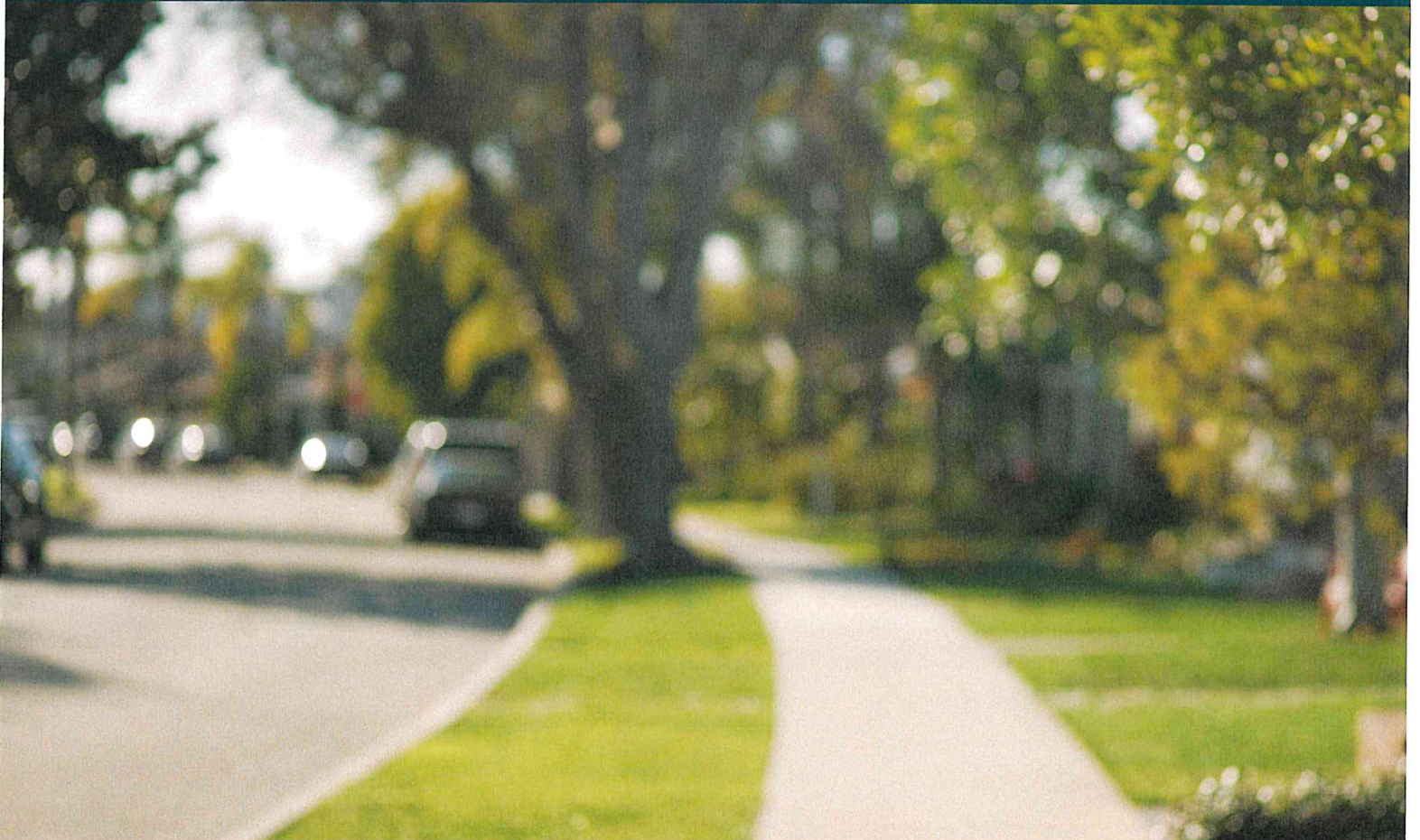




DRAFT

City of Farmer City

SIDEWALK MASTER PLAN



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1. Executive Summary

This five-year master plan for the City of Farmer City was developed by Prairie Engineers to provide a strategic plan for capital investments in the City's pedestrian infrastructure. The plan identifies current sidewalk inventory and condition rating, anticipated revenues, other potential funding, and establishes a list of project improvements. These improvements are deemed necessary to enhance and maintain the City's pedestrian transportation system at acceptable levels. The master plan begins with Fiscal year 2024 and should be updated annually.

1.1 Master Plan Goals

The primary goal of this plan is to provide a guideline for current and future capital investments in the City's pedestrian transportation system. The projects recommended by this plan may vary as the plan is updated due to changes in funding and priorities. This plan is intended to allow the citizens and elected officials of the community to review various sidewalk and associated projects planned for the next five years. It will serve as the basis of a discussion which shapes the City's future investments in pedestrian infrastructure.

As sidewalk conditions deteriorate over time, maintenance costs increase significantly. Timely maintenance can significantly postpone the need for more costly rehabilitation and reconstruction measures. This document is also meant to serve as a guide for the efficient management of the City's sidewalk network. It will assist in making better decisions regarding where to apply the City's limited funds to best manage the City's sidewalk maintenance, rehabilitation, and reconstruction programs.

2. Condition Rating Inventory

A sidewalk condition inventory was developed during the summer/fall of 2021 in conjunction with the master plan process. The primary goal of the inventory was to develop an asset inventory of sidewalks and sidewalk ramps to aid in the identification and evaluation of sidewalks and ramps for maintenance, rehabilitation, and reconstruction as part of the larger Sidewalk Master Plan.

The following is a summary of the methodologies and rating systems used, and details of the results found during the inventory. The current conditions of all sidewalks and ramps under the jurisdiction of the City of Farmer City were assessed using visual inspections of the sidewalks and ramps. The system derived to rate sidewalk and ramp conditions is based on the Public Rights-Of-Way Accessibility Guidelines (PROWAG) for planning, design, and construction of assets linked to the public transportation system.

The inventory and analysis were used to develop the Sidewalk Master Plan for the City's sidewalks, and as a basis for implementing the City's ADA Transition Plan to provide accessible sidewalks.

Efficient management of sidewalks and ramps requires proactive maintenance, rehabilitation, and quality assurance of materials as well as access measurements. Assuring that newly constructed sidewalks and ramps comply with PROWAG is essential and maintaining the

condition inventory of material and access for planning rehabilitation is important to establishing a sidewalk/ramp management program.

2.1 Methodology

The sidewalk condition inventory contained in this report was conducted during the summer/fall of 2021. The sidewalk condition inventory is intended to be a numerical and spatial indicator of the surface condition and access condition of each sidewalk and ramp in the public right-of-way. These numbers were derived by observing the distress apparent on the surface materials as well as the measurements taken to assess proper access for the physically disabled. Measurements taken on sidewalks included width, cross slope, and vertical faults exceeding 0.05 inches. Measurements taken on sidewalk ramps included width, cross slope, and running slope. The condition and material were noted for sidewalks and sidewalk ramps, as well as the presence or absence of detectable warnings at street intersections.

2.1.1 Rating System

Ramps and sidewalks were rated in two different manners: visible aesthetic condition and access compliance with PROWAG. A general one through five (one being worse than five) rating system was implemented for the visible condition of the sidewalk. Access compliance was rated overall on whether ramps or sidewalks passed or failed. Ramp access compliance was rated based on the slope, cross slope, width, and detectable warning. A passing rating was given to ramps with a slope less than 8.33%, a cross slope less than 2.00%, a minimum width of 4 feet, and the presence of detectable warnings. Sidewalk access compliance was rated passing for sidewalks with a cross slope less than 2.00% and a minimum 4-ft. width. Sidewalks were rated on a segment-by-segment basis based on field crew observations of sidewalk transitions from property to property. Sidewalk faults, too, caused segments to be broken up from one segment to another.

2.1.2 Data Format

All field data collected was compiled in ESRI GIS.shp file format. Points, lines, and attributes for the rating factors collected were associated with field data collected utilizing Trimble GeoXH handheld DGPS units.

