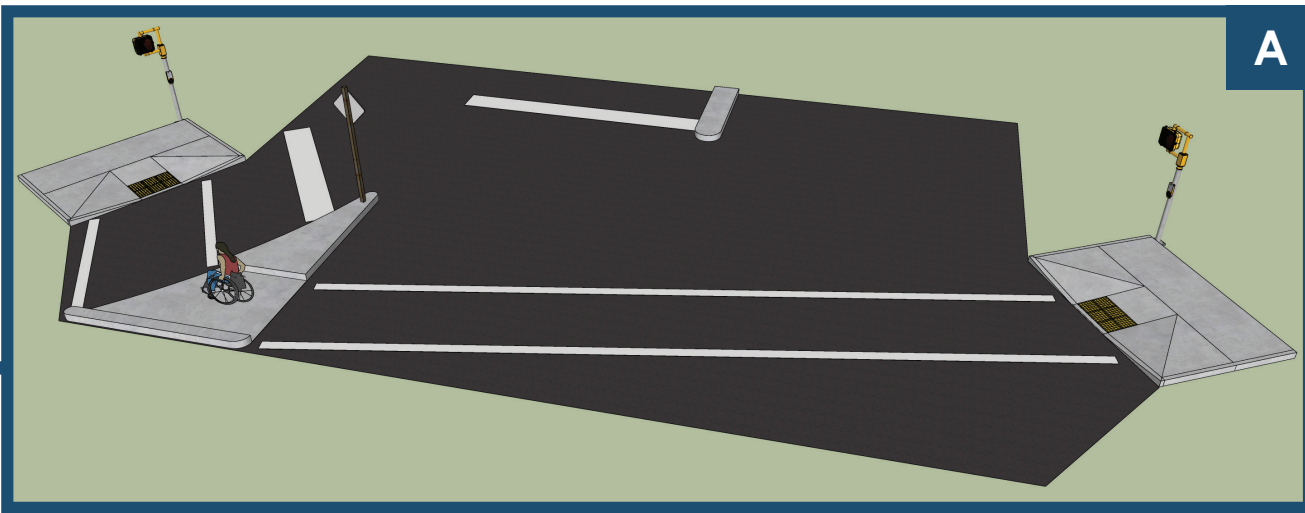
Intersection of NC16 & 1st Ave N

A

B

C

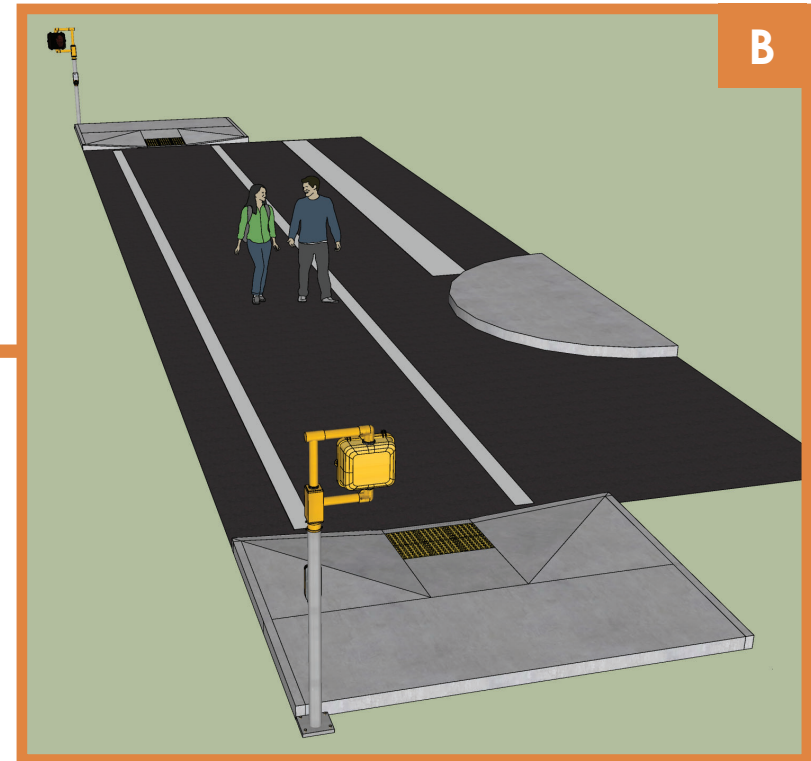




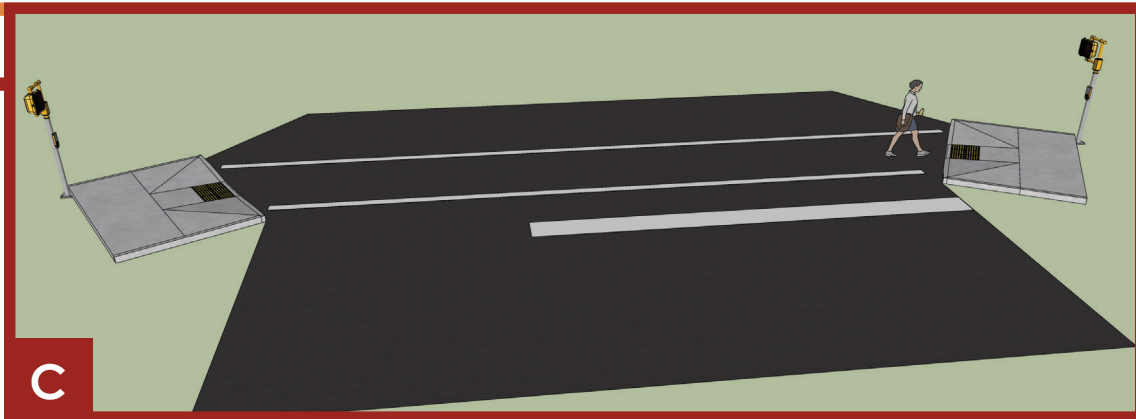
A

- » NW quadrant island converted to pedestrian island to improve pedestrian visibility
- » Pedestrian island needs to have depressed accessible route
- » NW quadrant needs detectable warnings on curb ramp and at entry/exit points of the pedestrian island
- » Crosswalk connecting NW quadrant to NE quadrant realigned
- » NE quadrant has 2 separate curb ramps for crossing in either direction – both curb ramps have detectable warnings

- » Stop bar is 4 feet behind new NE curb ramp
- » New NE curb ramp aligns with curb ramp in SE quadrant and concrete median is shortened – recommend marking crossing (the median could also be converted into a pedestrian resting area)
- » SE quadrant has 2 separate curb ramps for crossing in either direction
- » SW and SE curb ramps have detectable warnings and properly align – recommend marking crossing
- » Stop bars are 4 feet behind crossings
- » SW quadrant should have yield sign and pavement markings notifying motorists of SW-SE crossing
- » NW to SW crossing is not recommended. Pedestrians should utilize NE-SE crossing
- » Pedestrian signals needed
- » Evaluate green times for traffic signals to ensure all pedestrians have sufficient crossing time

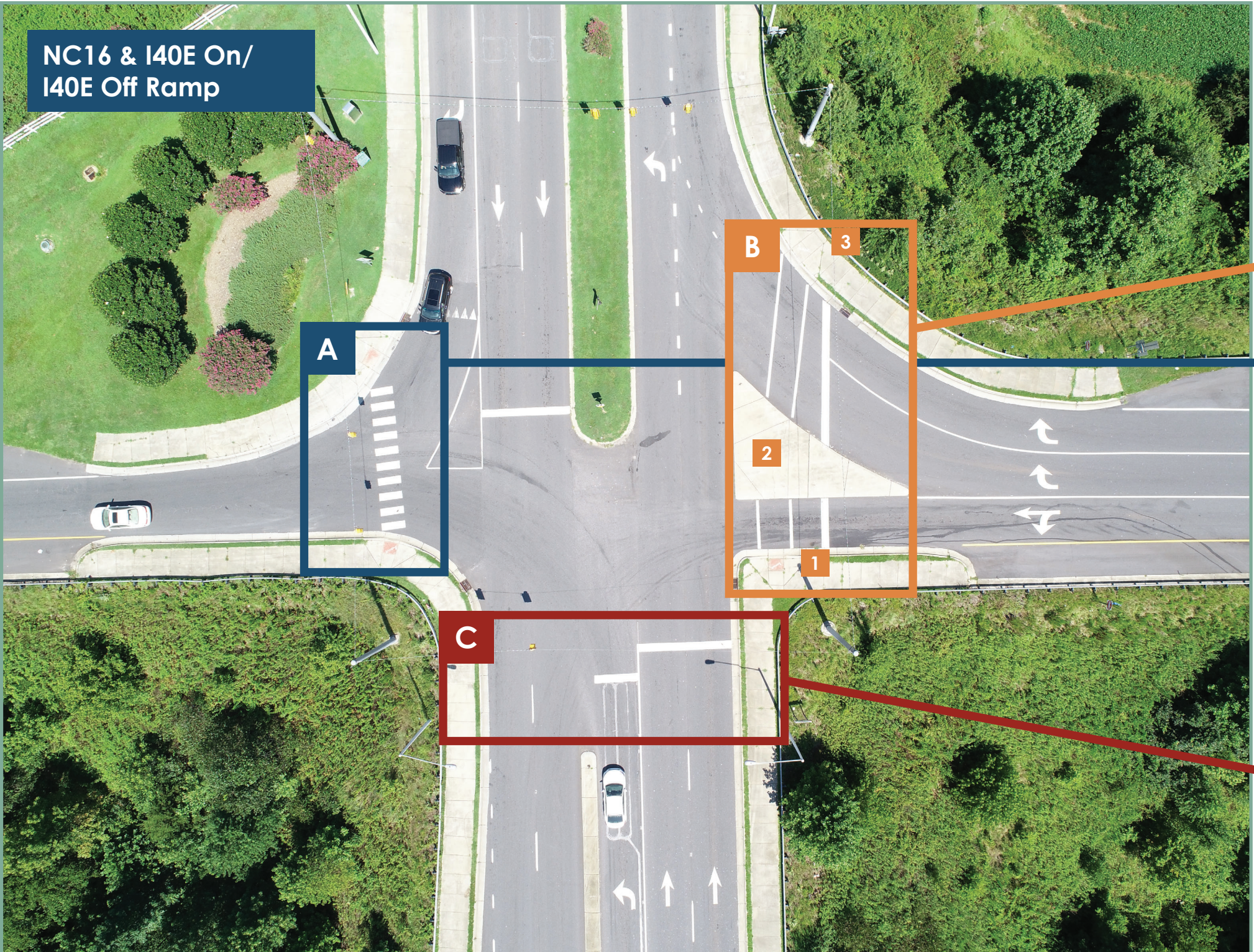


B



C

NC16 & I40E On/
I40E Off Ramp



A

B

3

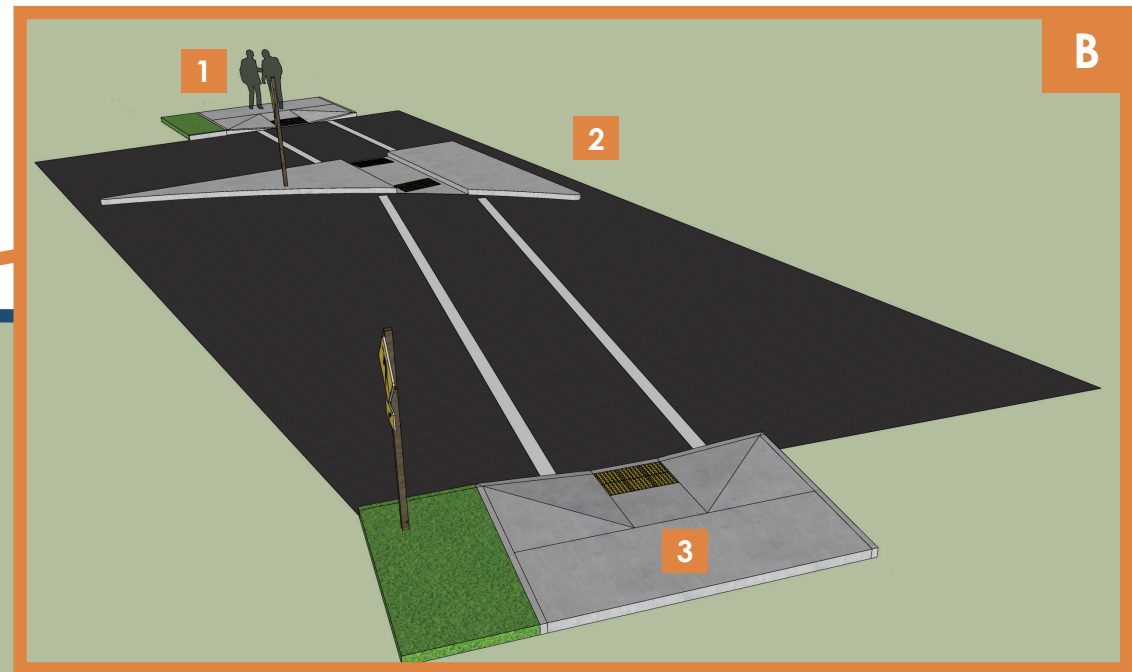
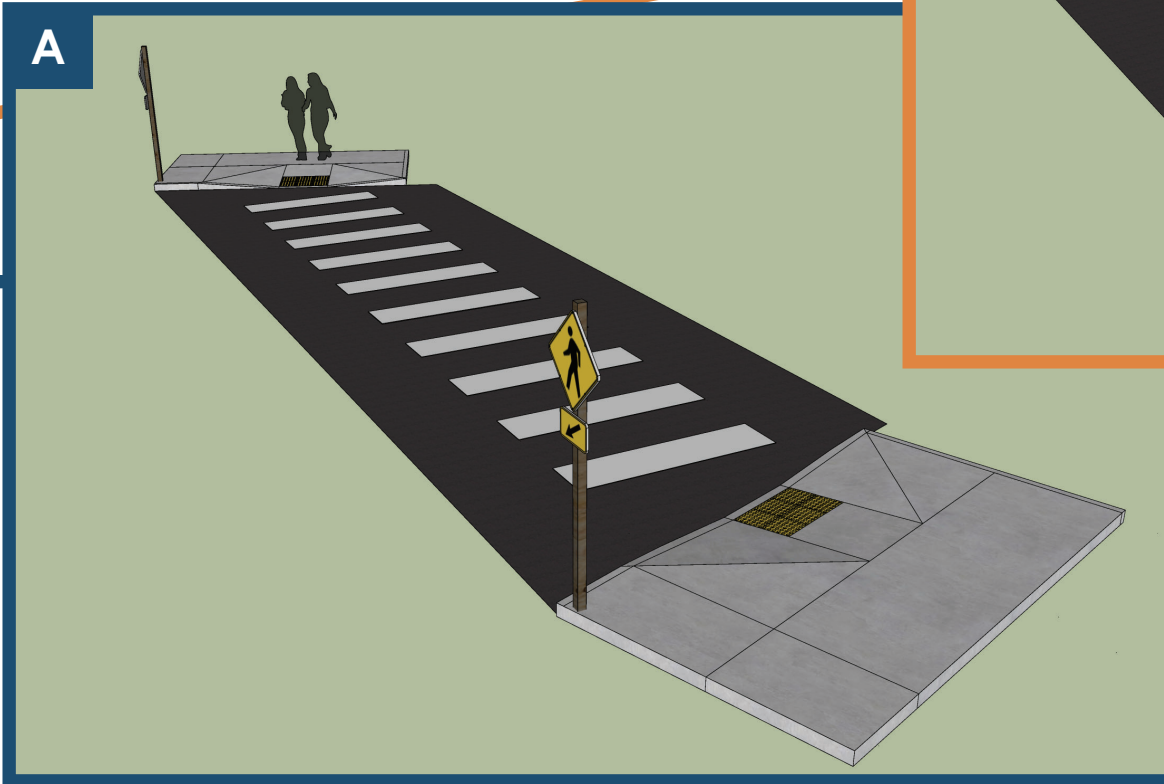
2

1

C

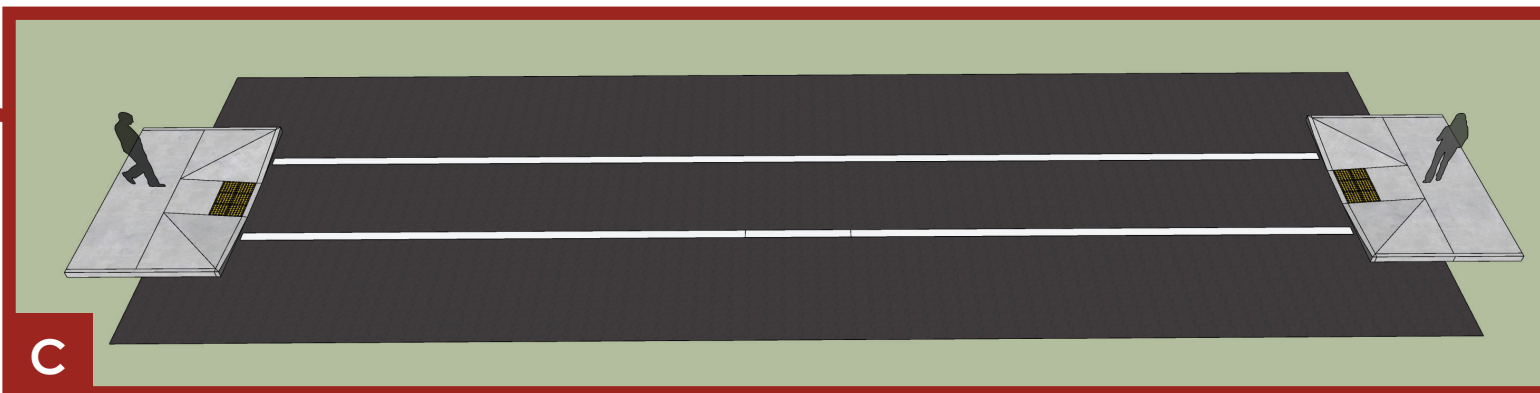
Section A:

- » Detectable warnings on both curb ramps and pedestrian crossing signage



Section B:

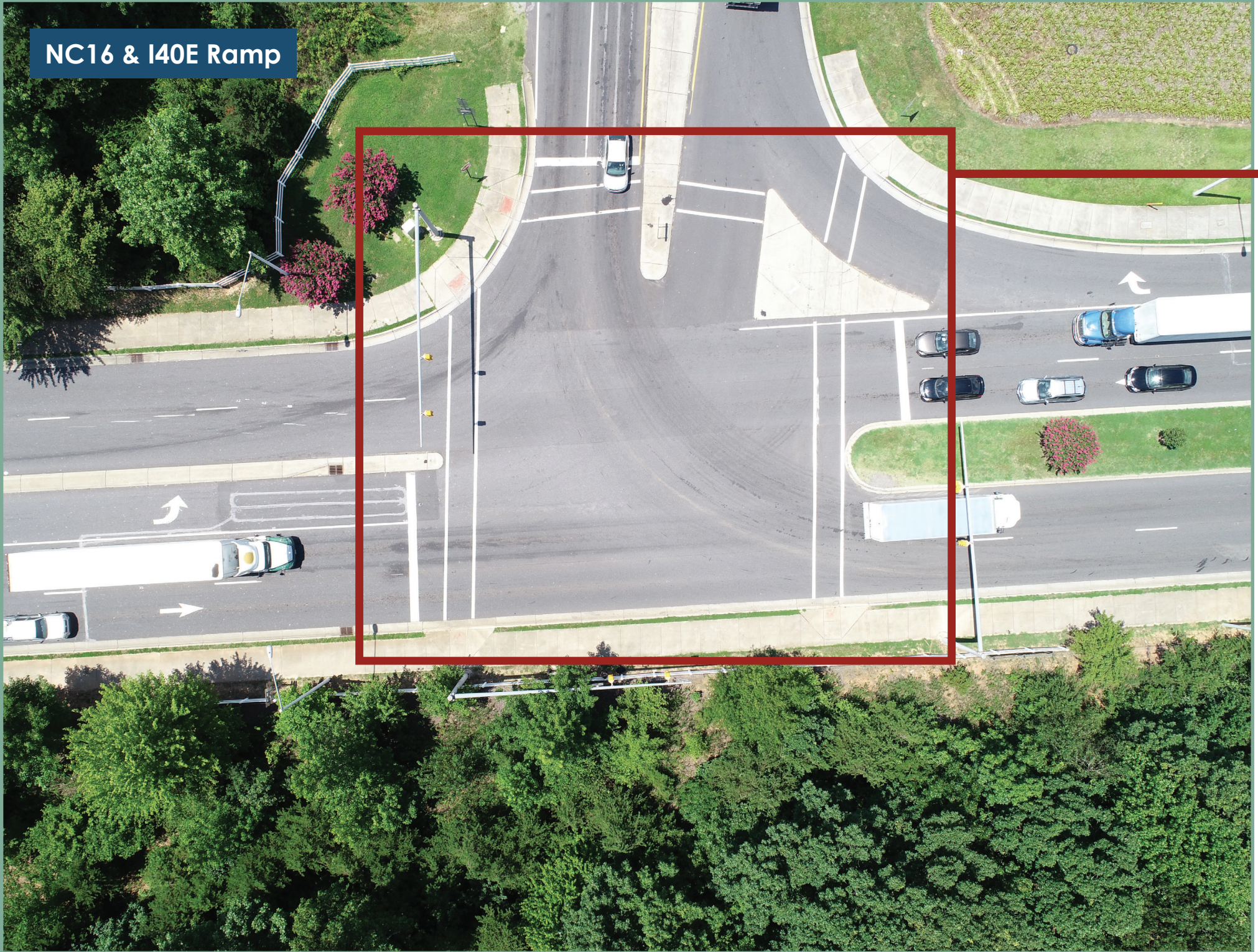
- » Detectable warnings on each curb ramp and entry/exit points of pedestrian island
- » Pedestrian island depressed for accessible route
- » Pedestrian signage at curb ramps and pedestrian island

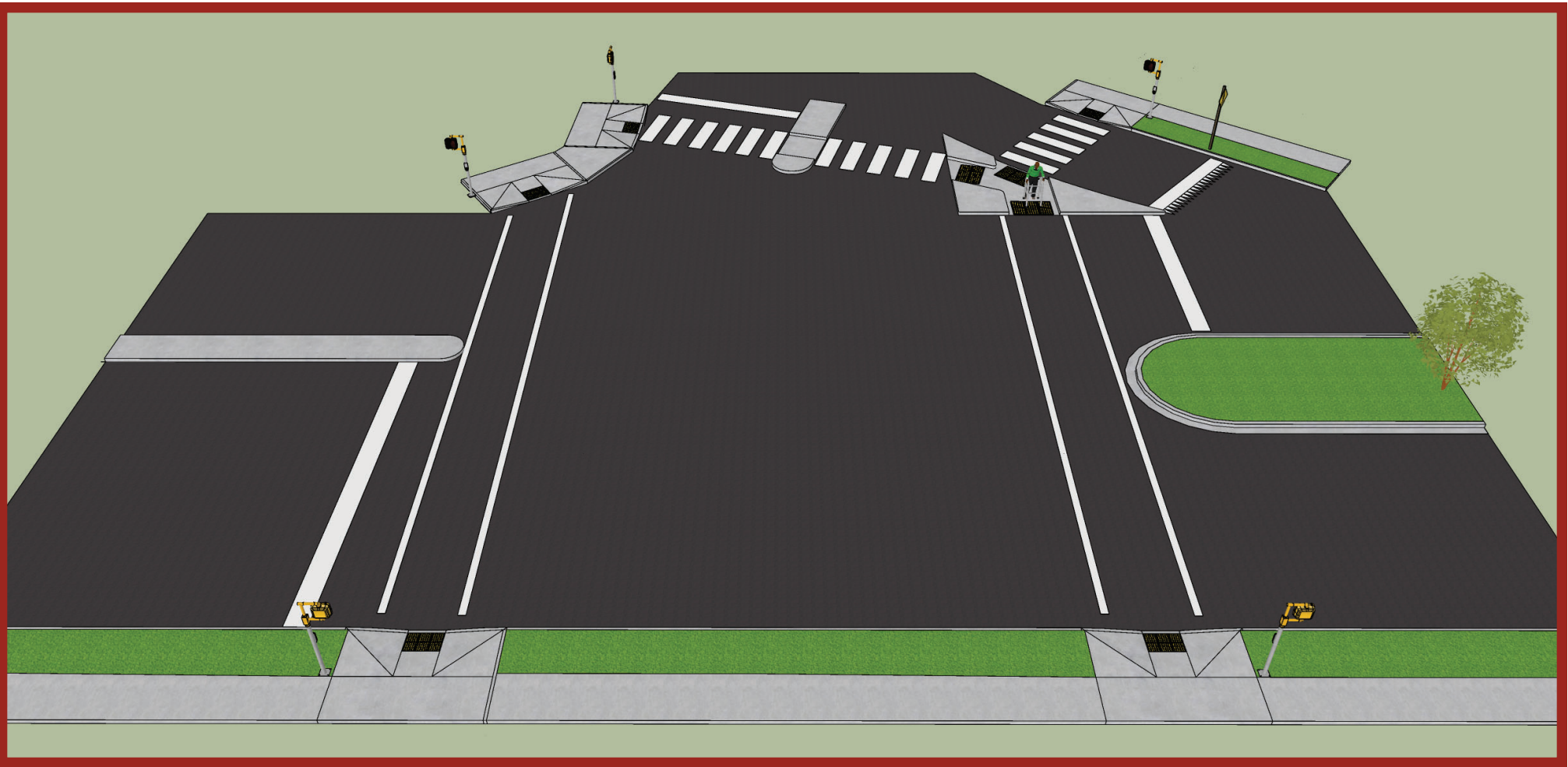


Section C:

- » 2 curb ramps with detectable warnings
- » Marked crosswalk
- » Stop bar 4 feet behind crosswalk

NC16 & I40E Ramp





NW Quadrant

- » Detectable warnings at both curb ramps
- » High visual crosswalk from NW to NE quadrant
- » Traffic median has depressed segment for pedestrians to pass – median is too narrow to require detectable warnings

NE Quadrant

- » High visual crosswalk and pavement markings to warn motorists of crossing
- » Pedestrian crossing and/or yield signage at slip lane
- » Pedestrian island has 3 detectable warnings at each entry/exit point

- » Pedestrian island has depressed, accessible route connecting each entry/exit point
- » Curb ramp has detectable warning

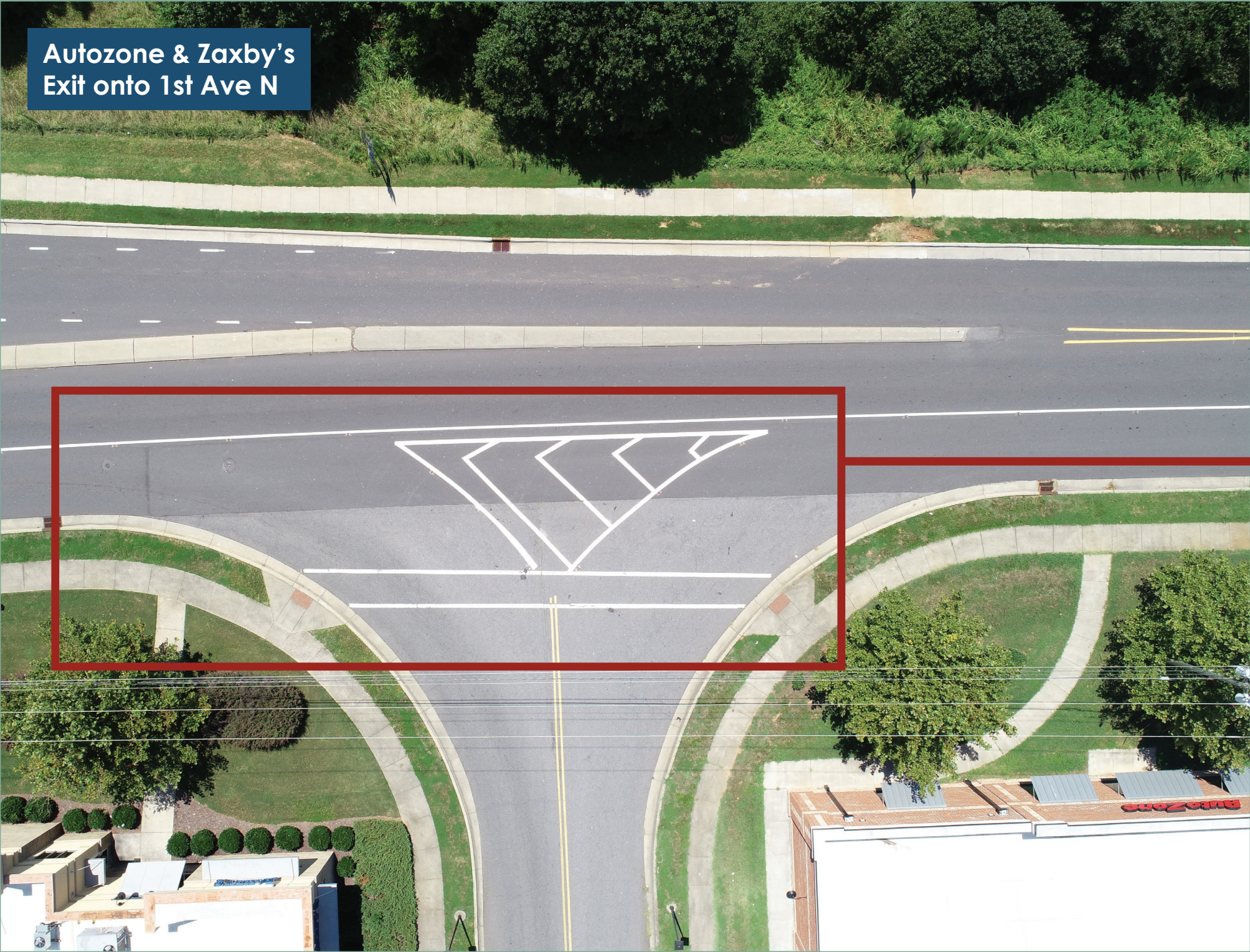
SW and SE Quadrant

- » SW and SE curb ramps have detectable warnings

All Quadrants

- » All four quadrants have pedestrian signals
- » Evaluate green times for traffic signals to ensure all pedestrians have sufficient crossing time

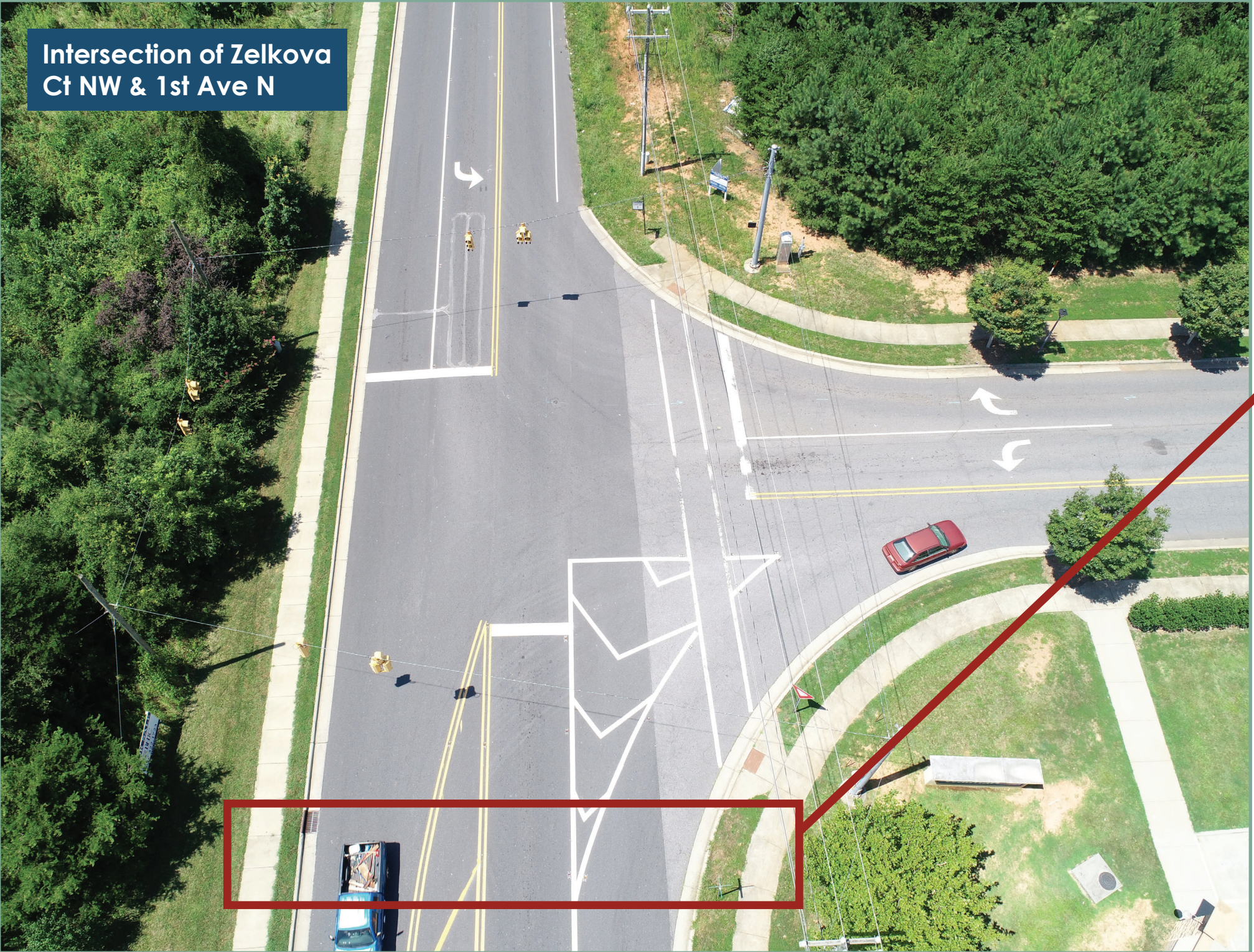
**Autozone & Zaxby's
Exit onto 1st Ave N**

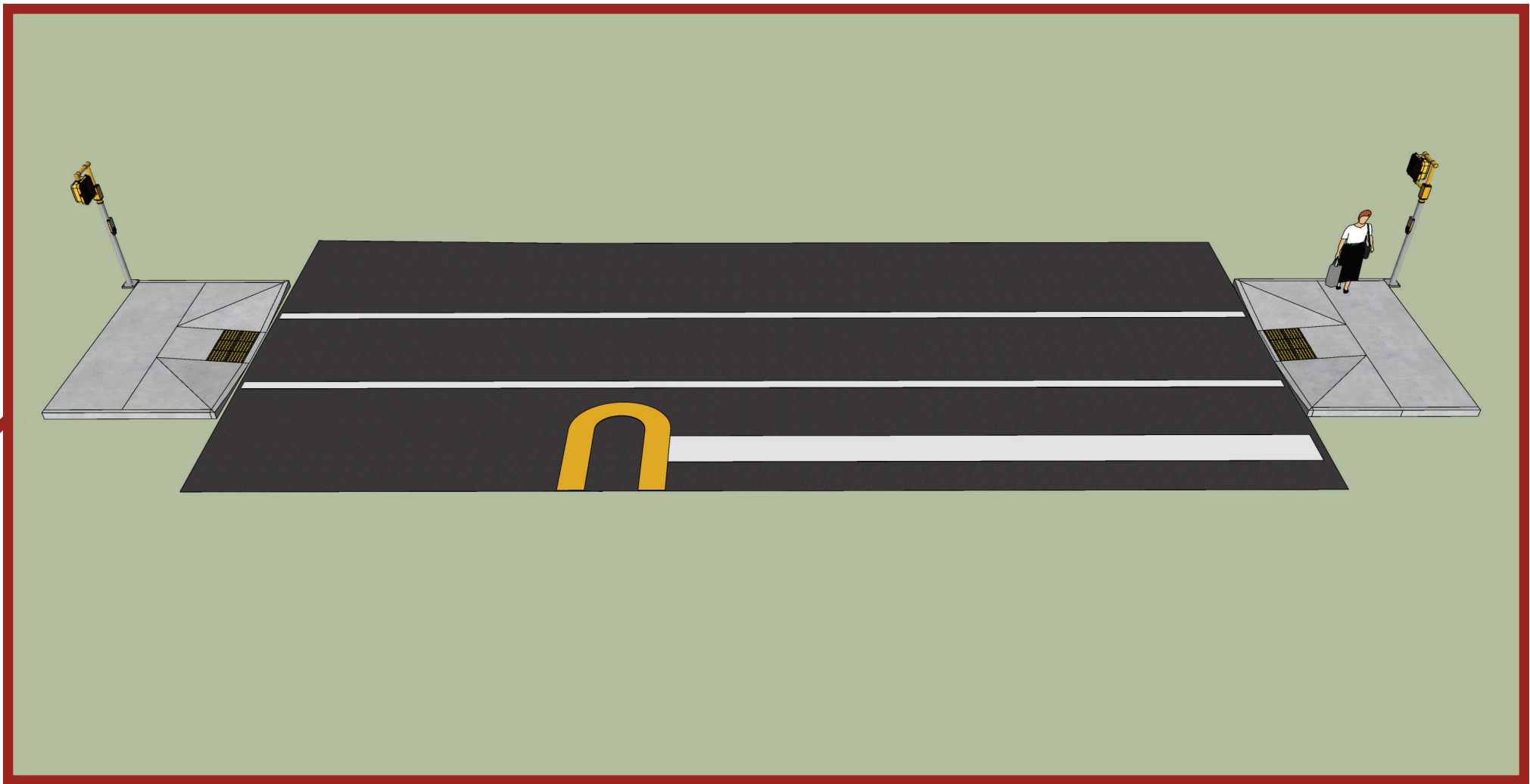




- » Stop sign at crosswalk
- » Stop bar 4 feet behind crossing
- » Right lane converted to through and right turn lane to encourage motorists to stop
- » No painted median

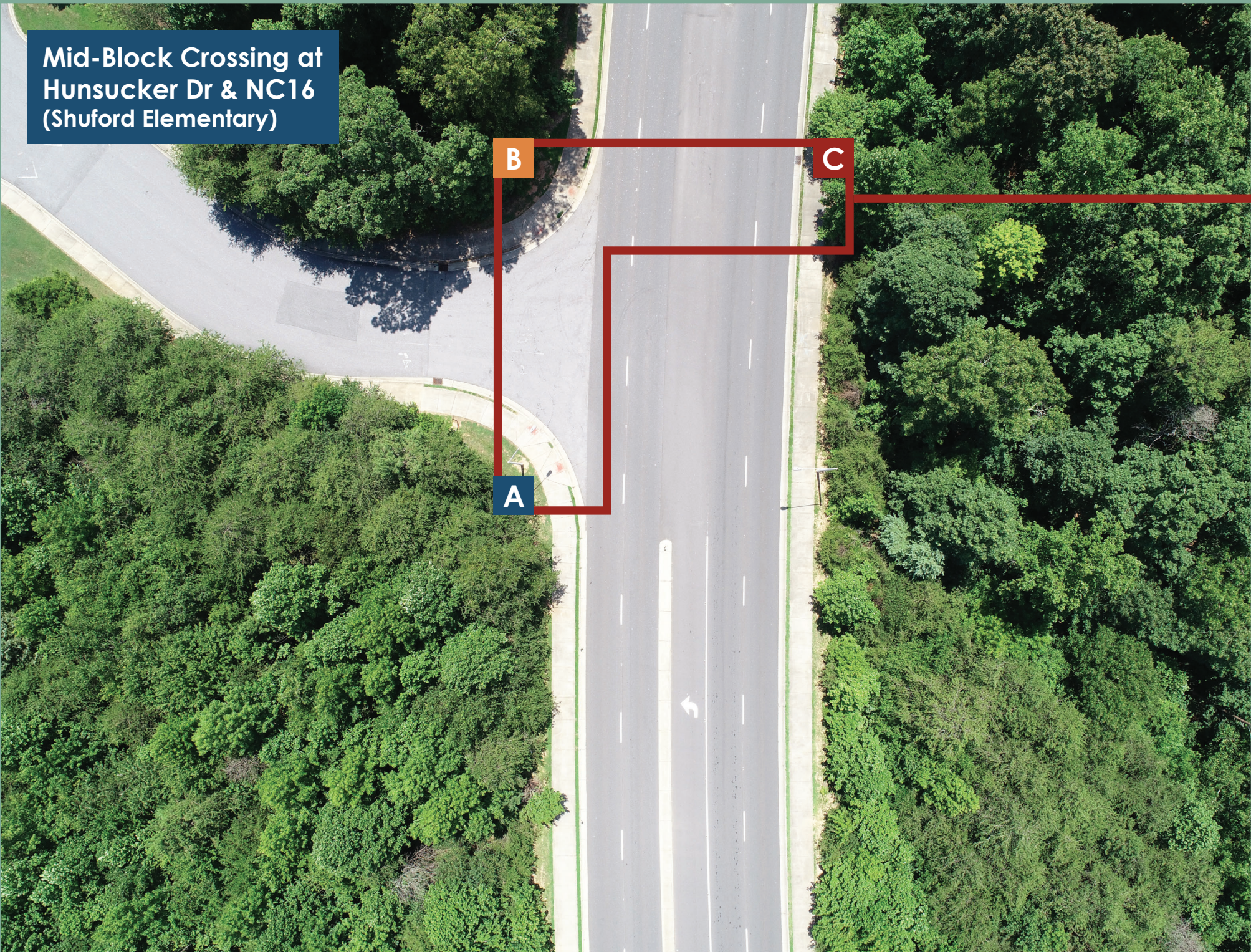
Intersection of Zelkova Ct NW & 1st Ave N





- » **Marked crosswalk added from SW-SE quadrant**
- » **Stop bar and painted medians moved 4 feet behind crosswalk**
- » **Separate curb ramp (with detectable warning) recommended but not required in SE quadrant**
- » **SW quadrant has curb ramp with detectable warning**
- » **Pedestrian signals for new crossing**
- » **Evaluate green times for traffic signals to ensure all pedestrians have sufficient crossing time**

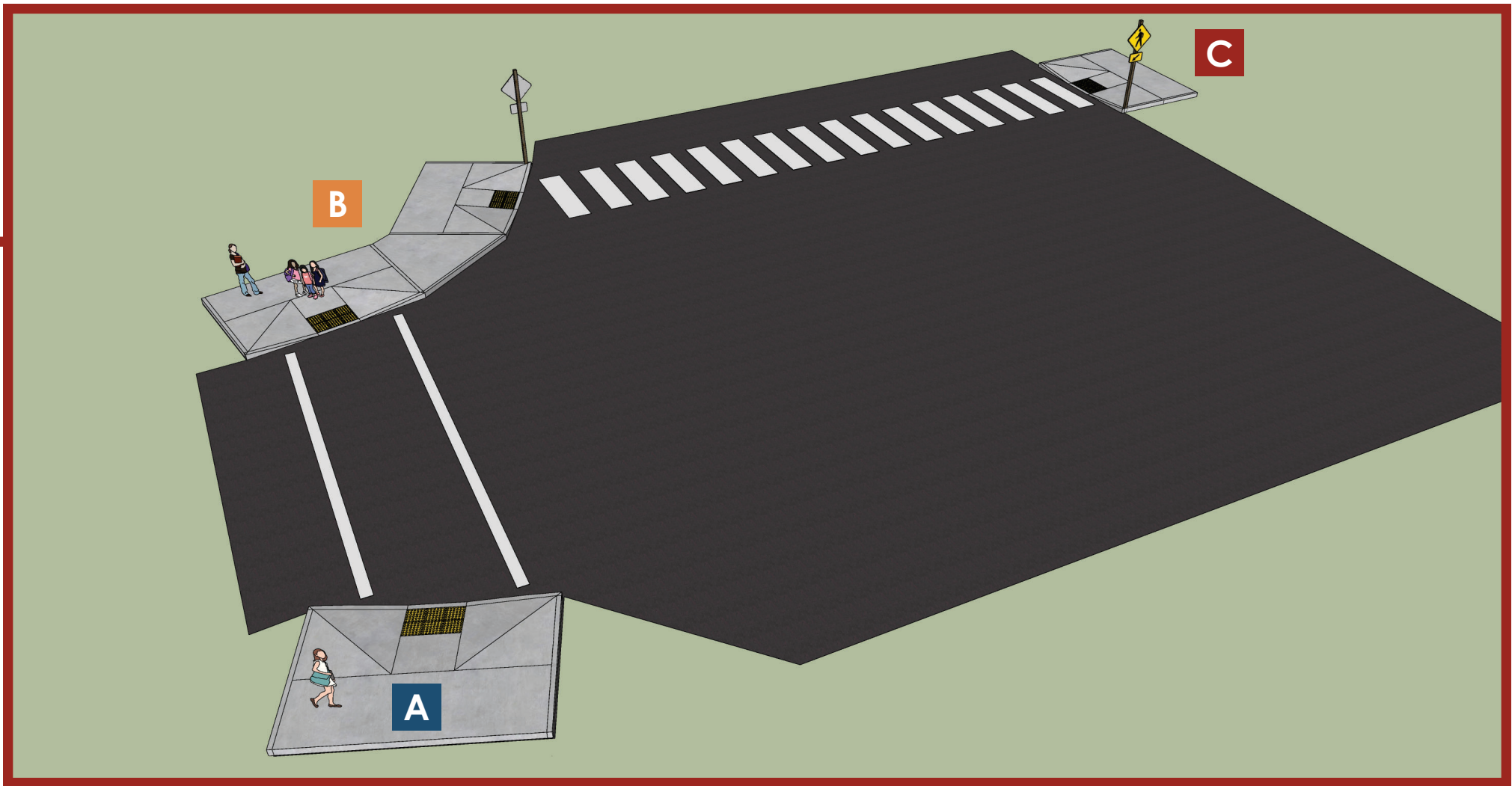
**Mid-Block Crossing at
Hunsucker Dr & NC16
(Shuford Elementary)**



B

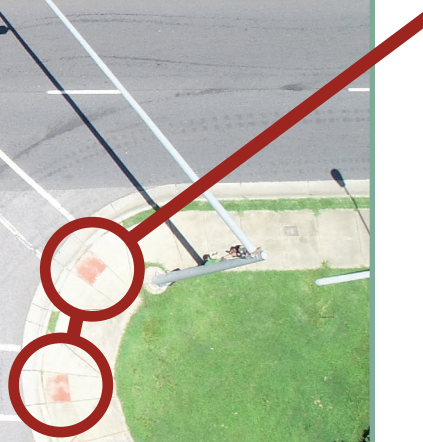
C

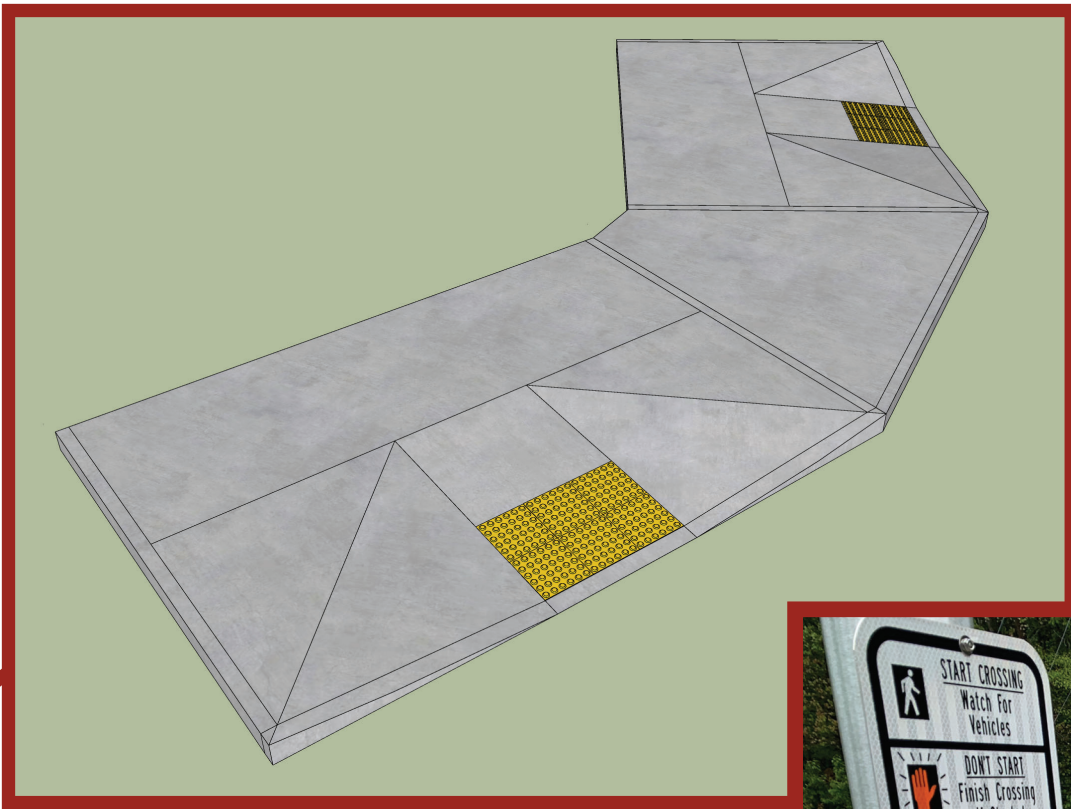
A



- » High visual crossing from B to C
- » Pedestrian signage and/or rapid flashing beacon at B-C crosswalk
- » A, B, & C curb ramps have detectable warnings
- » Curb ramp below curb ramp A is removed
- » Painted crosswalk from A to B
- » Stop bar 4 feet behind A-B crosswalk

Intersection of NC16
& Rockbarn Rd



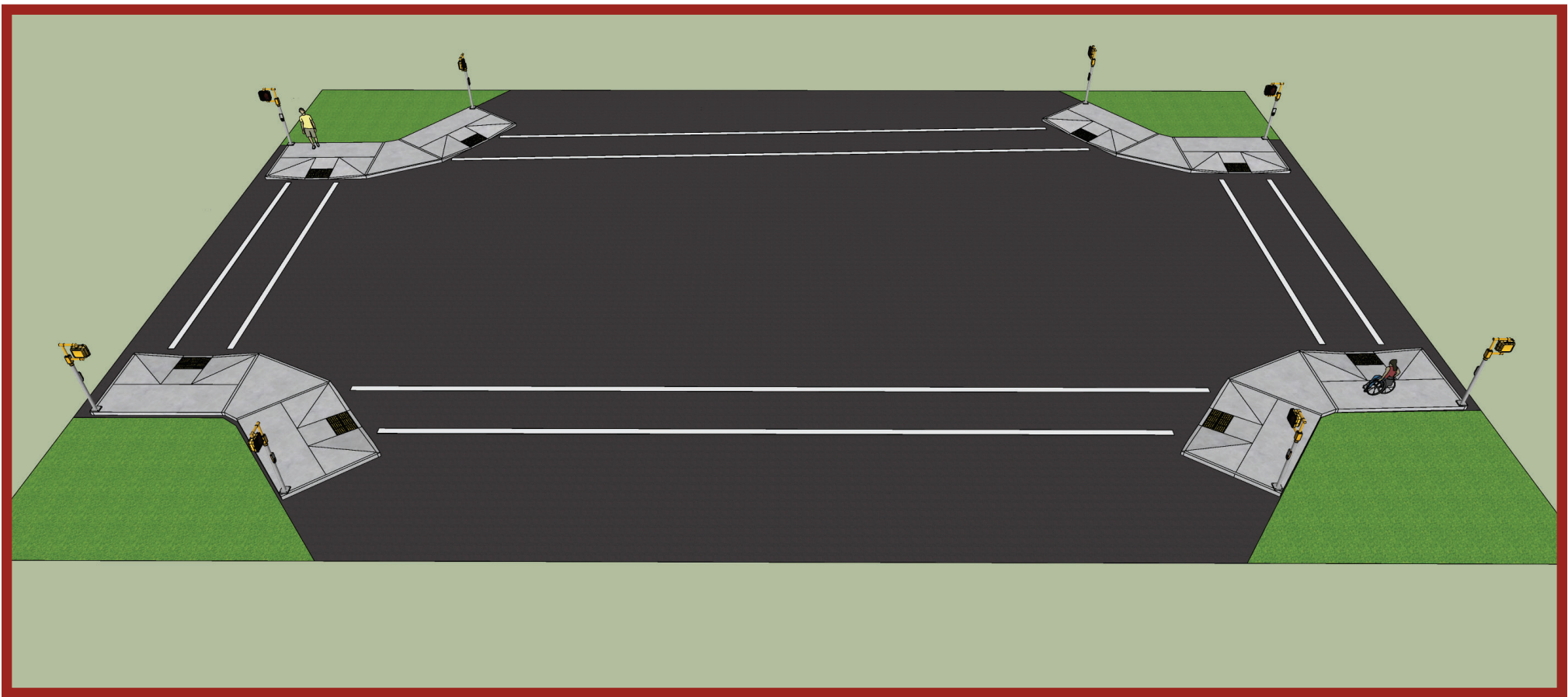


- » Add detectable warnings to all curb ramps (must visually contrast against pavement)
- » Install pedestrian signals
- » Evaluate green times for traffic signals to ensure all pedestrians have sufficient crossing time



Intersection of NC16 & US70

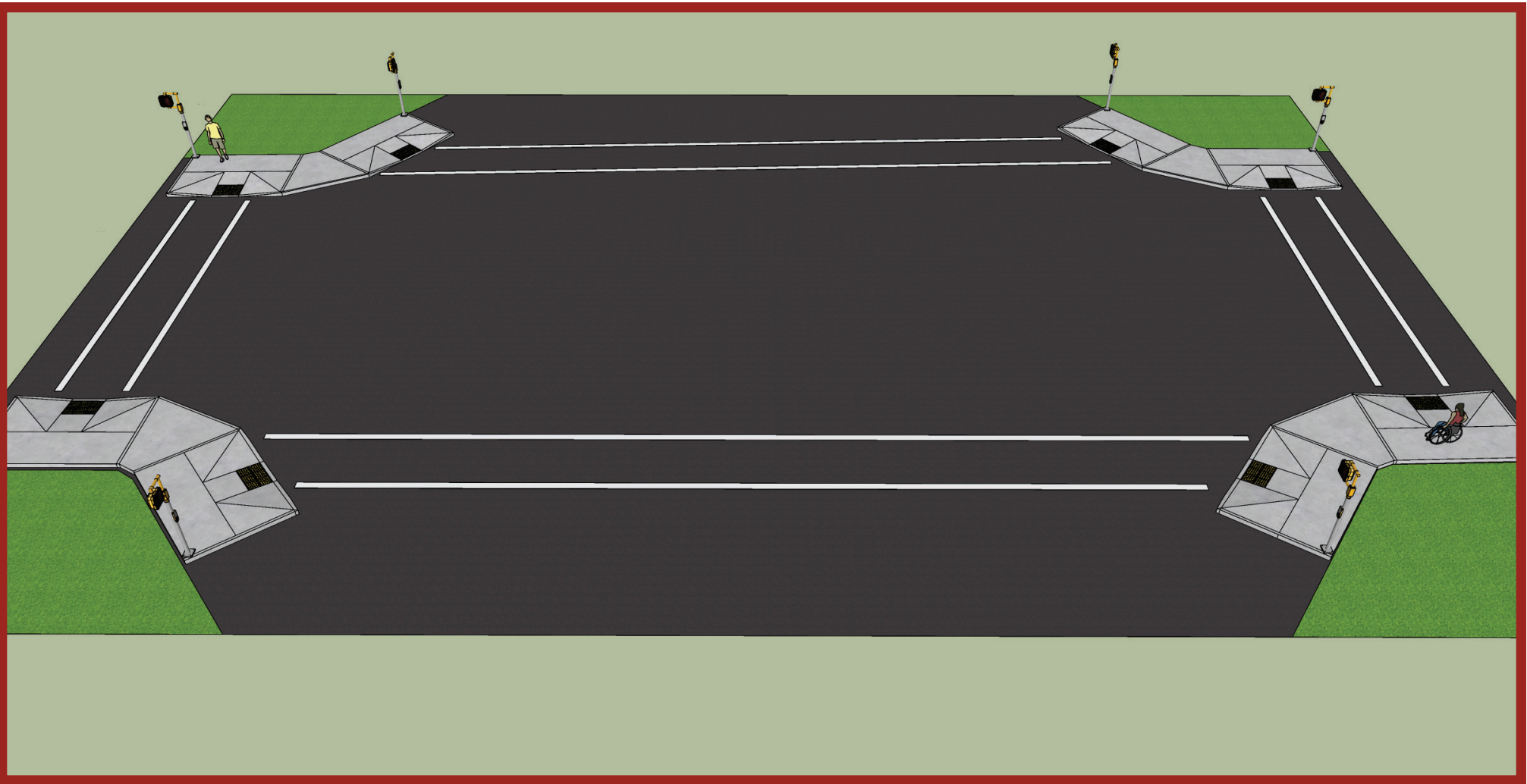




- » Add detectable warnings to all curb ramps (must visually contrast against pavement)
- » Move pedestrian signal push buttons next to curb ramps so all pedestrians can access. The push button should have a 4' X 4' landing with less than a 2% cross slope in all directions. The landing must be unobstructed and an all-weather surface. The landing can be 30" by 48" for a parallel approach. See standards for pedestrian signals.
- » Restripe crosswalks
- » Evaluate green times for traffic signals to ensure all pedestrians have sufficient crossing time