2.1.3 Data Contents

Three data sets were collected: Sidewalks (Line), Ramps (Point), and Sidewalk Faults (Point). Sidewalk attributes include Material, Cross Slope, Width, and Condition. Ramp attributes include Material, Detectable Warning Present, Detectable Warning Condition, Ramp Direction, Slope, Cross Slope, Width, and Condition. Sidewalk Fault attributes include Fault Type, Cause of Fault, and Vertical Change. Appendix A includes an in-depth data dictionary explaining the attributes associated with each data set.

2.1.4 Data Maps

Exhibits showing the condition and accessibility assessments of sidewalks and ramps in the City's right-of-way are included in the Appendices of this report. In addition to figures displaying the overall condition and access of sidewalks and ramps, additional figures were

developed to display individual attributes for sidewalks and ramps based on slope, cross slope, width, detectable warnings, aesthetic condition, and material make-up.

2.2 Results

2.2.1 Sidewalks

The inventory collected 3.7 miles of sidewalk. Sidewalks that crossed driveways, alleys, and other entrances were not identified as separate pavement features but were included in the sidewalk segment. Overall, 22% of existing sidewalks meet PROWAG requirements, with the majority failing due to cross slopes exceeding the allowable 2% maximum and/ or width failing to meet the 4 ft. minimum.

Much of the existing overall sidewalk network is predominantly in Poor visual condition. This rating condition is based on visible condition of the sidewalk from an aesthetic viewpoint. Nearly 60% of the sidewalks in the city are either Poor (34%) or Failed (25%). Some sidewalks were rated as Fair (27%) while only 8% were given a rating of “Good” and 6% a rating of “Excellent”.

See figures 2.2.1A and 2.2.1B for the pass/fail rates of the various sidewalk attributes recorded. Figures 2.2.1C and 2.2.1D provides sidewalk condition rating and a graphical representation of sidewalk material, respectively.



Figure 2.2.1A: Sidewalk Results Overall Pass/Fail

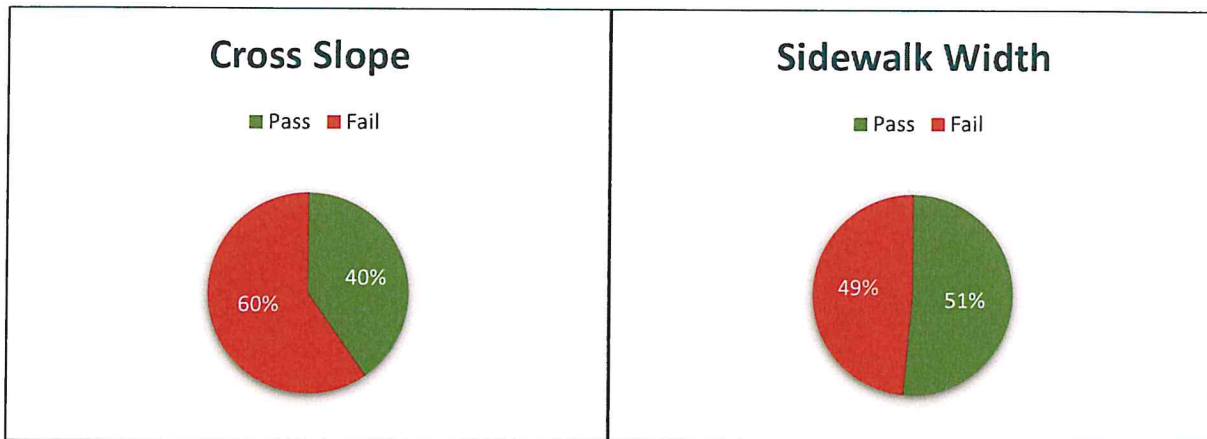


Figure 2.2.1B: Sidewalk Access Compliance Measurements

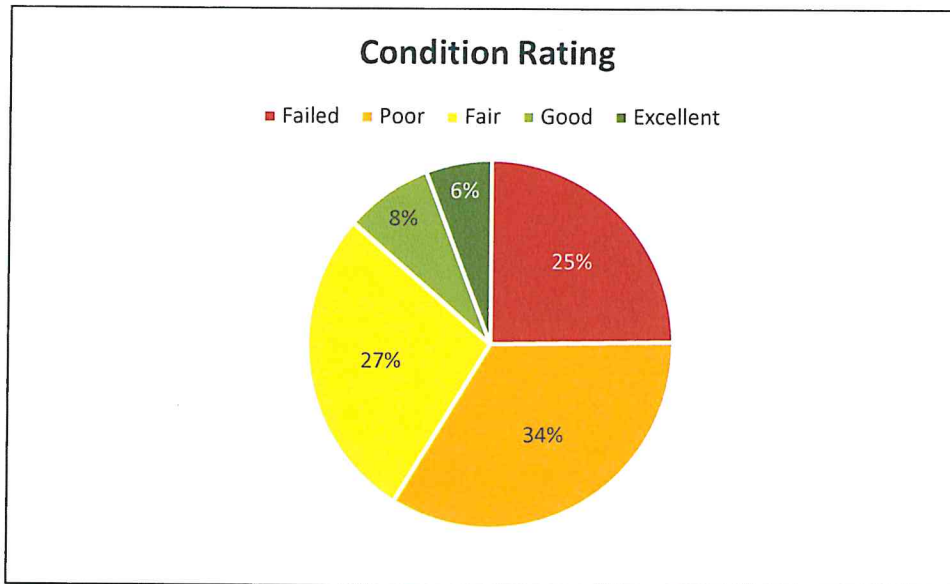


Figure 2.2.1C: Overall Visual Condition of City's Sidewalks

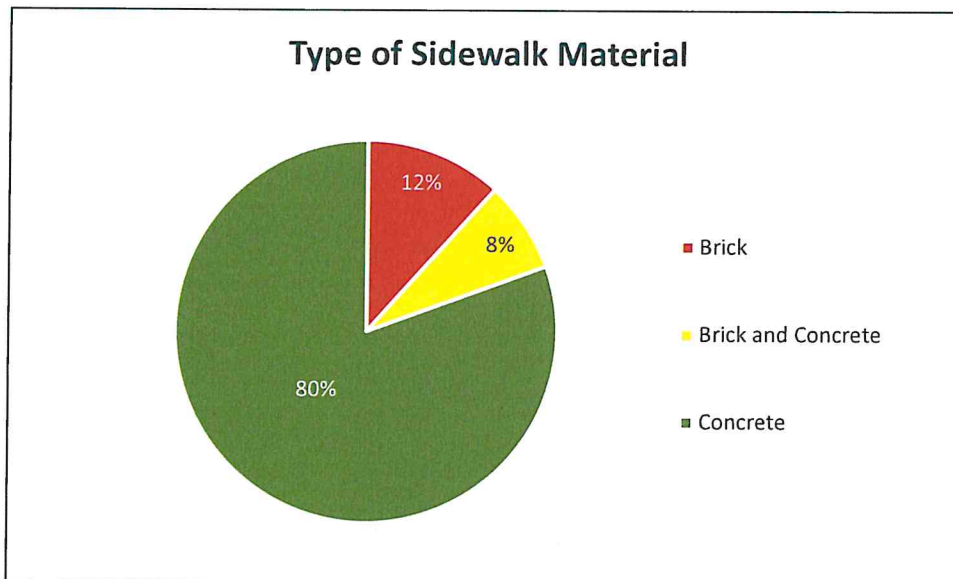


Figure 2.2.1D: City's Sidewalk Material

2.2.2 Ramps

There were 228 ramps collected during this inventory. No stairs or curbs, where a typical ramp would be collected, were collected as ramps for this inventory. Currently there are 46 locations throughout the City of Lincoln that have a sidewalk that ends at a street crossing with no ramp. Approximately 80% of sidewalks have accessibility to the street via ramped crossings.

See figures 2.2.2A and 2.2.2B below for the pass/fail rates of the various sidewalk ramp attributes recorded. Figure 2.2.2C provides ramp condition rating.

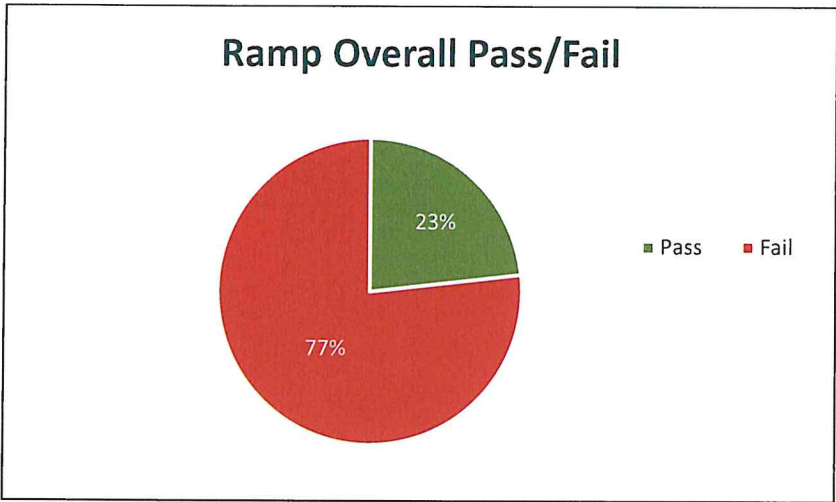


Figure 2.2.2A: Ramp Results Overall Pass/Fail

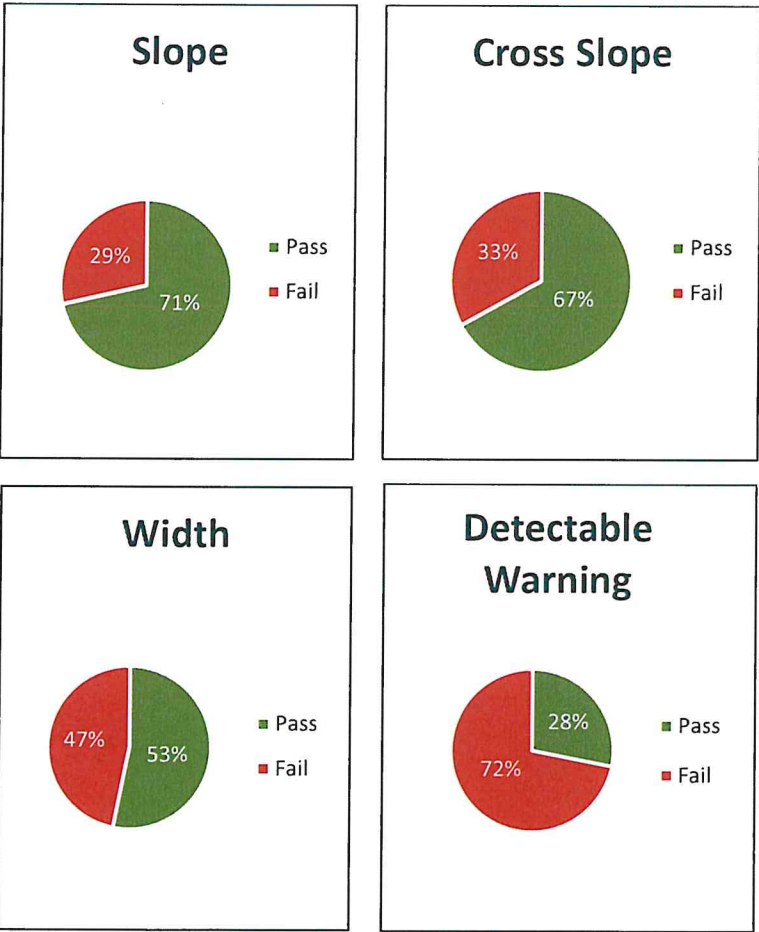


Figure 2.2.2B Ramp Access

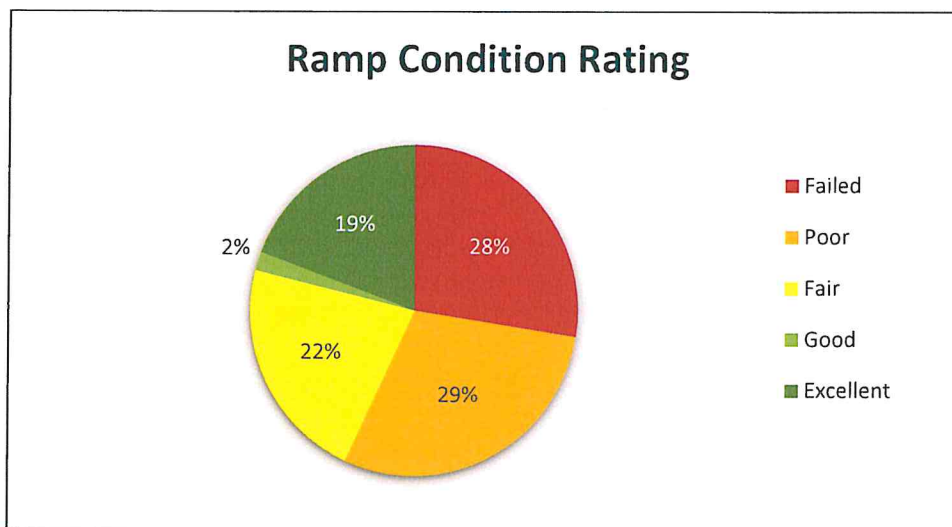


Figure 2.2.2C Overall Visual Ramp Conditions

3. Anticipated Revenues

<Expand on funding sources for capital improvement projects (sidewalk)>

3.1 Estimated Individual Project Costs

Most of the project costs contained in this document are conceptual level estimates. They are intended to provide the City with a sufficient level of detail to make funding decisions regarding the size of the yearly program and the feasibility of specific projects and programs. The actual costs of individual projects may vary as the project progresses and more detailed cost estimates are developed.

The figures below summarize the pedestrian infrastructure program for each of the five planning years. **More detailed information is available in Sections X and Y of this Plan.**

3.1.1 Pedestrian Infrastructure (FY 2024)

3.1.2 Pedestrian Infrastructure (FY 2025)

3.1.3 Pedestrian Infrastructure (FY 2026)

3.1.4 Pedestrian Infrastructure (FY 2027)

3.1.5 Pedestrian Infrastructure (FY 2028)

3.2 Master Plan Scope

This document is intended only to plan for pedestrian transportation related expenditures paid for with transportation or general funds. This master plan includes all anticipated capital expenditures which are related to the City's pedestrian transportation network and have been incorporated into this document.

4. Proposed Sidewalk Improvement Projects and Programs

The pedestrian transportation programs and projects proposed in this master plan were primarily developed using the Condition Rating Inventory as prepared by Prairie Engineers in Section 2. The proposed programs and projects have been prioritized to maximize the return on investment in the City's infrastructure and to rehabilitate or reconstruct the majority of those features that are in poor or failed condition.

Maps depicting the locations of various maintenance and construction segments are contained in the Appendix and further described below.

4.1 Sidewalks Rehabilitation Program

Many of the City's sidewalks and access ramps do not meet the requirements of the American's with Disabilities Act (ADA) and Public Right of Way Accessibility Guidelines (PROWAG). Sidewalks are currently constructed or repaired as applications are made by citizens and approved by the City Council. A rehabilitation program has been programmed for FY 2024 to help prioritize these improvements. This plan has programmed \$185,000 every other year to repair and construct new sidewalks. This amount is sufficient to construct 1,550 feet (4 blocks) of new sidewalk every other year.

4.2 City 33/33/33 Program

The 33/33/33 sidewalk program provides homeowners the opportunity to replace defective sidewalks along the streets in front of their homes for a third of the total replacement cost. The benefit to residents is that they receive repairs of serviceable sidewalk that would typically

require a much longer wait time through the standard sidewalk rehabilitation program. The benefit for the city is sidewalk upgrades at a third of the cost in City money. Each project is funded equally in part by the City, the Community Foundation and the resident.