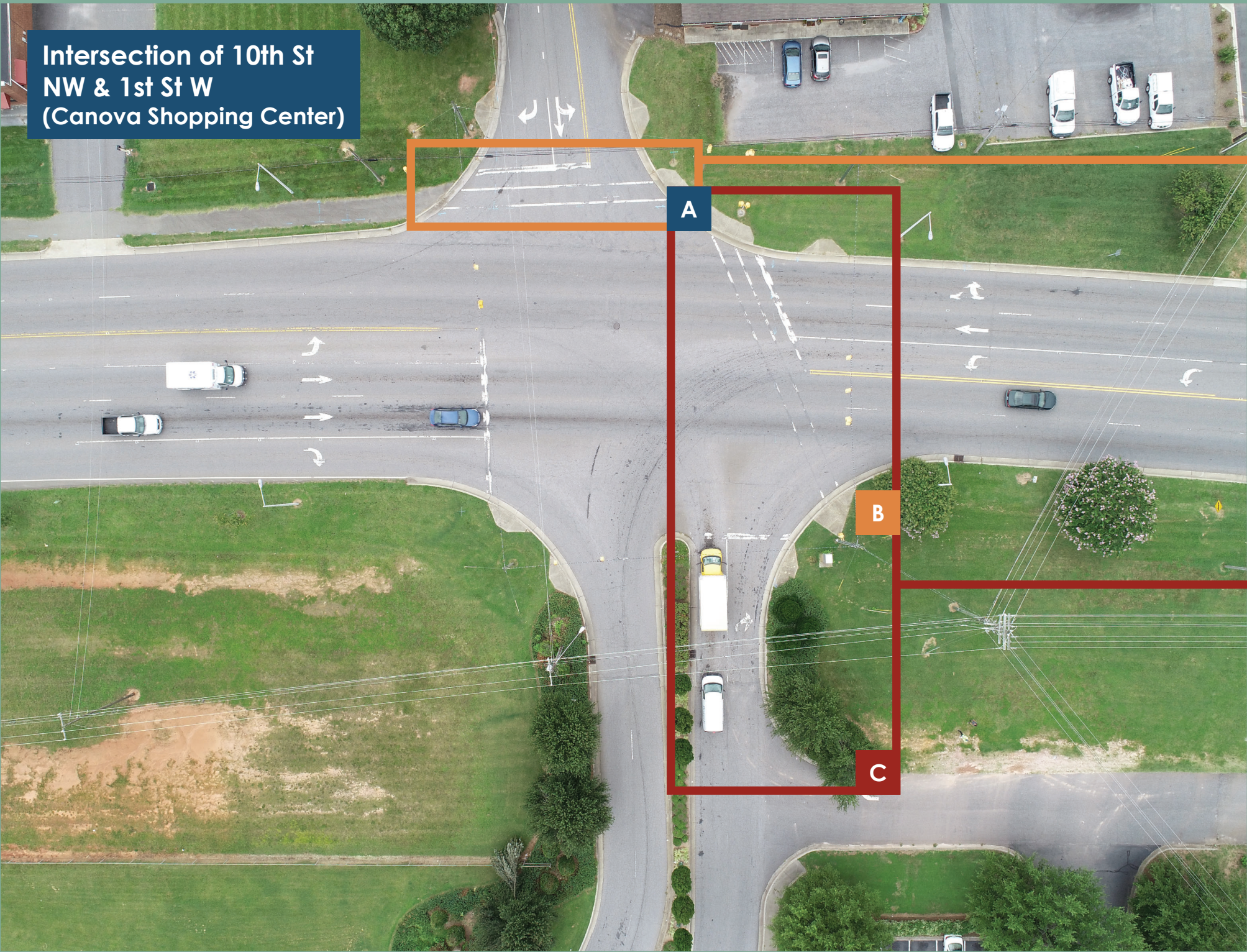
Intersection of NC16 & Emmanuel Church Rd





- » Add detectable warnings to all curb ramps (must visually contrast against pavement)
- » Move pedestrian signal push buttons next to curb ramps so all pedestrians can access. The push button should have a 4' X 4' landing with less than a 2% cross slope in all directions. The landing must be unobstructed and an all-weather surface. The landing can be 30" by 48" for a parallel approach. See standards for pedestrian signals.
- » Restripe crosswalks
- » Evaluate green times for traffic signals to ensure all pedestrians have sufficient crossing time

**Intersection of 10th St
NW & 1st St W
(Canova Shopping Center)**



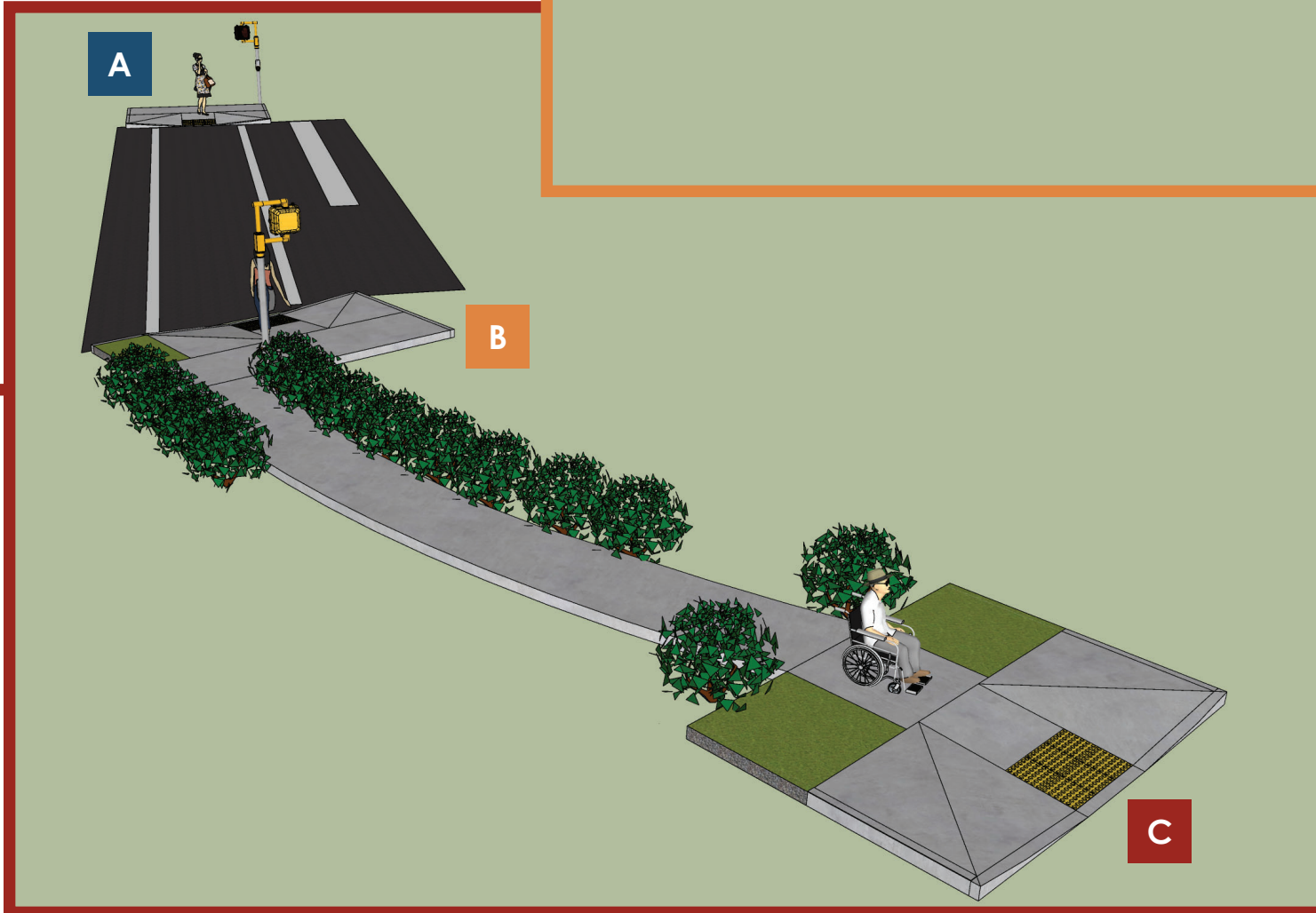
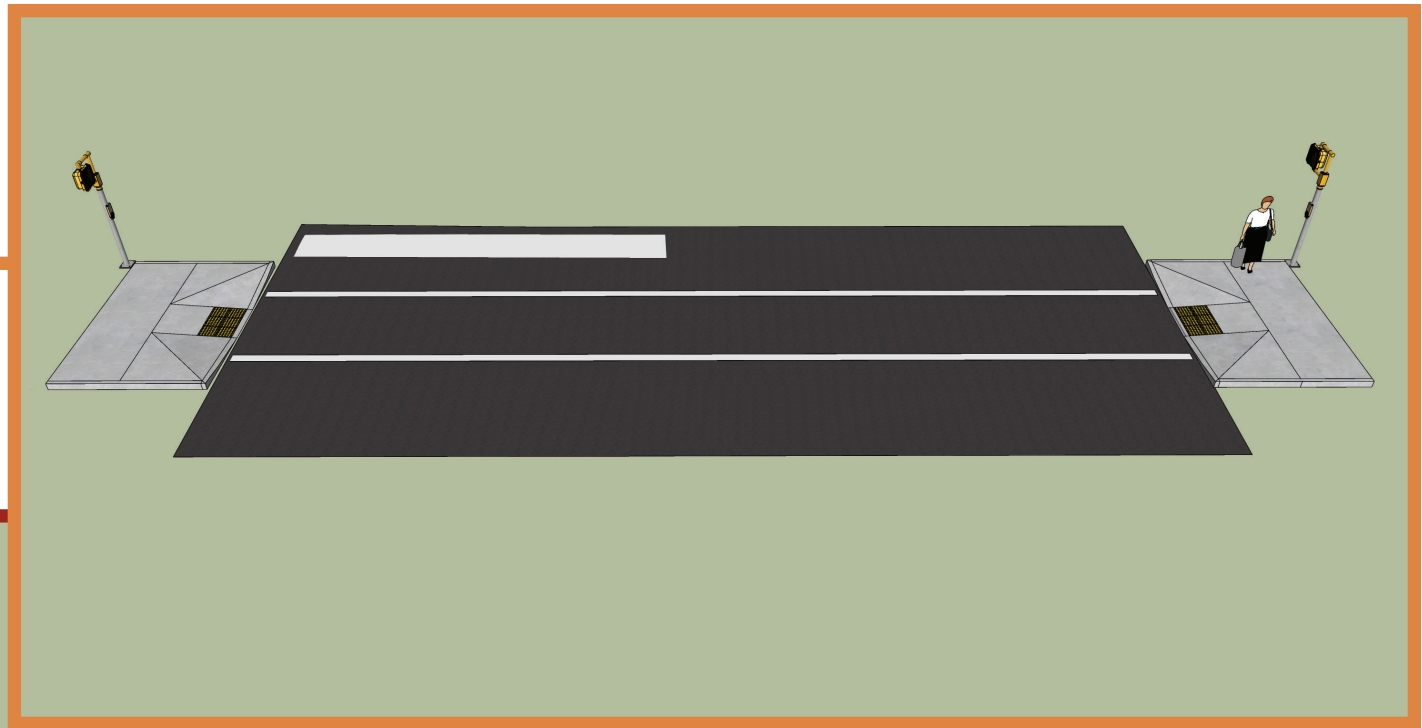
A

B

C

Orange Box Suggestions

- » Add compliant curb ramps with detectable warnings on either side of crosswalk
- » Restripe crosswalk
- » Pedestrian push button located closer to each curb ramp

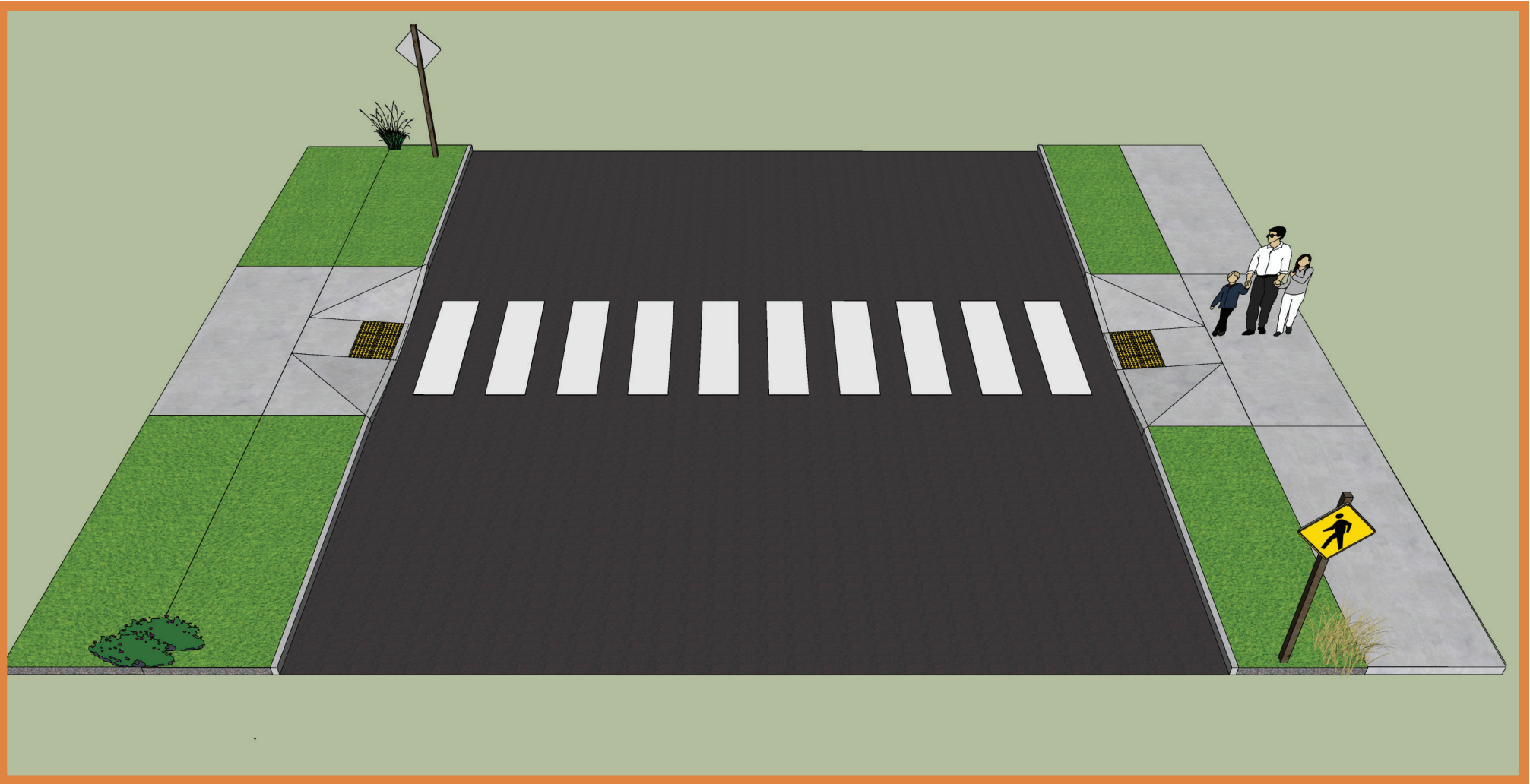


Red Box Suggestions

- » Compliant curb ramps with detectable warnings at A, B, & C
- » Restripe crosswalk
- » Connect sidewalk from B to C
- » Pedestrian signals
- » Evaluate green times for traffic signals to ensure all pedestrians have sufficient crossing time

10th St NW at Canova Shopping Center





The following suggestions are recommended if the Canova shopping center reopens

- » **Extend sidewalk at shopping center down to driveway cut at 10th St NW**
- » **High visual crosswalk across 10th St NW**
- » **Curb ramps with detectable warnings on either side of crosswalk**
- » **Advanced pedestrian signage and/or rapid flashing beacon warning motorists of pedestrian crossing**

COST ESTIMATES

High and medium priority identified issues have been assigned cost estimates, if applicable. Labor has not been included in these estimates because the City's maintenance staff plan to supply personnel to complete the labor. Dirt work (grading), acquisition, and engineering costs have not been included in the cost estimates. A majority of the projects that need this level of improvement are located within an NCDOT right of way and are/could be scheduled for improvement in the future. It is possible that right of way work will be contracted out through NCDOT's bidding process. Due to inflation, material cost and availability of personnel will fluctuate. These cost estimates should be reassessed at the time of implementation by an engineer and city staff.

General changes that are needed, either at no cost or minimal:

- Rearrange furniture to accommodate ADA requirements
- Remove obstacles that are impeding adequate movement.
- Adjust door pressures so the timing to close is compliant with ADA standards.
- Relocate or remove items as identified, such as hooks, dispensers, and fixtures that are protruding into the travel pathway

FACILITIES

(More ornamental signage can cost up to \$80 per sign) Standard signage has been evaluated.)



WHEELCHAIR SYMBOL LIFT SIGN FOR SPAS, SWIMMING POOLS, HOT TUBS, ETC.
(SIZE - 6" x 8")
\$59.99



ADA COMPLIANT WHEELCHAIR ACCESSIBLE EXIT SIGN
\$49.95



ADA WHEELCHAIR ACCESSIBLE EXIT SIGN WITH DIRECTION ARROW AND BRAILLE
\$69.95



NOT AN EXIT SIGN WITH NON-WHEELCHAIR ACCESSIBLE SYMBOL
\$64.95



PUSH TO EXIT SIGN WITH TACTILE TEXT AND BRAILLE - ADA COMPLIANT

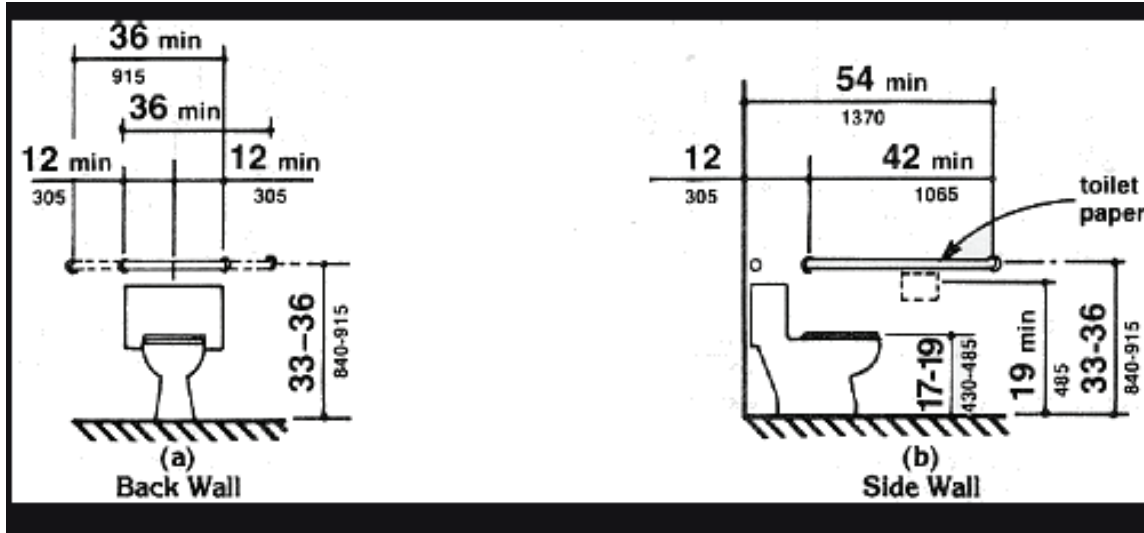
\$44.95



WE ARE PLEASED TO PROVIDE ASSISTANCE FOR CUSTOMERS SIGN

(SIZE - 10" X 10")

\$44.95



BRADLEY GRAB BARS - CONCEALED FLANGES (1 1/4")

(36" Long)

\$31.80



EMPLOYEES ONLY ROOM SIGN - ADA COMPLIANT TACTILE BRAILLE SIGNS

\$44.95



ADA COMPLIANT WHEELCHAIR ACCESSIBLE RESTROOM SIGNS

\$44.95 /per sign



AMERICAN SANITARY TOILET PARTITION SLIDE BOLT LATCH

\$7.48



KEENEY ADA COMPLIANT UNDER SINK SAFETY COVER KIT WITH OFFSET

\$37.76

(Insulation or piping replacement for sink ADA requirements – insulation noodle \$1.00 for 6 feet)

PARKING LOTS



R7-8B CALIFORNIA COMPLIANT VAN ACCESSIBLE HANDICAP PARKING SIGNS

\$29.95

(This sign can be added to the existing signs that are not posted correctly.)