Typically, most of the program participants have serviceable sidewalks, and are rated on the higher end of the condition rating scale. Fixing these sidewalks sooner than planned, through the 33/33/33 program, prevents the sidewalks from further degradation.

If the 33/33/33 applicant is requesting replacement of a sidewalk in severe condition, rated on the lower end of the condition rating scale, the applicant will not be charged. Farmer City public works considers it unfair to require a resident to partially pay for repair of substandard sidewalk.

4.3 Individual Sidewalk Reconstruction Projects

In addition to the program detailed above, several individual sidewalk reconstruction projects are programmed as follows:

< Expand >

5. Five Year Master Plan (FY 2024 – FY 2028)

5.1 Projected Transportation Revenues by Fiscal Year

5.2 Total Roadway Funding Required

5.3 FY 2024 Project Listing

5.4 FY 2025 Project Listing

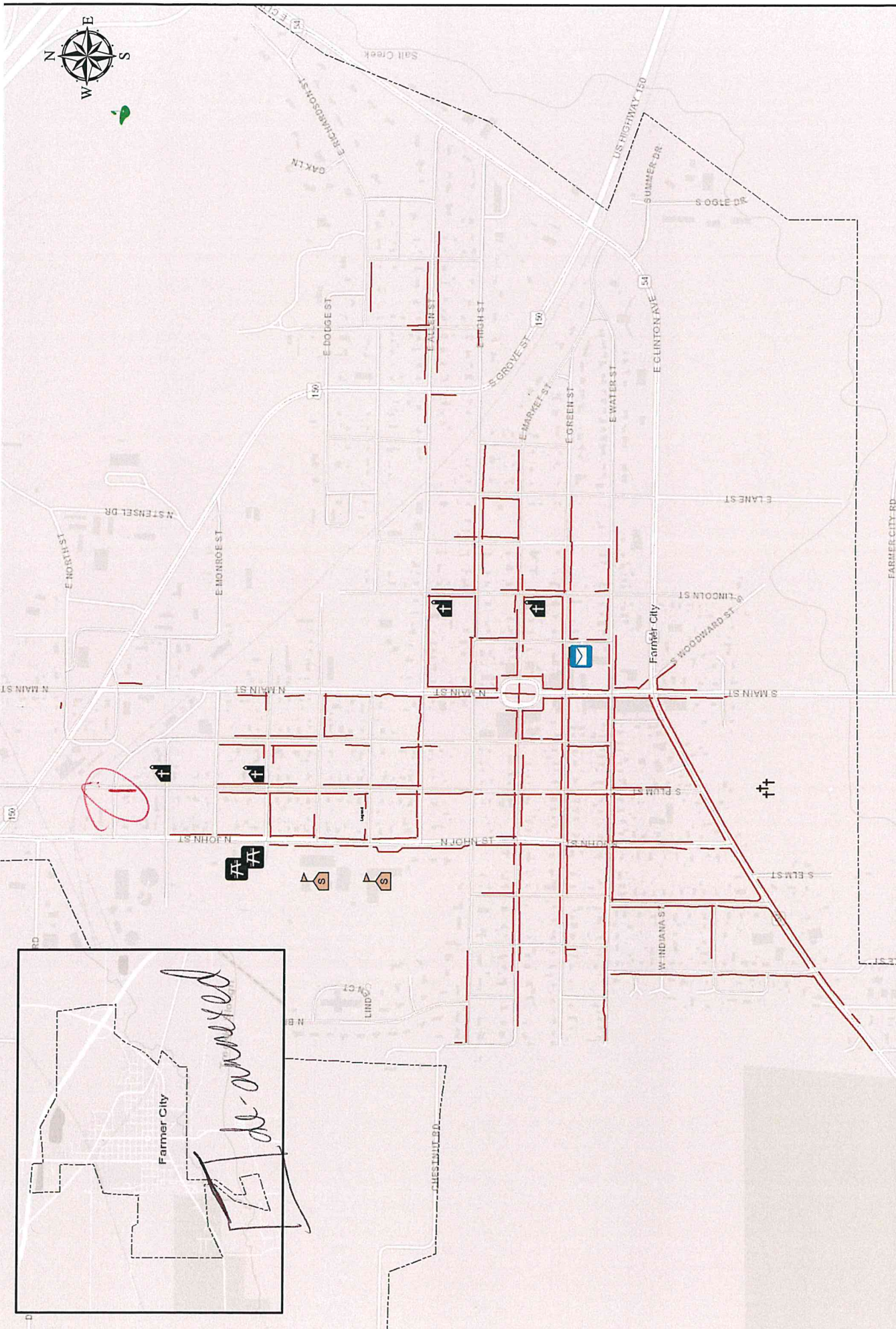
5.5 FY 2026 Project Listing

5.6 FY 2027 Project Listing

5.7 FY 2028 Project Listing

Appendix A

Sidewalk Inventory – Sidewalks



- Post Office
- School
- Golf Course
- Cemetery
- Church
- Park

- Sidewalks
- Roads
- City Boundary

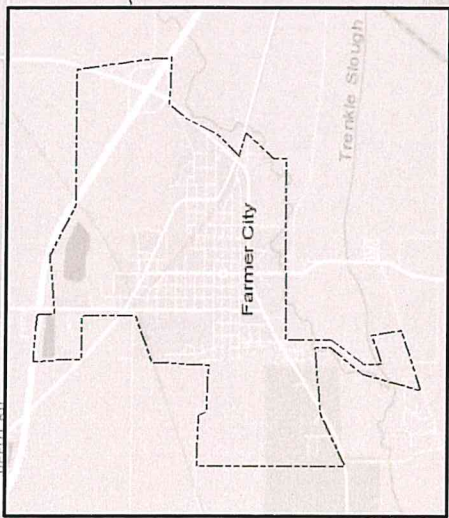
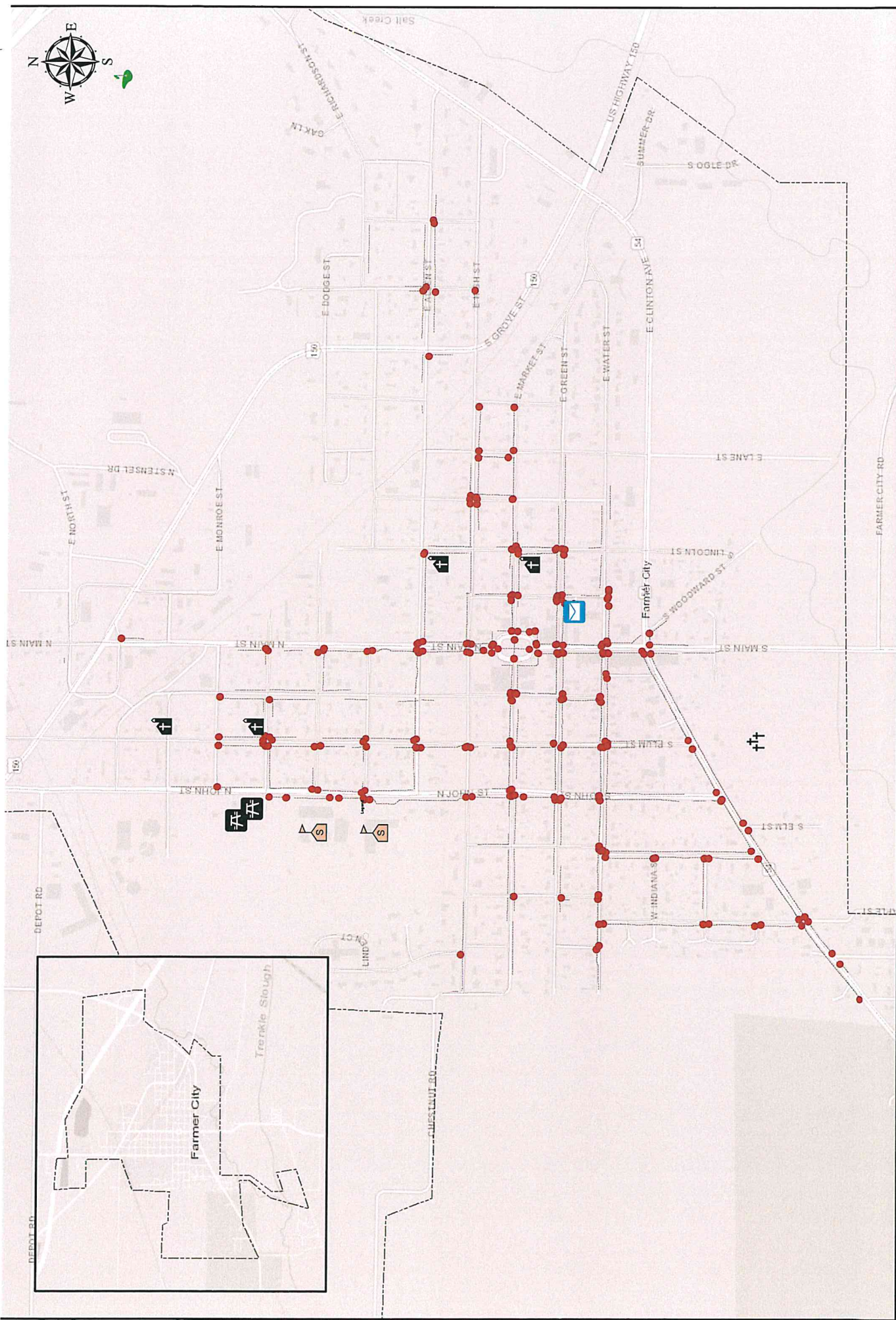
All Sidewalks