U-CHANNEL POST

\$20.00



HANDICAP VAN ACCESSIBLE PARKING SIGNS

(SIZE - 12" x 18")

\$34.95

(This sign can be used where none exist and one is needed.)

PARKS

POURED PLAYGROUND RUBBER SURFACE – ADA

surface for playgrounds 1000 sq. ft. or larger can range from \$8 to \$14 per sq. ft. installed. For smaller playgrounds, the cost per square foot can be more expensive due to the minimum amount of raw material required. It is more cost effective to use rubber playground safety tiles in smaller play areas.

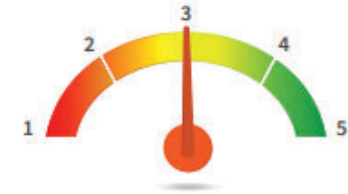
Generally, for wet poured rubber flooring, the surface area should be at least 1000 sq. ft. or more.

Rubber Safety Tiles for Playgrounds less than 1,000 sq. ft.

- 24" x 24" rubber tiles
- Available in both 2-1/2" and 4-1/4" thickness
- ADA compliant edges and accessories

PLAYGROUND SURFACING MATERIAL COMPARISON

As a general rule, unitary surfaces (with the exception of rubber tiles), tend to outperform loose fill materials on every criteria aside from the time and cost to install.



Material Type	Material	 Safety Certified	 Cleanliness	 Maintenance	 Accessibility	 Aesthetic	 Install Cost	 Lifetime Cost
Unitary	Synthetic Grass Systems	Green	Green	Light Green	Green	Green	Light Green	Light Green
Unitary	Poured in Place	Green	Green	Light Green	Green	Green	Yellow	Yellow
Unitary	Bonded Rubber	Green	Green	Light Green	Green	Light Green	Yellow	Light Green
Unitary	Rubber Nuggets	Light Green	Orange	Yellow	Yellow	Yellow	Light Green	Yellow
Unitary	Rubber Tiles	Light Green	Light Green	Light Green	Light Green	Green	Orange	Light Green
Loose-Fill	Engineered Wood Fiber	Light Green	Yellow	Yellow	Yellow	Yellow	Green	Yellow
Loose-Fill	Landscape Wood Mulch	Red	Orange	Yellow	Red	Orange	Green	Yellow
Loose-Fill	Sand	Orange	Red	Orange	Red	Orange	Green	Yellow
Loose-Fill	Pea Gravel	Orange	Orange	Orange	Red	Orange	Green	Yellow

ASPHALT TRAIL FOR ADA ACCESSIBILITY (PARKS)

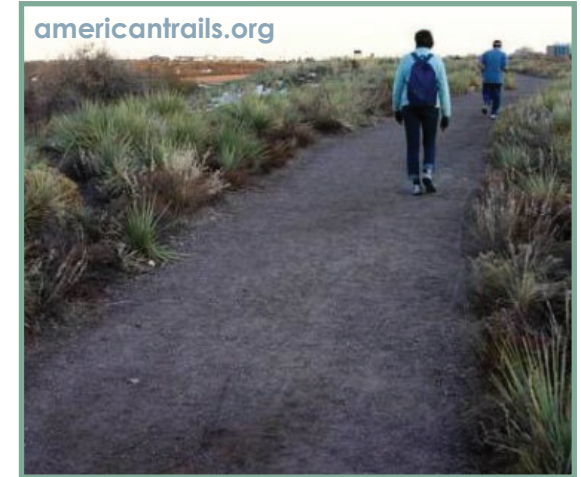
Asphalt paving costs \$7 to \$13 per square foot.

Reference for examples: www.americantrails.org/images/documents/TN-trail-ada.pdf

Crush Cinder Trails - Crusher fine trails usually cost in excess of \$10.00 per linear foot.

"Crushed stone trails provide a user-friendly, all-season surface for all types and ages of visitors, including strollers, wheelchairs, and road bikes."

Cost Range: \$1600 to \$4K (topography, utilities and amount of replacement required due to needed ADA slope are all factors)



ADA HALF RAMP

\$437.95



ELEVATED SAND TABLE

\$1,246.00

Age Group - 2 to 5 years

Description:

- Rounded shape gives more children space to play
- Lipped edge keeps the sand in
- Raised to the perfect height to accommodate all children
- Sturdy legs placed at four points

Unit Cost of Surface Materials

Surfacing

loose fill materials	\$0.30 - \$1.30 per square foot, installed
engineered wood fiber	\$0.90 - \$3.20 per square foot, installed
rubber mats/tiles	\$6.35 - \$16.00 per square foot, installed, including underlayment
poured-in-place rubber	\$8.50 - \$21.00 per square foot, installed, including underlayment
transitions between loose fill and rubber materials	\$5.30 - \$11.00 per linear foot, installed
border materials	\$5.30 - \$16.00 per linear foot, installed

Unit Cost of Equipment Features

Accessible Equipment Features

12 inch rise of 1:12 ramp	\$1,484 - \$2,756
ramp landing	\$2,120 - \$5,512, including barriers
ramp and landing combined, per 12 inch rise	\$3,604 - \$8,218
transfer platform	\$424 - \$742
transfer platform with approach step	\$742 - \$1,590
transfer steps	\$106 - \$530 per foot of rise
earth berm to 24 inches	\$3,710 - \$5,830

Unit Cost of Other Items

Other Cost Elements

stairs	\$106 - \$265 per foot of rise
ladders and climbers	\$32 - \$159 per foot of rise
equipment installation	20% - 40% of equipment <u>cost</u>



**EQUILATERAL TRIANGLE
FABRIC SAIL SHADE
STRUCTURE WITH 12FT.
ENTRY HEIGHT POWDER
COATED STEEL COLUMNS -
BASE MODEL**

(CANOPY SIZE - 15FT.)

\$5,099.95



**BENCH ATTACHMENT ARCH
FABRIC SHADE**

\$1,152.00

Range from 1100 to 6,000 depending on size, type of material and type of installation (footers, inspection, and engineering)

RIGHT OF WAY

New Sidewalk – 65.00 per linear foot (350,000 per mile)

Existing sidewalk repair - 20.00 per linear foot (100,000 per mile)

LEVELING -

The cost of leveling a slab usually ranges from \$500 to \$1,500. This is dependent on the size of the area to level, the materials used, and the labor involved. Foam leveling will likely cost around \$2,000-2,500 for a 100 square foot slab.

DETECTABLE WARNING SURFACE

Detectable warning surface is listed at \$424 per square yard. It was assumed that each curb ramp would be designed with the minimum necessary detectable warning surface necessary – 2' deep and as wide as the depressed area of curb, or 1.1 square yards for each detectable warning surface suggested.

LOW: \$475.00 each

HIGH: \$570.00 each

Stick-on detectable warning – \$200 to \$350

Set in concrete – \$290 to \$400



TRUNCATED DOMES ADA TILES - FOR CONCRETE SURFACES

(SIZE - 2' x 4')

\$209.00



TRUNCATED DOMES CAST-IN-PLACE REPLACEABLE TILE

(SIZE - 3' x 4')

\$289.00



TRUNCATED DOMES CAST-IN-PLACE REMOVABLE TILE

(SIZE - 3' x 5')

\$429.00

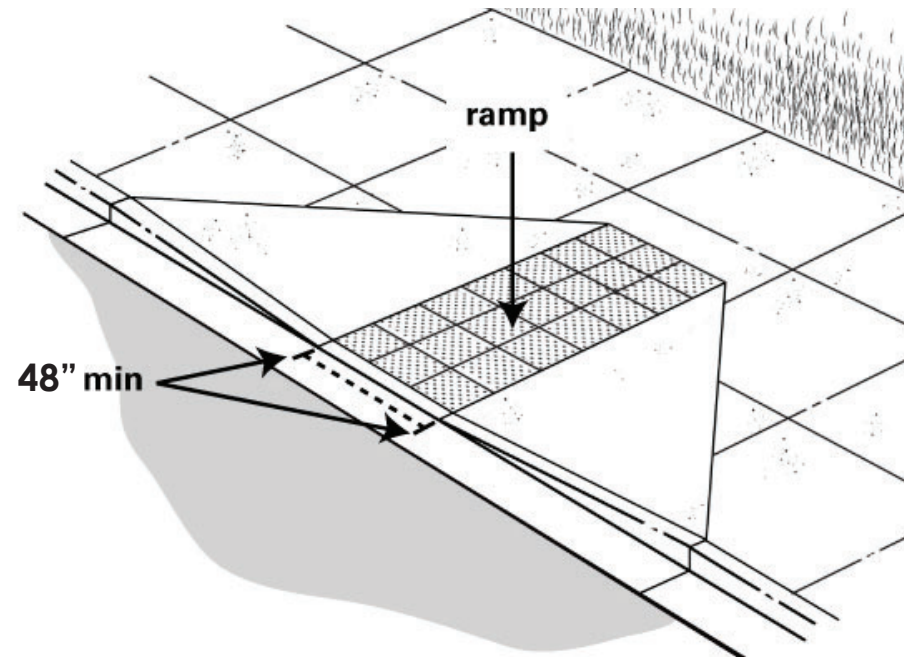
CONSTRUCT ADA-COMPLIANT CURB RAMP

Installing a new curb ramp at a corner is assumed to include the following: constructing a CG-12 with aggregate, a detectable warning surface, a 4' wide strip of concrete along the back of the ramp (about 10 square yards), 8 linear feet of new radial CG-6, sawcutting the existing pavement (about 22 LF), demolishing and then replacing a 1' strip of asphalt pavement along the new curb and curb ramp (about 22 LF), and 5 cubic yards of borrow for any grading that might be necessary behind the new ramp.

LOW: \$2,350.00 each

HIGH: \$2,820.00 each

Cost range due to topography, utilities and amount of replacement required due to needed ADA slope.



REPLACE EXISTING CURB RAMP WITH ADA-COMPLIANT CURB RAMP

Replacing a curb ramp is assumed to involve the following actions: removing the existing concrete curb ramp (assumed to be 12 SY), removing 4 feet of concrete sidewalk along the back of the ramp for grading purposes (about 10 square yards), and installing a new curb ramp.

LOW: \$3,200.00 each

HIGH: \$3,840.00 each

INSTALL CURB AND GUTTER

The installation of curb and gutter includes the costs of sawcutting asphalt pavement, removing a 1' wide strip of existing asphalt pavement, installing a 1' wide strip of full depth asphalt pavement, the cost of the combination concrete curb and gutter itself, and grading behind the curb.

LOW: \$43.00 per linear foot

HIGH: \$51.60 per linear foot

FULL-DEPTH ASPHALT PAVEMENT (TRAIL)

Full depth asphalt pavement is assumed to be 2" of surface course, 4" of intermediate course, 6" of base course, and 8" of aggregate.

LOW: \$101.00 per square yard

HIGH: \$121.20 per square yard

MILL AND OVERLAY (REMOVING, SEALING AND RE-POURING ASPHALT)

Mill and Overlay consists of milling the top layer of flexible pavement and installing a 2" thick overlay on top. The 2" surface course is \$13.03 per SY. Type A Milling (1 ½" depth) is listed at \$30.92 in the Statewide Averages.

LOW: \$49.00 per square yard

HIGH: \$58.80 per square yard

INSTALL BUS STOP PAD

The cost of installing a bus stop pad was based on cost estimates for a group of 11 Fairfax County Bus stops designed by Kimley-Horn. These bus stop pads did not include shelters, and about half included benches. The five most expensive bus stop pads were averaged to produce the "high" cost and six least expensive were averaged to produce the "low" cost. These costs reflect only the construction costs associated with the construction of the bus stop pad and do not include mobilization, maintenance of traffic, utility relocations, professional engineering services, surveys, production of plats, or any contingencies.

LOW: \$5,000.00 each

HIGH: \$9,200.00 each

DEMOLITION OF ASPHALT PAVEMENT

Demolition of flexible pavement is listed at \$10.68 per SY.

LOW: \$11.00 per square yard

HIGH: \$13.20 per square yard

CURBED SIDEWALK

Curbed sidewalk is bid as curb-abutted sidewalk with no buffer space.

LOW: \$63.00 per linear foot

HIGH: \$75.60 per linear foot

DEMOLISH CONCRETE MEDIAN NOSE

This item includes the demolition of 5 linear foot of concrete median nose, replacing that space with full-depth pavement, and relocating the sign that was in the median nose. The cost for demolishing the median nose is assumed to be the same as demolition of curb and gutter, which is listed at \$18.10.

LOW: \$1,600.00 each

HIGH: \$1,920.00 each

RELOCATE PEDESTRIAN SIGNAL POLE

Relocating a pedestrian signal pole requires the removal and disposal of the existing pedestal pole and associated push buttons, signs, signal heads, wiring, and junction boxes. The total cost of these items is \$2,650 as derived from previous project experience. The new pole requires a PF-2 Pole and PF-2 Pole Foundation, 500 linear foot of both 14 AWG/7C and 14 AWG/2C conductor cable, a push button with associated sign, and a LED pedestrian signal head. The cost for the PF-2 Pole and foundation is a combined \$1,570. The cost for the conductor cables, push button and sign, and a pedestrian LED Signal Head is a combined \$5,665 as derived from previous project experience.

LOW: \$10,000.00 each

HIGH: \$12,000.00 each

NEW PEDESTRIAN SIGNAL POLE

The new pole requires a PF-2 Pole and PF-2 Pole Foundation, 500 linear foot of both 14 AWG/7C and 14 AWG/2C conductor cable, a push button with associated sign, a LED pedestrian signal head, and a new junction box. The cost for the PF-2 Pole and foundation is a combined \$1,570. The cost for the conductor cables, push button and sign, a pedestrian LED Signal Head, and new junction box is a combined \$6,125 as derived from previous project experience.

LOW: \$7,800.00 each

HIGH: \$9,360.00 each

UPDATE SIGNAL DISPLAY

Updating a signal display requires a new 3-Section Signal Head, 500' of 14AWG/7C conductor cable, and removing and disposing of the existing signal heads. From past projects, we've estimated this cost at \$2,300 per updated signal head.

LOW: \$2,300.00 per updated signal head

HIGH: \$2,760.00 per updated signal head

IMPLEMENT SPLIT PHASE OPERATIONS

Implementing split phase operations is assumed to include the installation of a new 4-Section Signal Head, 500 linear foot of 14AWG/7C, a new elongated double arrow, and the removal of existing signal head for each approach. Implementing split phase operations assumes doing this to both sides of an approach, so costs are doubled.

LOW: \$7,300.00 per pair of approaches

HIGH: \$8,760.00 per pair of approaches

FLASHING SIGNAL BEACON

It is assumed that flashing signal beacons will be hard-wired to the signal cabinet. Each pair of flashing signal beacons includes signs, beacons, poles, foundations, conduit, conductor cable, and junction boxes. Based on prior project experience, the combined cost of these items will be \$15,000.

LOW: \$15,000.00 per pair

HIGH: \$18,000.00 per pair

STRIPING

4" pavement markings are listed at \$0.61 per linear foot

LOW: \$0.61 per linear foot

HIGH: \$0.73 per linear foot

RE-STRIPING

Re-striping a road requires both eradicating pavement markings and laying down new pavement markings. Eradicating pavement markings is listed at \$0.53 per linear foot averages, and 4" pavement markings are listed at \$0.61 per linear foot.

LOW: \$1.14 per linear foot

HIGH: \$1.37 per linear foot

STRIPING FOR TURN LANE

Striping for a turn lane is assumed to include three elongated single turn arrows, and two "ONLY" pavement markings.

LOW: \$950.00 per turn lane

HIGH: \$1,140.00 per turn lane

ELONGATED ARROW

Elongated single arrows are listed at \$107.73 each

LOW: \$110.00 each

HIGH: \$132.00 each

ELONGATED DOUBLE ARROW

Elongated double arrows are listed at \$152.20 each

LOW: \$160.00 each

HIGH: \$192.00 each

STOP BAR

24" Type B Class IV Pavement Markings at \$16.05 per linear foot.

LOW: \$16.00 per linear foot

HIGH: \$19.20 per linear foot



30" PUSH BUTTON LED FLASHING CROSSWALK SYSTEM

\$4,399.99



SOLAR HORIZONTAL RAPID FLASHING BEACON SYSTEM BACK TO BACK WITH PUSH BUTTON ACTIVATION

\$3,499.99

LED lighting solutions

SENSE OF SAFETY AND SECURITY ALONG PEDESTRIAN ROUTES ANALYSIS

SAFE ROUTES NETWORK TO CONOVER FACILITIES

In addition to ADA standards, other factors need to be analyzed to determine route improvements and designs for pedestrians around Conover owned facilities. To address safety issues accurately, root safety hazards must be identified. This analysis covers more common roadway issues influencing pedestrian sense of safety. Pedestrian facilities must offer security elements before citizens and tourists will feel comfortable utilizing them.

This section examines the road and pedestrian infrastructure around Conover's twenty-one facilities (listed in Table X.1) to develop a proposed Safe Routes Network (SRN) for walkers to use. This analysis utilized WPCOG's Geographic Information System (GIS) to build the walking system. GIS products used included ArcMap 10.7.1, a mapping software from Environment Systems Research Institutes (ESRI), ESRI's ArcGIS Network Analyst, and GIS data provided by the North Carolina Department of Transportation and Greater Hickory Metropolitan Planning Organization. The GIS data inputs included Annual Average Daily Traffic (AADT) counts, existing sidewalk locations, posted speed limits, and road functional classes to define the SRN. Pedestrian crashes were also addressed to further identify problem areas within and outside of the SRN.

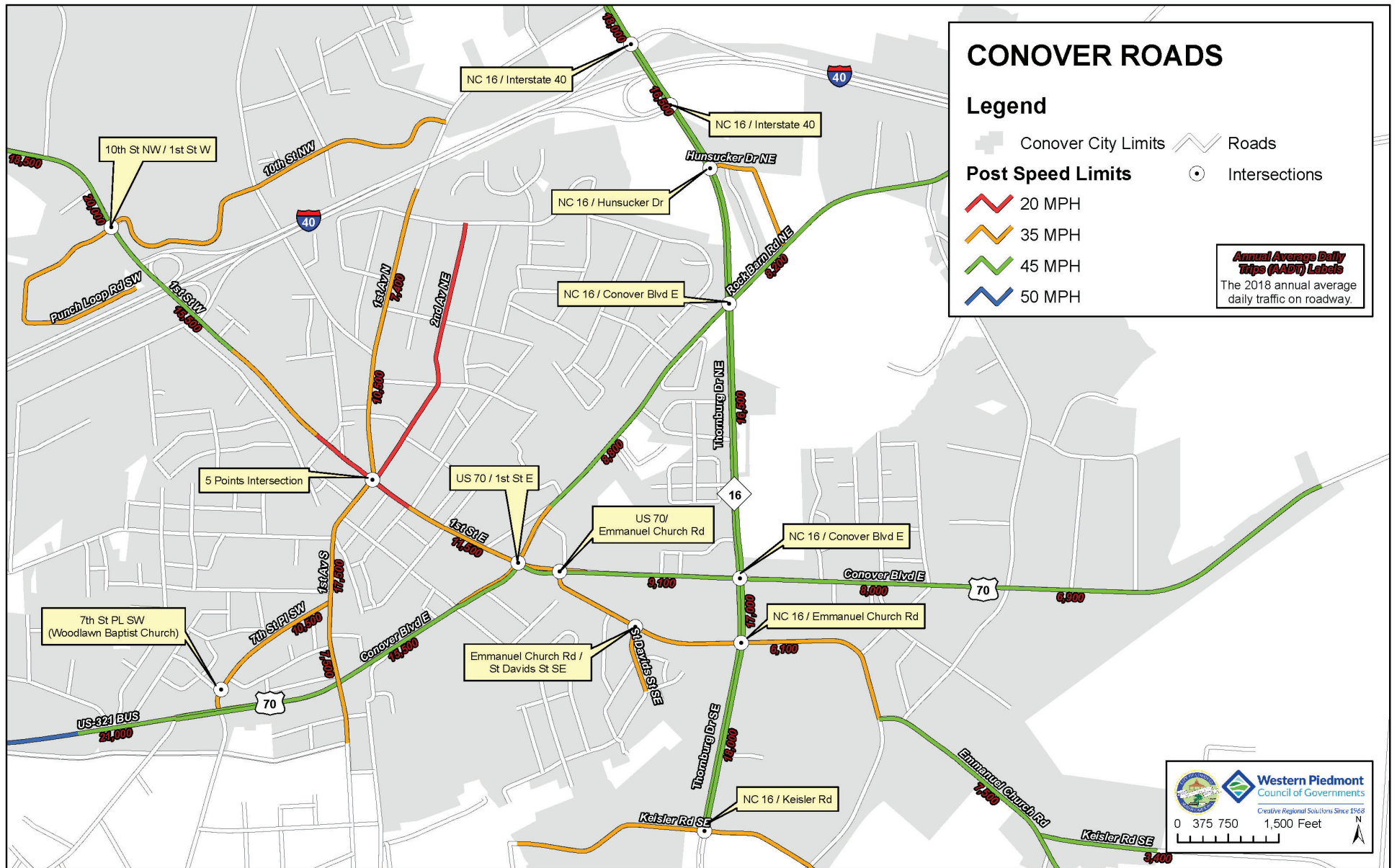
AADT AND POSTED SPEED LIMITS

The map on page 137 displays available AADT counts as well as posted speed limits. The points call out specific problematic areas noted previously in the Pedestrian Right of Way section. The highest traffic volumes and highest speeds are along NC 16. The pedestrian facilities are compliant along this route; however, intersections lack a sense of pedestrian safety. 1st Ave South has a lower speed limit of 35; however, AADT counts are as high as 17,500. This is problematic at the intersection of 4th St Southwest

Table 5 Conover Facilities

Facility Name	Facility Type
City Hall	City Hall
Conover City Park	Park
Conover Station	Conover Station
Downtown Park	Park
Fire Station 1	Fire Station
Fire Station 2	Fire Station
Fire Station 3	Fire Station
Fleet Maintenance (Division of Public Works)	Public Works
Hines Park	Park
Hunsucker Park	Park
Majestic Park	Park
NE Alleyway Parking Lot	Parking Lot
Police Department	Police Department
Post Office Parking Lot	Parking Lot
Public Works	Public Works
Rowe Park	Park
SE Alleyway Parking Lot	Parking Lot
Sherrod Parking Lot	Parking Lot
Travis Park	Park
Washington Park	Park
Z-Gate Parking Lot	Parking Lot

and 1st Ave South, 5 Points intersection, as well as the midblock crossing downtown. 7th St Place Southwest has a speed limit of 35 and an AADT count of 10,500. The high traffic counts and speed limits of US 70 make the midblock crossing on 7th St Place Southwest hazardous without proper warnings to motorists. The intersection of 10th St Northwest and 1st St West has a speed limit of 45 mph as well as an AADT of 20,000. An improved crossing at 1st St West is necessary for pedestrian safety. Please see suggested safety and ADA improvements in the Pedestrian Right of Way section.



This map is a graphic representation and should only be used for illustrative purposes. Map made with data provided by City of Conover, Catawba County GIS, NCDOT, and ESRI.

Document Path: Q:\GIS_Data\Code_Enforcement\ADA_Maps\RoadMaps\Conover_RoadMap.mxd

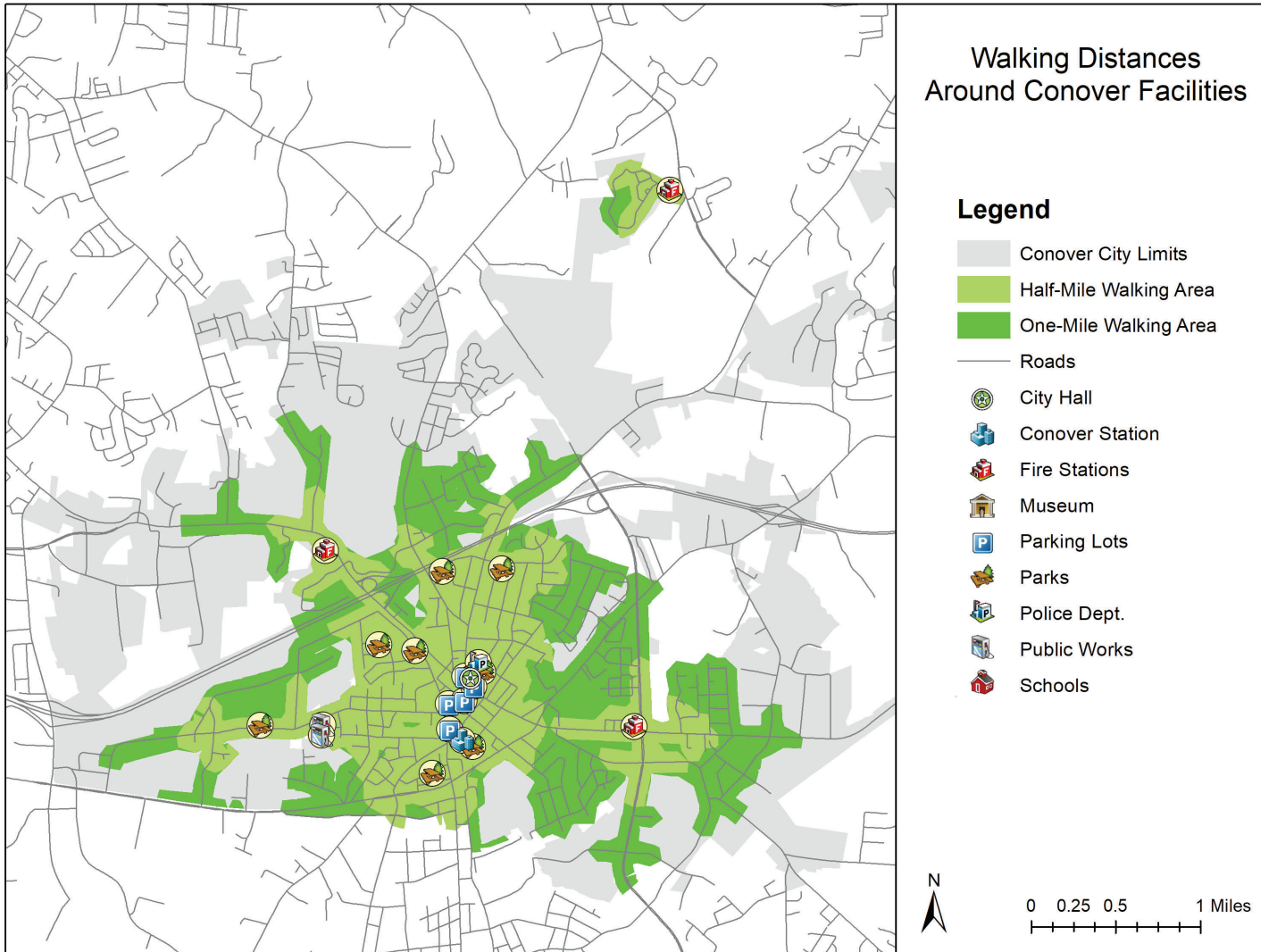
Western Piedmont Council of Governments
Creative Regional Solutions Since 1968

0 375 750 1,500 Feet

Scale bar and north arrow.

WALKING AREAS

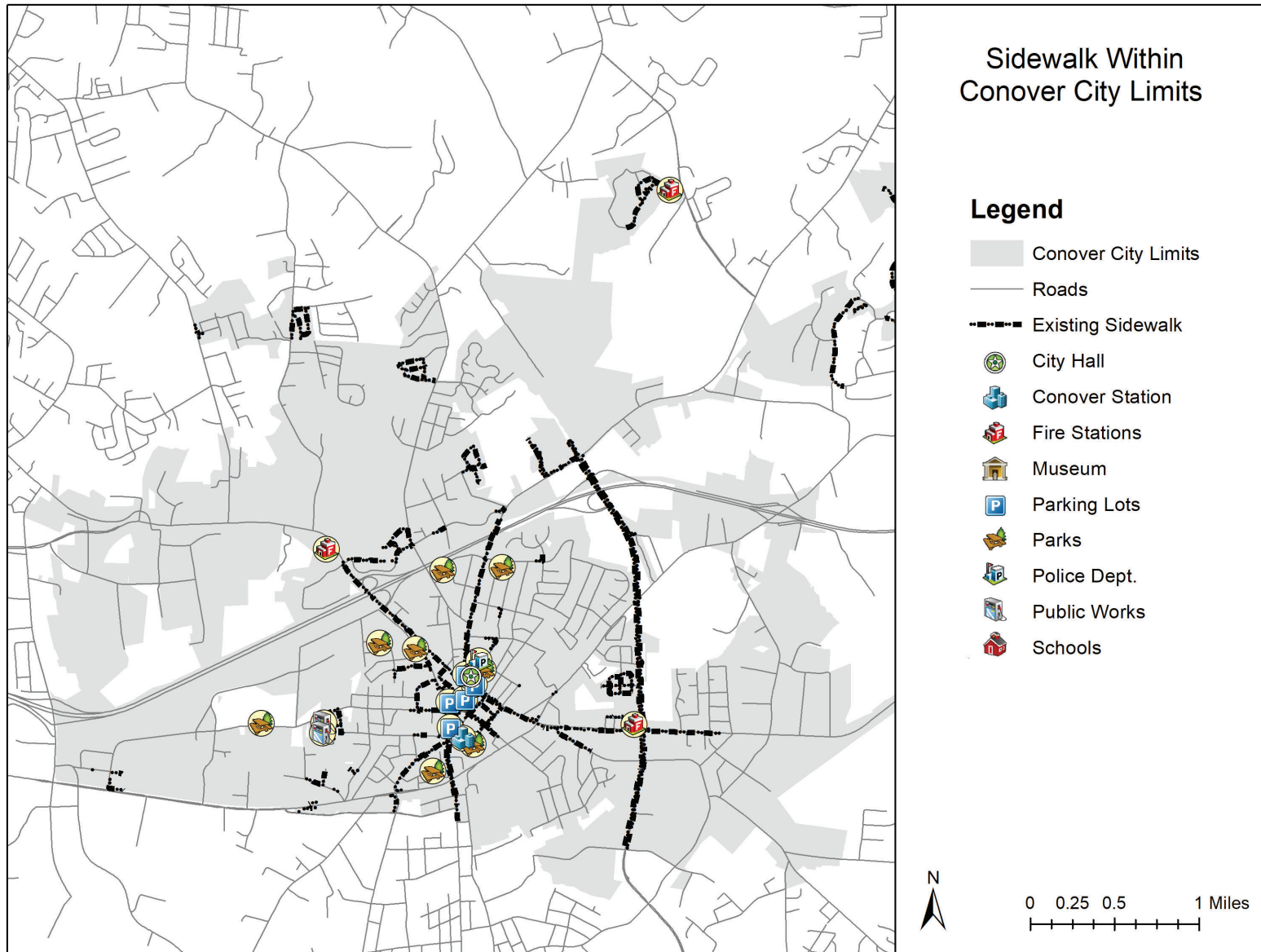
The map below shows half-mile and one-mile buffers around Conover owned facilities. These buffers represent most probable walking areas pedestrians would have to take to access Conover facilities. Buffers are limited to inside Conover's city limits and generated by the Network Analyst. There are 43-miles of road within the half-mile area and 65-miles of the road in the one-mile area. The half-mile distance is considered the standard length from which the facilities can be reached in ten minutes. The one-mile space captures the remaining 29-miles of street more than half a mile from a Conover facility. The assessment for the safe route system evaluated all the roads within the one-mile area to address whether a pedestrian can reasonably access routes to Conover facilities.



This map is a graphic representation and should only be used for illustrative purposes. Map made with data provided by City of Conover, Catawba County GIS, NCDOT, and ESRI.
Document Path: Q:\GIS_Data\Code_Enforcement\ADA_Maps\SidewalkMaps\Conover_Walking\Conover_WalkingDistances.mxd

SIDEWALK

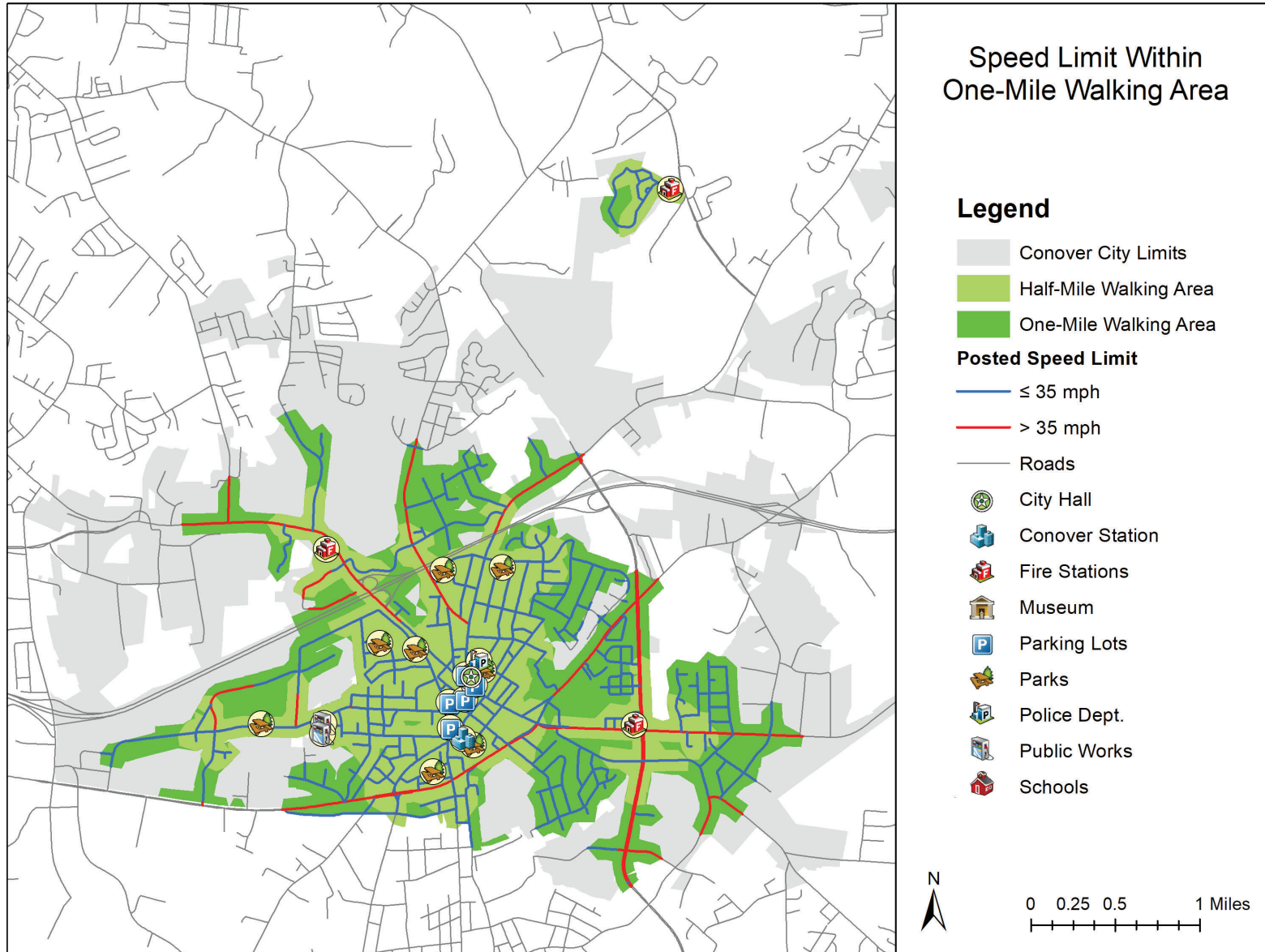
The twenty-eight miles of Conover sidewalk are drawn on the map below. The safe route system included all street sections with a sidewalk. This did not analyze sidewalk condition or compliance. Sidewalk can be found around most Conover facilities. Future sidewalk should connect the remaining facilities to the pedestrian network as well as offer neighborhoods, schools, grocery stores, medical, and employment connections.



This map is a graphic representation and should only be used for illustrative purposes. Map made with data provided by City of Conover, Catawba County GIS, NCDOT, and ESRI.
Document Path: Q:\GIS_Data\Code_Enforcement\ADA_Maps\Sidewalk\Maps\Conover_Walking\Conover_Sidewalks.mxd

POSTED SPEED LIMIT

The following map offers a more in-depth view of posted speed limits of roads surrounding Conover facilities. All the roads within the one-mile walking area have a posted speed limit of 20, 35, 45, 50, or 55 mph. The map below shows routes that are less than or equal to 35 mph and routes that are greater than 35 mph. Routes with a 35 mph or lower speed limit are considered less hazardous on SRNs.



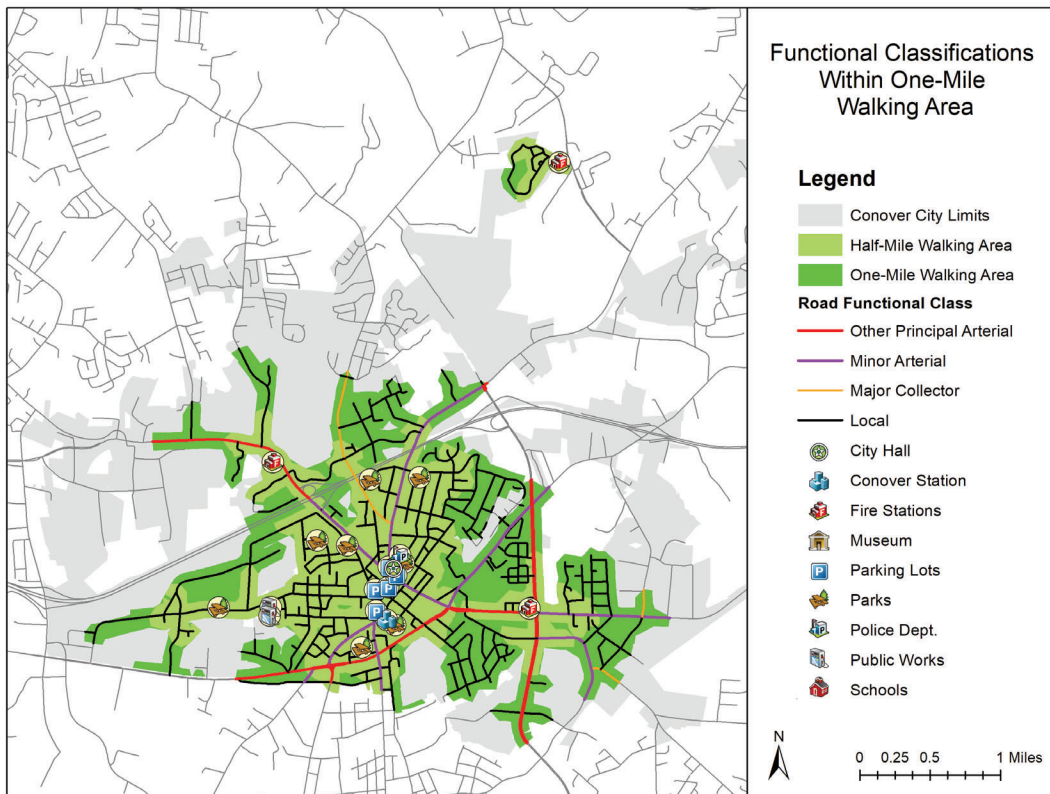
This map is a graphic representation and should only be used for illustrative purposes. Map made with data provided by City of Conover, Catawba County GIS, NCDOT, and ESRI.
Document Path: Q:\GIS_Data\Code_Enforcement\ADA_Maps\SidewalkMaps\Conover_Walking\Conover_PostedSpeedLimit.mxd

FUNCTIONAL CLASSIFICATION SYSTEM

The United States Department of Transportation Federal Highway Administration defines functional classification of routes as “the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide” (Source: USDOT FHA). The map below classifies the road network as other principal arterials, minor arterials, major collectors, or local streets within the one-mile area. Definitions for these functional classifications are listed below.