Sidewalk Inventory Farmer City, Illinois

Appendix B

Sidewalk Inventory – Ramps



- Ramps
- Sidewalks
- Roads
- City Boundary
- Cemetery
- Church
- Park
- Post Office
- School
- Golf Course

All Ramps



**Sidewalk Inventory
Farmer City, Illinois**

Appendix C

Sidewalk Inventory – Sidewalk Faults



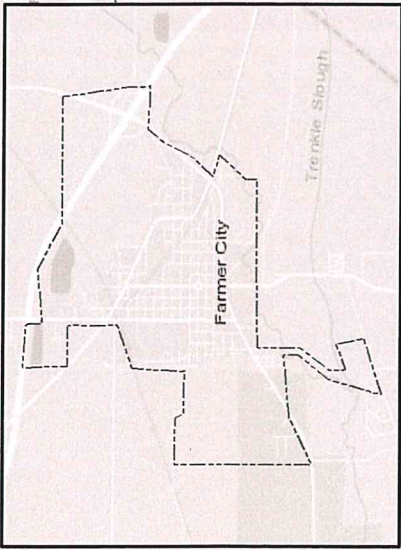
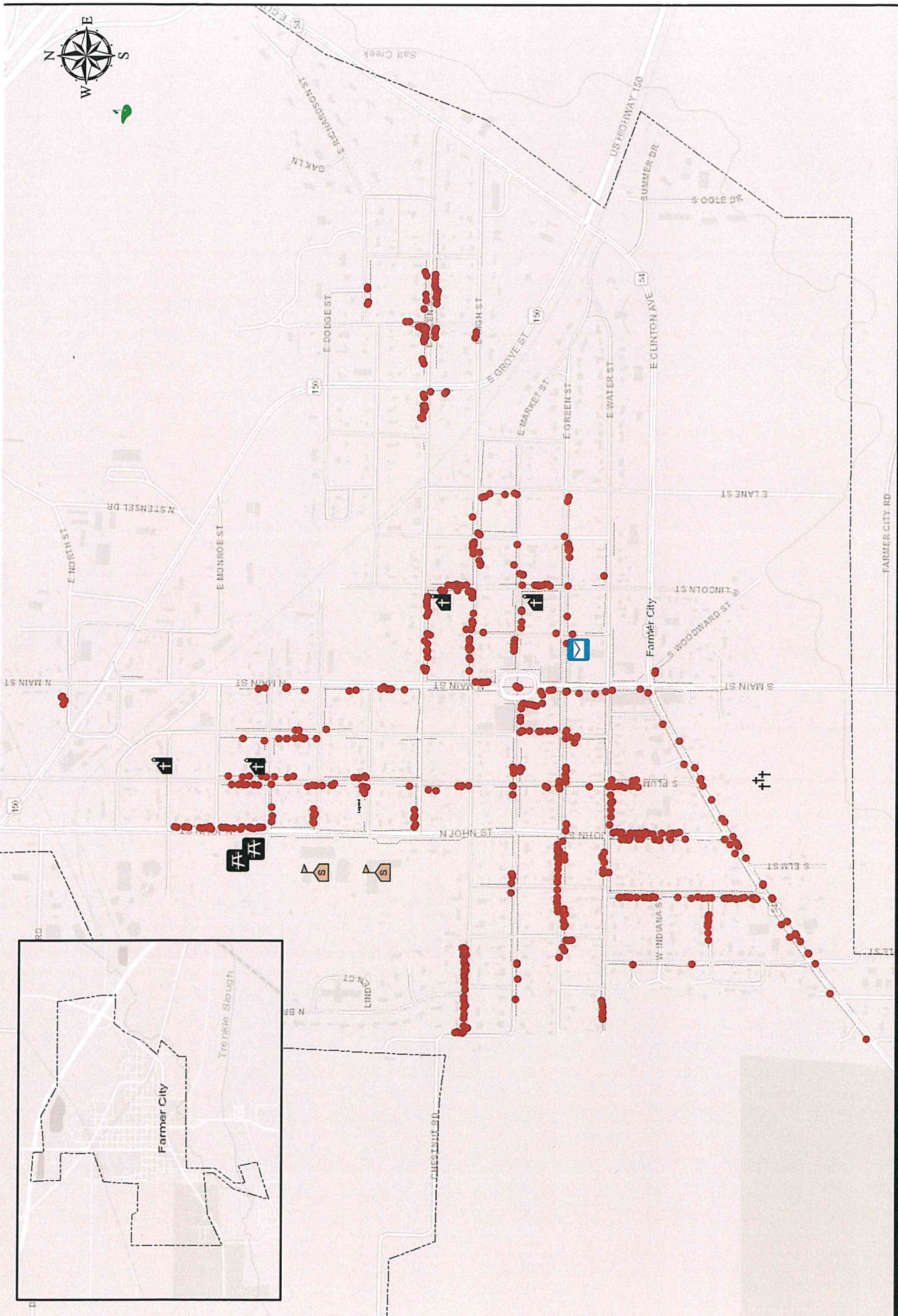
- Post Office
- Cemetery
- Church
- School
- Park
- Golf Course