Principal Arterial – The principal arterial system should serve the major centers of activity of a metropolitan area, the highest traffic volume corridors, and the longest trip desires; and should carry a high proportion of the total urban area travel on a minimum of mileage. Principal Arterials should be further divided into three subcategories: Interstates; Other Freeways and Expressways; and Other.

Minor Arterial – The minor arterial street system should interconnect with and augment the urban principal arterial system. This street system should also provide service to trips of moderate length at a somewhat lower level of travel mobility than principal arterials.



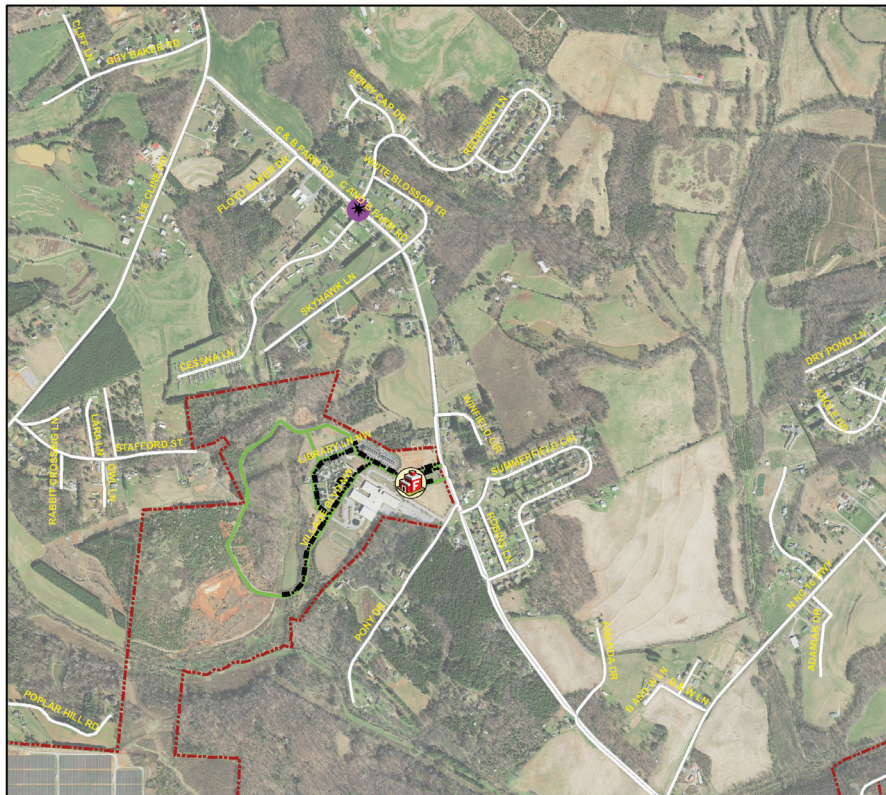
Collector – The collector street system provides land access service and traffic circulation within residential neighborhoods, commercial and industrial areas. This street system differs from the arterial system described above. Facilities on the collector system may intersect residential neighborhoods, thus distributing trips from arterials throughout the area to destinations. In rural areas, the collectors are further divided into major and minor collectors.

Local – The local street system consists of all roads not defined as arterials or collectors (Source: NCDOT).

Each classification serves a different purpose for moving traffic along roadways. Travel characteristics for arterials are high speed limits and highest usage in terms of vehicle average daily trips. Collectors are built for moderate speed limits and moderate usage. Local streets have the lowest posted limits and daily vehicle trips (Source: USDOT FHA). All local classified roads are included in the safe route network since they generally have lower speed limits and lower AADTs.

SRN GRID AND DOCUMENTED PEDESTRIAN CRASHES

The following maps display a magnified grid version of Conover's proposed SRN, Conover facilities, and pedestrian crashes. While many pedestrian crashes fell outside of the proposed SRN, several occurred within the SRN at identified problematic areas noted in the pedestrian right of way section. Each factor within the SRN should be analyzed in coordination with ADA standards to reduce pedestrian crashes.

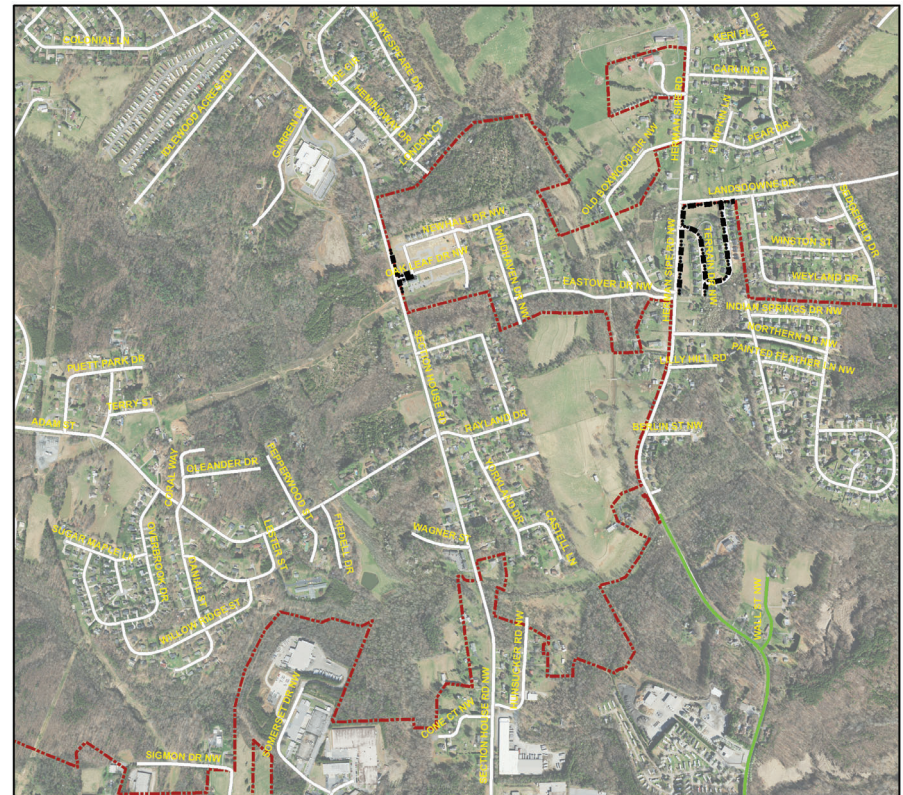
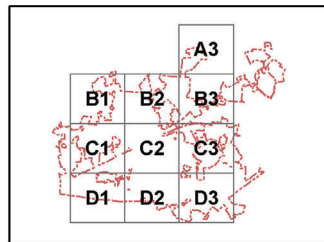


Legend

- Conover City Limits
- Safe Routes
- Existing Sidewalk
- Roads
- City Hall
- Conover Station
- Fire Stations
- Museum
- Parking Lots
- Parks
- Police Dept.
- Public Works
- Schools
- Pedestrian Crashes
- Crosswalks
- Pedestrian Islands
- Pedestrian Signals

Safe Routes Network

GRID Index: A3

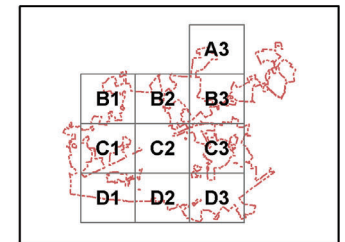


Legend

- Conover City Limits
- Safe Routes
- Existing Sidewalk
- Roads
- City Hall
- Conover Station
- Fire Stations
- Museum
- Parking Lots
- Parks
- Police Dept.
- Public Works
- Schools
- Pedestrian Crashes
- Crosswalks
- Pedestrian Islands
- Pedestrian Signals

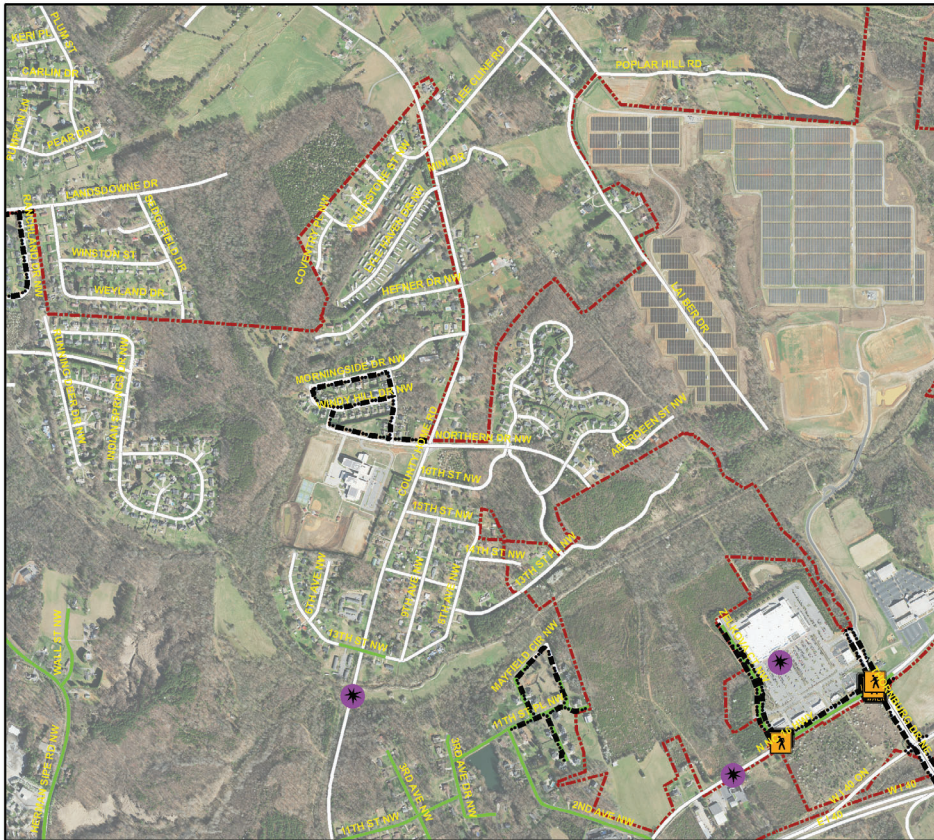
Safe Routes Network

GRID Index: B1



This map is a graphic representation and should only be used for illustrative purposes. Map made with data provided by City of Conover, Catawba County GIS, NCDOT, and ESRI. Document Path: Q:\GIS_Data\Code_Enforcement\ADA_Maps\Sidewalk\Map\Conover_Walking\Conover_WalkingNetwork_Mapbook.mxd

This map is a graphic representation and should only be used for illustrative purposes. Map made with data provided by City of Conover, Catawba County GIS, NCDOT, and ESRI. Document Path: Q:\GIS_Data\Code_Enforcement\ADA_Maps\Sidewalk\Map\Conover_Walking\Conover_WalkingNetwork_Mapbook.mxd

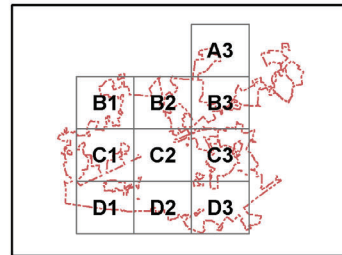


Legend

- Conover City Limits
- Safe Routes
- Existing Sidewalk
- Roads
- City Hall
- Conover Station
- Fire Stations
- Museum
- Parking Lots
- Parks
- Police Dept.
- Public Works
- Schools
- Pedestrian Crashes
- Crosswalks
- Pedestrian Islands
- Pedestrian Signals

Safe Routes Network

GRID Index: B2



This map is a graphic representation and should only be used for illustrative purposes. Map made with data provided by City of Conover, Catawba County GIS, NCDOT, and ESRI. Document Path: Q:\GIS_Data\Code_Enforcement\ADA_Maps\Sidewalk\Maps\Conover_Walking\Conover_WalkingNetwork_Mapbook.mxd

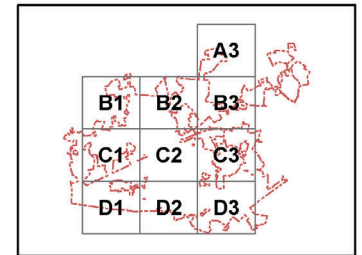


Legend

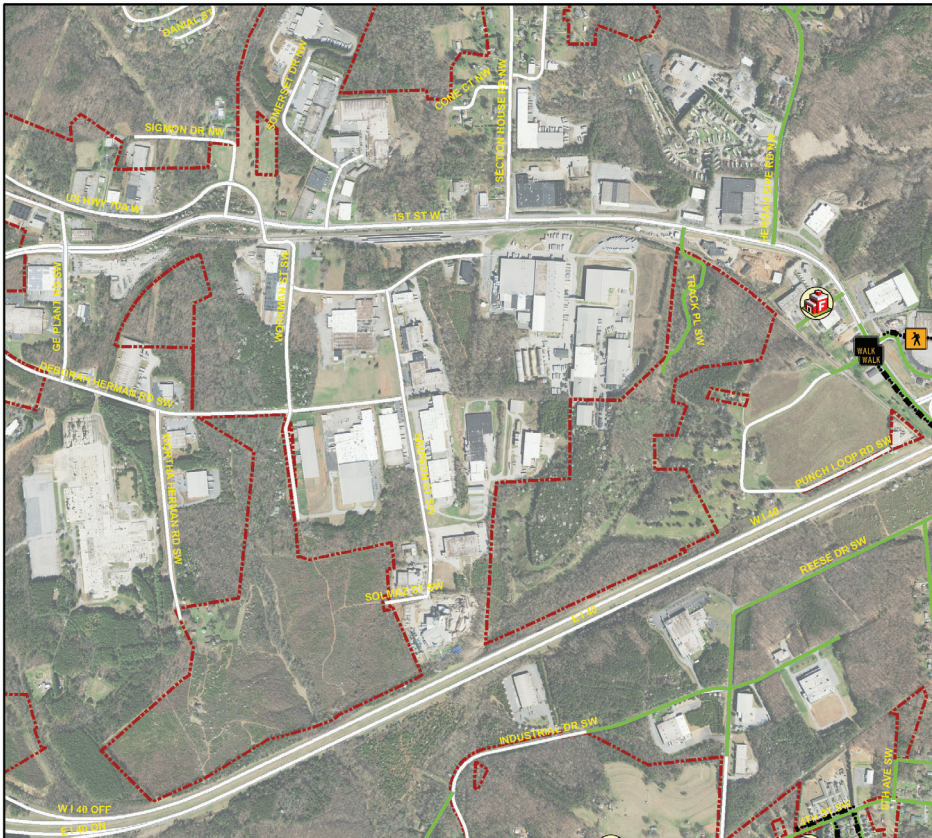
- Conover City Limits
- Safe Routes
- Existing Sidewalk
- Roads
- City Hall
- Conover Station
- Fire Stations
- Museum
- Parking Lots
- Parks
- Police Dept.
- Public Works
- Schools
- Pedestrian Crashes
- Crosswalks
- Pedestrian Islands
- Pedestrian Signals

Safe Routes Network

GRID Index: B3



This map is a graphic representation and should only be used for illustrative purposes. Map made with data provided by City of Conover, Catawba County GIS, NCDOT, and ESRI. Document Path: Q:\GIS_Data\Code_Enforcement\ADA_Maps\Sidewalk\Maps\Conover_Walking\Conover_WalkingNetwork_Mapbook.mxd

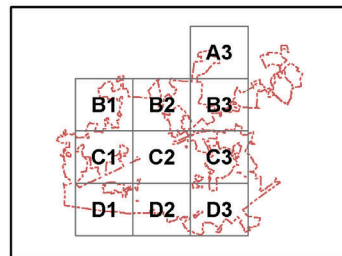


Legend

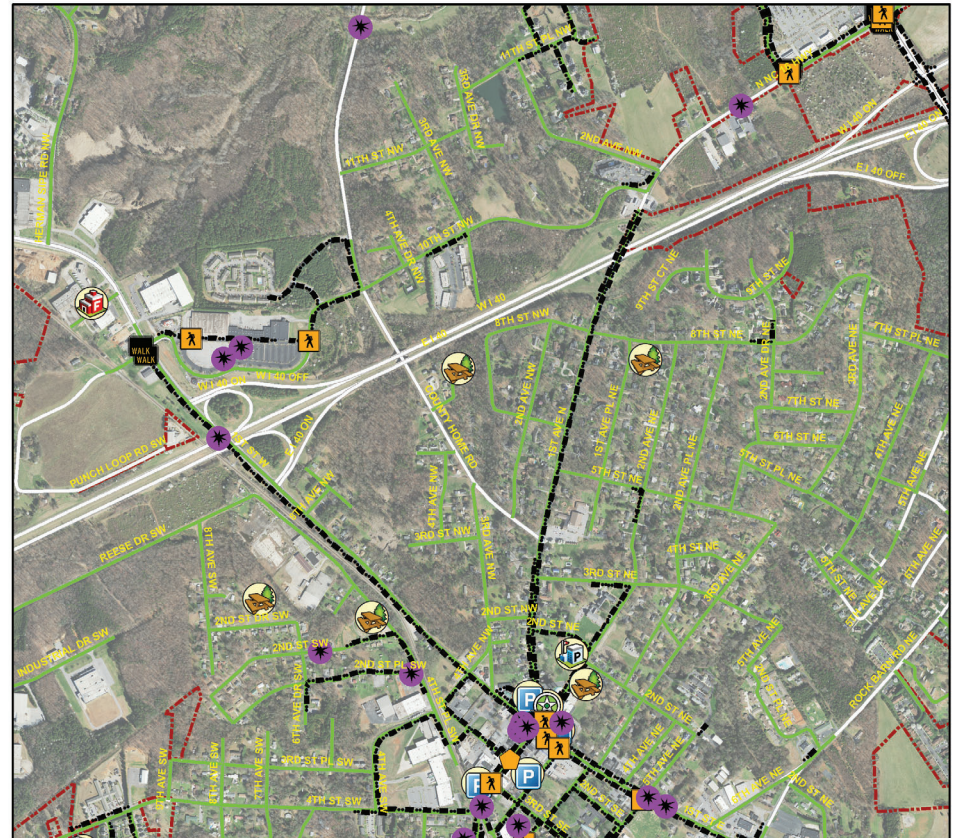
- Conover City Limits
- Safe Routes
- Existing Sidewalk
- Roads
- City Hall
- Conover Station
- Fire Stations
- Museum
- Parking Lots
- Parks
- Police Dept.
- Public Works
- Schools
- Pedestrian Crashes
- Crosswalks
- Pedestrian Islands
- Pedestrian Signals