- Faults
- Sidewalks
- Roads
- City Boundary

All Faults

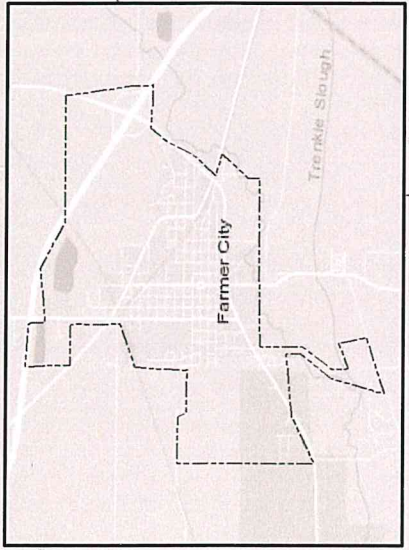
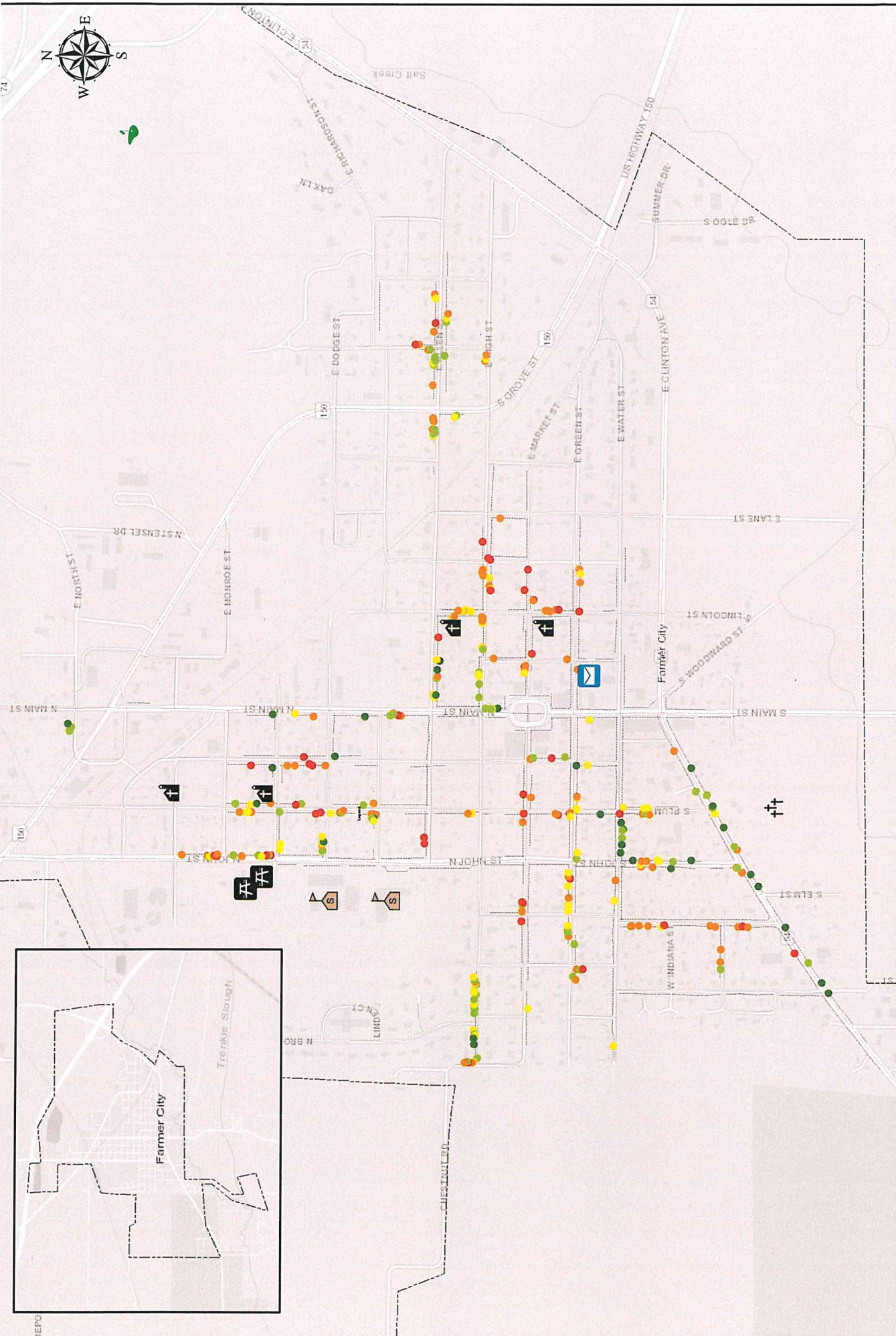


**Sidewalk Inventory
Farmer City, Illinois**



Appendix D

Sidewalk Inventory – Sidewalk Faults, Vertical Change



Sidewalk Inventory
Farmer City, Illinois

0 500 1,000 Feet

Sidewalk Vertical Change

- 0.00" - 0.25"
- 0.26" - 0.50"
- 0.51" - 1.00"
- 1.10" - 2.00"
- > 2.00"

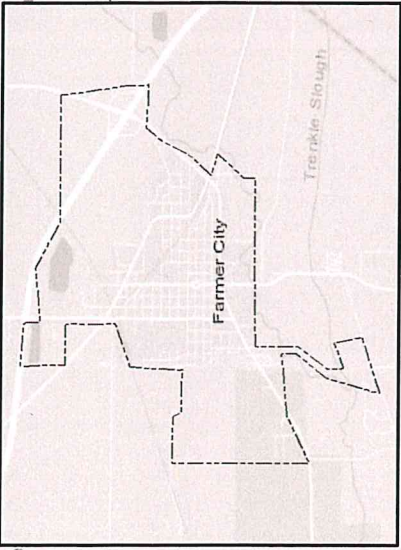
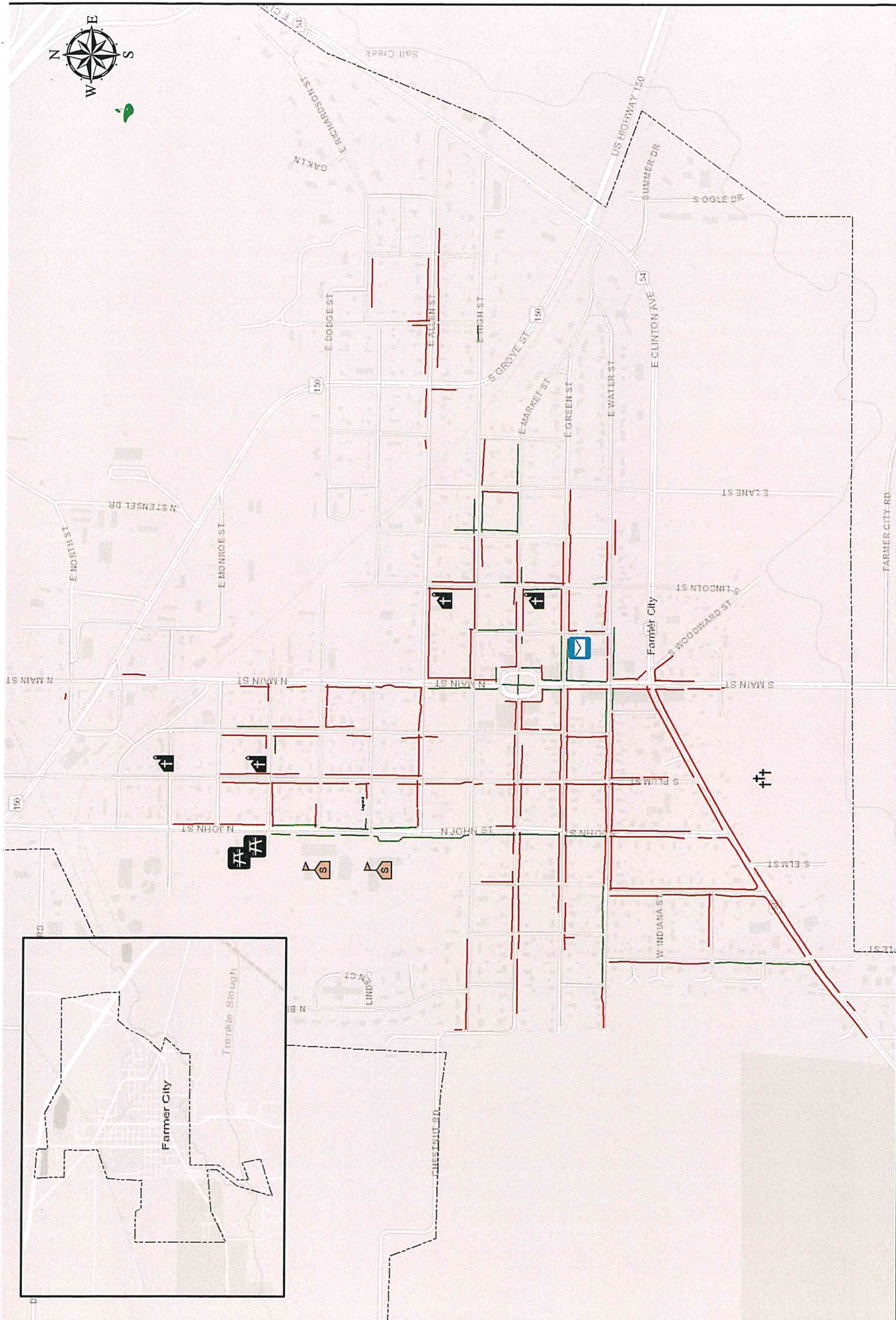
Legend:

- Roads
- City Boundary
- Sidewalks
- Cemetery
- Church
- Park
- Post Office
- School
- Golf Course

Prairie Engineers
ENGINEERS · SURVEYORS · SCIENTISTS

Appendix E

Sidewalk Requirements Pass/ Fail (PROWAG)



- Post Office
- Cemetery
- Church
- Park
- School
- Golf Course

- No Roads
- Yes City Boundary

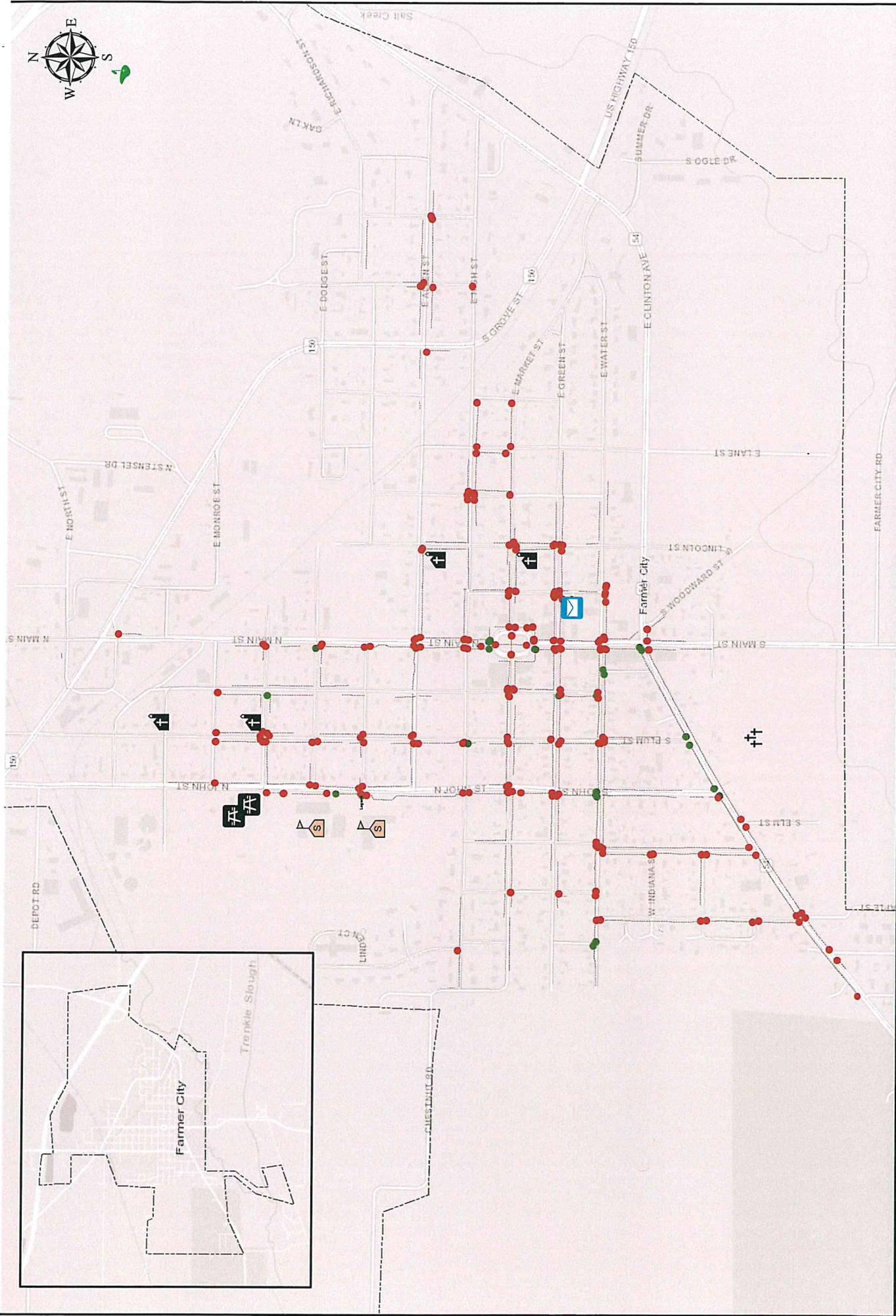
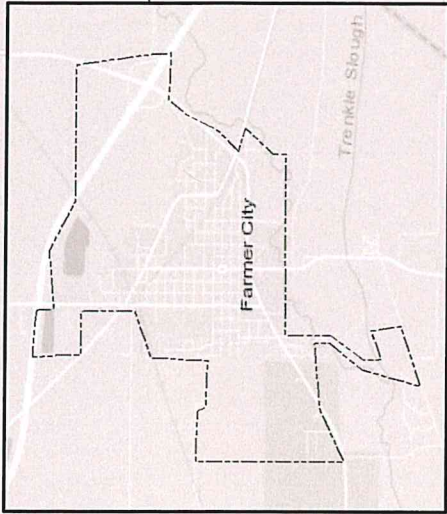
Sidewalk Inventory PROWAG



Sidewalk Inventory Farmer City, Illinois

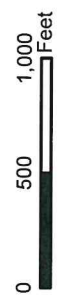
Appendix F

Ramp Requirements Pass/ Fail (PROWAG)



- No
- Yes
- Sidewalks
- Roads
- City Boundary
- Cemetery
- Church
- Park
- Post Office
- School
- Golf Course