Safe Routes Network

GRID Index: C1



This map is a graphic representation and should only be used for illustrative purposes. Map made with data provided by City of Conover, Catawba County GIS, NCDOT, and ESRI. Document Path: Q:\GIS_Data\Code_Enforcement\ADA_Maps\SidewalkMaps\Conover_Walking\Conover_WalkingNetwork_Mapbook.mxd

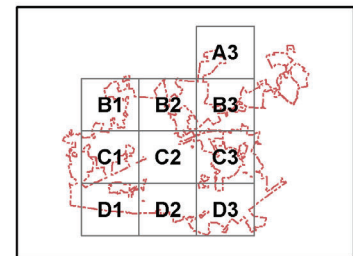


Legend

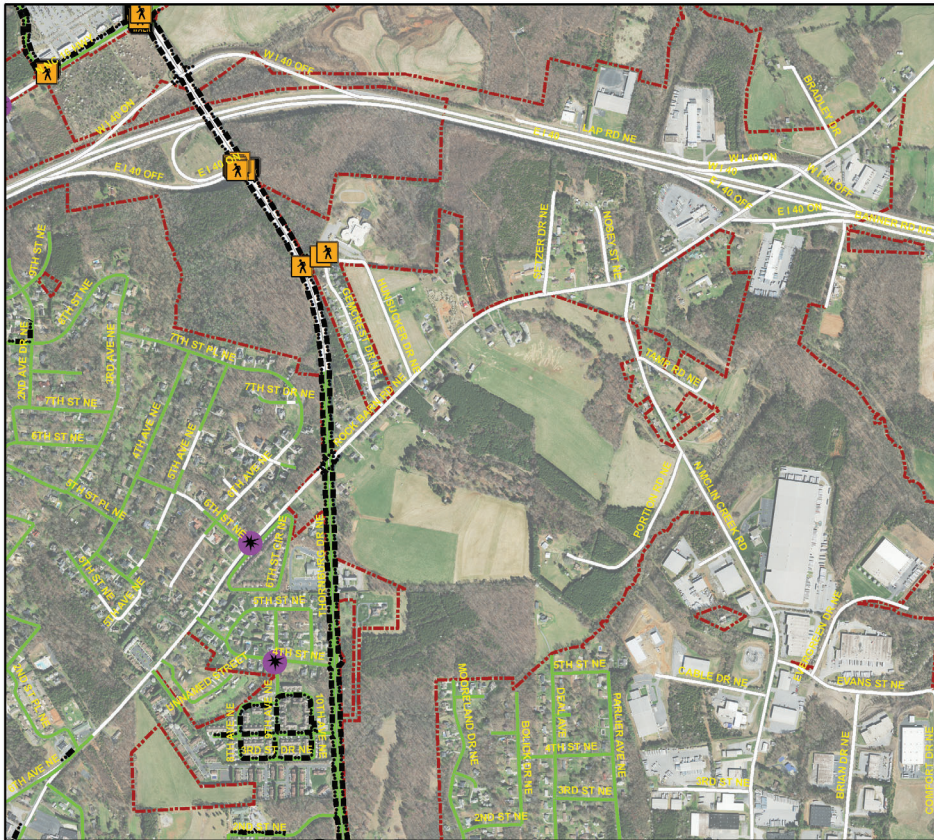
- Conover City Limits
- Safe Routes
- Existing Sidewalk
- Roads
- City Hall
- Conover Station
- Fire Stations
- Museum
- Parking Lots
- Parks
- Police Dept.
- Public Works
- Schools
- Pedestrian Crashes
- Crosswalks
- Pedestrian Islands
- Pedestrian Signals

Safe Routes Network

GRID Index: C2



This map is a graphic representation and should only be used for illustrative purposes. Map made with data provided by City of Conover, Catawba County GIS, NCDOT, and ESRI. Document Path: Q:\GIS_Data\Code_Enforcement\ADA_Maps\SidewalkMaps\Conover_Walking\Conover_WalkingNetwork_Mapbook.mxd

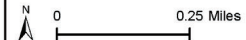
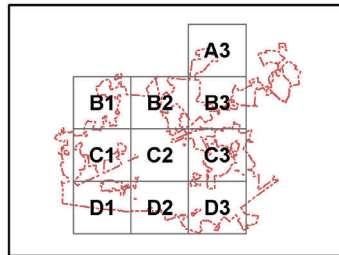


Legend

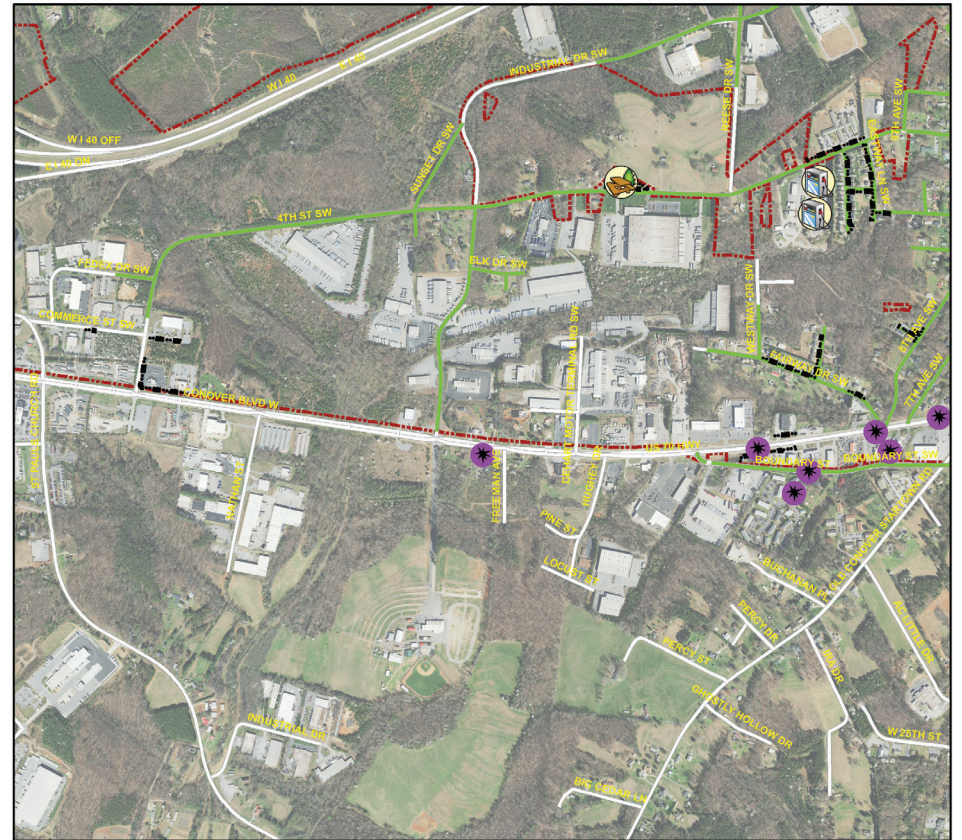
- Conover City Limits
- Safe Routes
- Existing Sidewalk
- Roads
- City Hall
- Conover Station
- Fire Stations
- Museum
- Parking Lots
- Parks
- Police Dept.
- Public Works
- Schools
- * Pedestrian Crashes
- ⚓ Crosswalks
- ⬠ Pedestrian Islands
- WALK Pedestrian Signals

Safe Routes Network

GRID Index: C3



This map is a graphic representation and should only be used for illustrative purposes. Map made with data provided by City of Conover, Catawba County GIS, NCDOT, and ESRI. Document Path: Q:\GIS_Data\Code_Enforcement\ADA_Maps\SidewalkMaps\Conover_Walking\Conover_WalkingNetwork_Mapbook.mxd

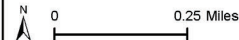
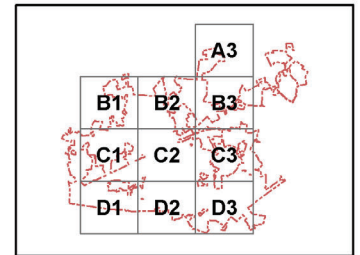


Legend

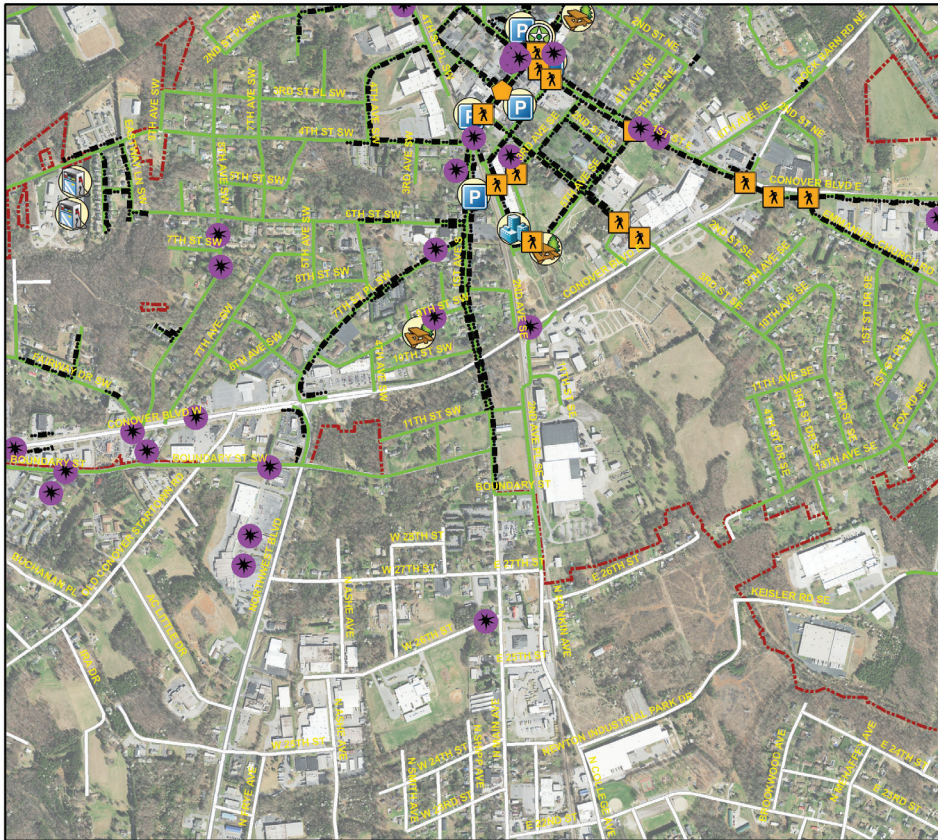
- Conover City Limits
- Safe Routes
- Existing Sidewalk
- Roads
- City Hall
- Conover Station
- Fire Stations
- Museum
- Parking Lots
- Parks
- Police Dept.
- Public Works
- Schools
- * Pedestrian Crashes
- ⚓ Crosswalks
- ⬠ Pedestrian Islands
- WALK Pedestrian Signals

Safe Routes Network

GRID Index: D1



This map is a graphic representation and should only be used for illustrative purposes. Map made with data provided by City of Conover, Catawba County GIS, NCDOT, and ESRI. Document Path: Q:\GIS_Data\Code_Enforcement\ADA_Maps\SidewalkMaps\Conover_Walking\Conover_WalkingNetwork_Mapbook.mxd

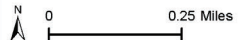
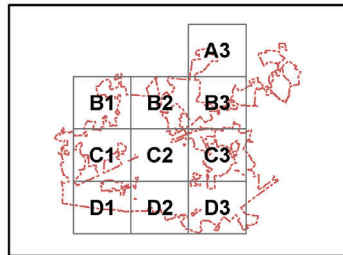


Legend

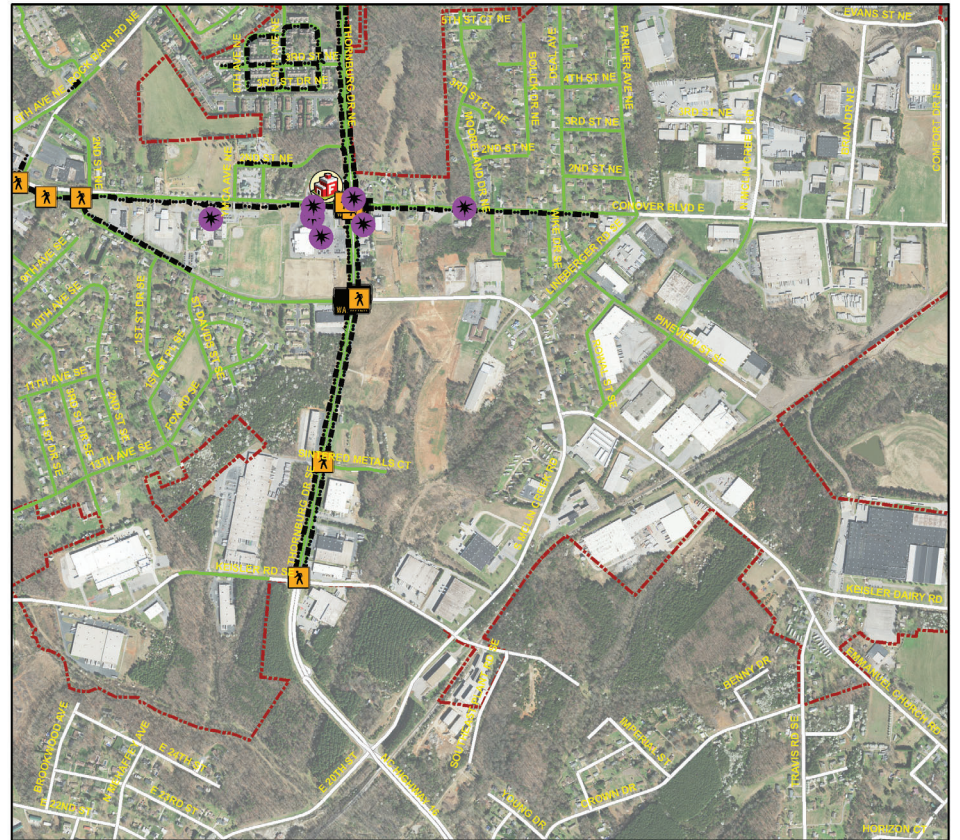
- Conover City Limits
- Safe Routes
- Existing Sidewalk
- Roads
- City Hall
- Conover Station
- Fire Stations
- Museum
- Parking Lots
- Parks
- Police Dept.
- Public Works
- Schools
- Pedestrian Crashes
- Crosswalks
- Pedestrian Islands
- Pedestrian Signals

Safe Routes Network

GRID Index: D2



This map is a graphic representation and should only be used for illustrative purposes. Map made with data provided by City of Conover, Catawba County GIS, NCDOT, and ESRI. Document Path: Q:\GIS_Data\Code_Enforcement\ADA_Maps\SidewalkMaps\Conover_Walking\Conover_WalkingNetwork_Mapbook.mxd

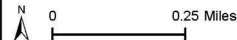
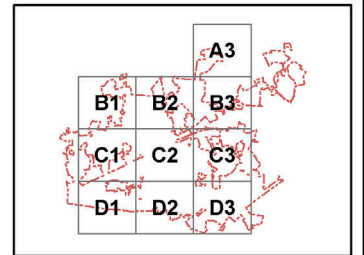


Legend

- Conover City Limits
- Safe Routes
- Existing Sidewalk
- Roads
- City Hall
- Conover Station
- Fire Stations
- Museum
- Parking Lots
- Parks
- Police Dept.
- Public Works
- Schools
- Pedestrian Crashes
- Crosswalks
- Pedestrian Islands
- Pedestrian Signals

Safe Routes Network

GRID Index: D3



This map is a graphic representation and should only be used for illustrative purposes. Map made with data provided by City of Conover, Catawba County GIS, NCDOT, and ESRI. Document Path: Q:\GIS_Data\Code_Enforcement\ADA_Maps\SidewalkMaps\Conover_Walking\Conover_WalkingNetwork_Mapbook.mxd

SRN CONCLUSION

As stated above, many pedestrian crashes occurred outside of the proposed SRN. Several, however, occurred within the SRN at identified problematic areas noted in the pedestrian right of way section. Each factor within the SRN should be analyzed in coordination with ADA standards to reduce pedestrian crashes. While the SRN is not wholly dependent on the presence of pedestrian infrastructure, ADA requires that all existing pedestrian infrastructure meet specific standards to meet the needs of all users. Route improvements should be made first to routes posing the biggest safety hazards. Hazardous areas not included in the SRN without compliant pedestrian infrastructure should be considered in the more immediate future for pedestrian improvements. This is necessary for hazardous routes connecting neighborhoods, schools, Conover facilities, shopping, medical, etc. As Conover develops and updates its pedestrian network, the SRN and ADA should be reassessed to document pedestrian usage and improvements.

REFERENCES

Source: United States Census. Disability Status. Retrieved June 25, 2020, from www.census.gov/quickfacts/fact/note/US/DIS010218#:~:text=Definition,vision%2C%20cognition%2C%20and%20ambulation.

Source: United States Census. How Disability Data are Collected from The American Community Survey. Retrieved July 17, 2020, from www.census.gov/topics/health/disability/guidance/data-collection-acs.html

Source: US Department of Transportation, Federal Highway Division. FHWA Functional Classification Guidelines. Retrieved October 21, 2020, from gpsinformation.info/roundabout/Guides/UrbanRuralDefinition.htm.

Source: North Carolina Department of Transportation. Collecting Functional Classification Data. Retrieved October 21, 2020, from connect.ncdot.gov/projects/planning/TransPlanManuals/Collect%20Functional%20Class%20Data.pdf.

Source: US Department of Transportation, Federal Highway Division. Highway Functional Classification Concepts, Criteria, and Procedure. Retrieved October 22, 2020, from <https://dot.sd.gov/media/documents/HwyFunctionalClassification.pdf>.

Source: Sullivan County Transportation Short Range Transit Operations Plan - Bus Stop ADA Guidelines, Retrieved October 22, 2020, from www.uvlsrpc.org/files/4215/4775/9655/SCT_ADA_Bus_Stop_Guidelines.pdf.

Source: Americans With Disabilities Act Accessibility Standards Accessed Date: July 23, 2020, from www.access-board.gov/ada/

Source: State and Local Governments (Title II) Accessed Date: July 23, 2020, from www.ada.gov/ada_title_II.htm#:~:text=Title%20II%20applies%20to%20State,State%20and%20local%20government%20entities.

Source: ADA Checklist for Existing Facilities Accessed Date: July 23, 2020, from www.adachecklist.org/checklist.html

Appendix A: Americans with Disabilities Act Discrimination Grievance Policy - WPCOG - https://41caa07a-56ba-4c1e-bb60-4d43c53aa7ab.filesusr.com/ugd/960958_81aa35a913bc4c55993a9e89d8ede1f8.pdf

Appendix B: ADA Checklist for Existing Facilities - www.adachecklist.org/doc/fullchecklist/ada-checklist.pdf

Appendix C: ADA Checklist for Existing Facilities - Play Areas - www.adachecklist.org/doc/rec/play/play.pdf

Appendix D: Compliant Surfaces from September Report -

- www.access-board.gov/research/completed-research/improved-engineered-wood-fiber-ewf-surfaces
- www.access-board.gov/guidelines-and-standards/recreation-facilities/guides/surfacing-the-accessible-playground
- www.ncaonline.org/resources/articles/playground-surfacestudy-finalreport.shtml