**Sidewalk
Ramps
PROWAG**



**Sidewalk Inventory
Farmer City, Illinois**

Appendix G

Sidewalk Visual Condition



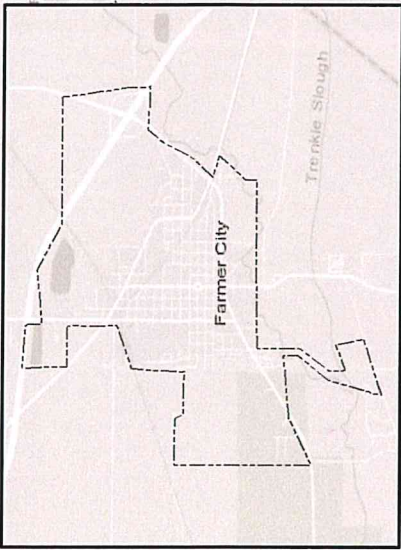
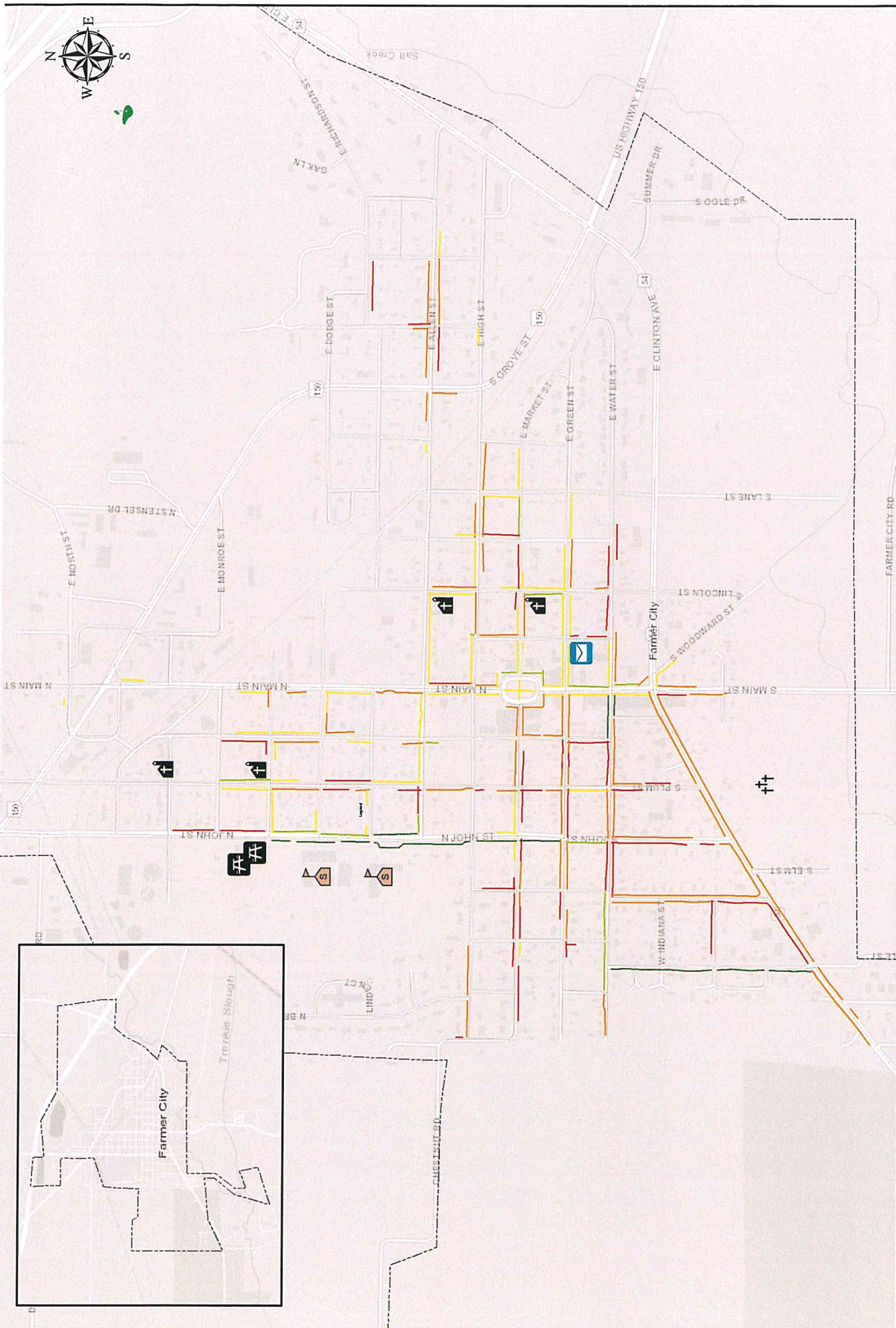
- Post Office
- Cemetery
- Church
- School
- Park
- Golf Course

- Failed
- Poor
- Fair
- Good
- Excellent
- Roads
- City Boundary

Sidewalk Visual Condition







Sidewalk Inventory Farmer City, Illinois



Appendix H

Sidewalk Maximum Cross Slope Percentages

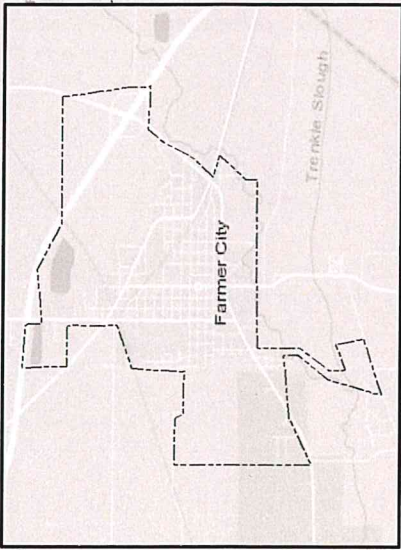
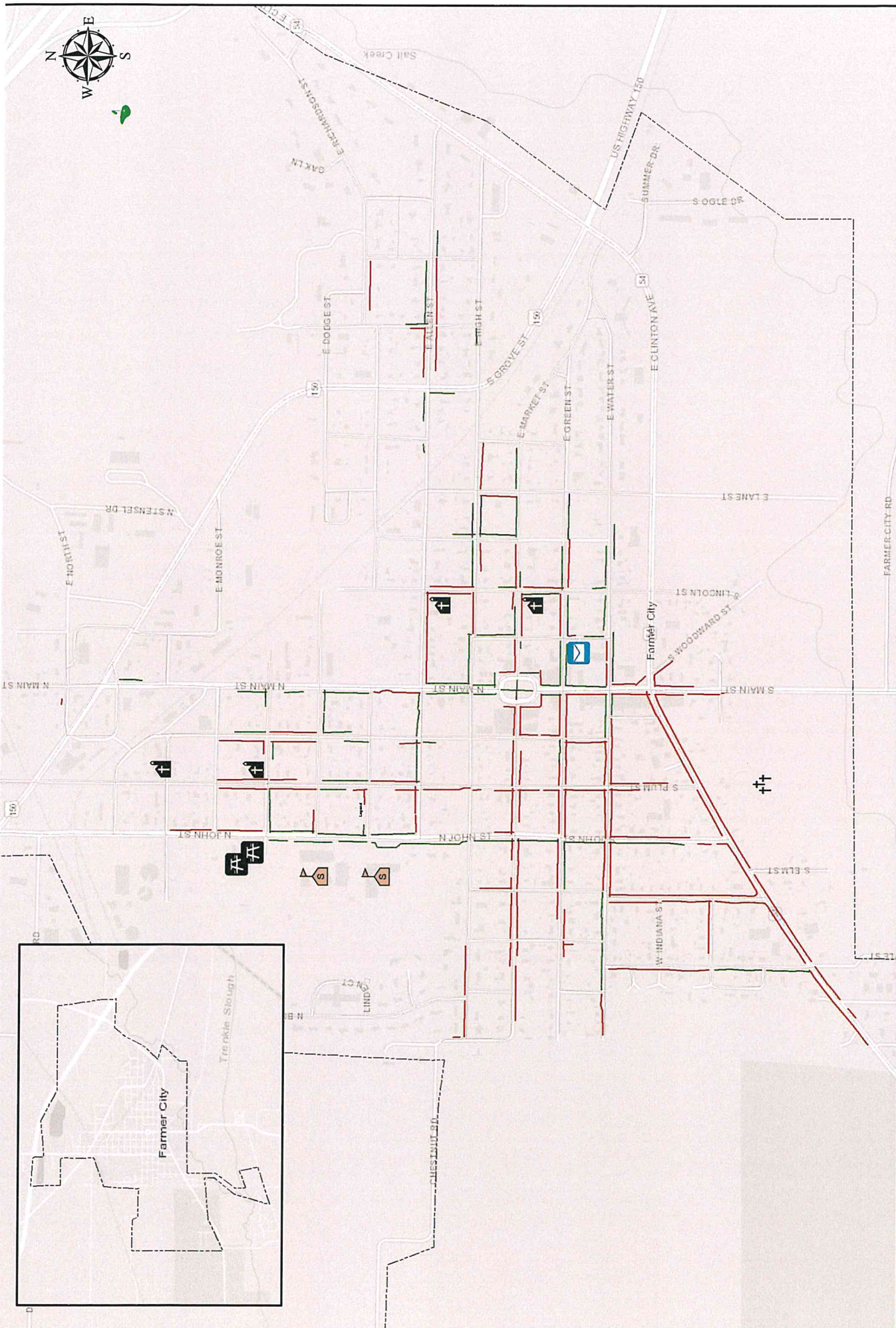
-  Post Office
-  Cemetery
-  Church
-  School
-  Park
-  Golf Course

-  ≤ 2.0%
-  > 2.0%
-  Roads
-  City Boundary

**Sidewalk
Maximum
Cross Slope**

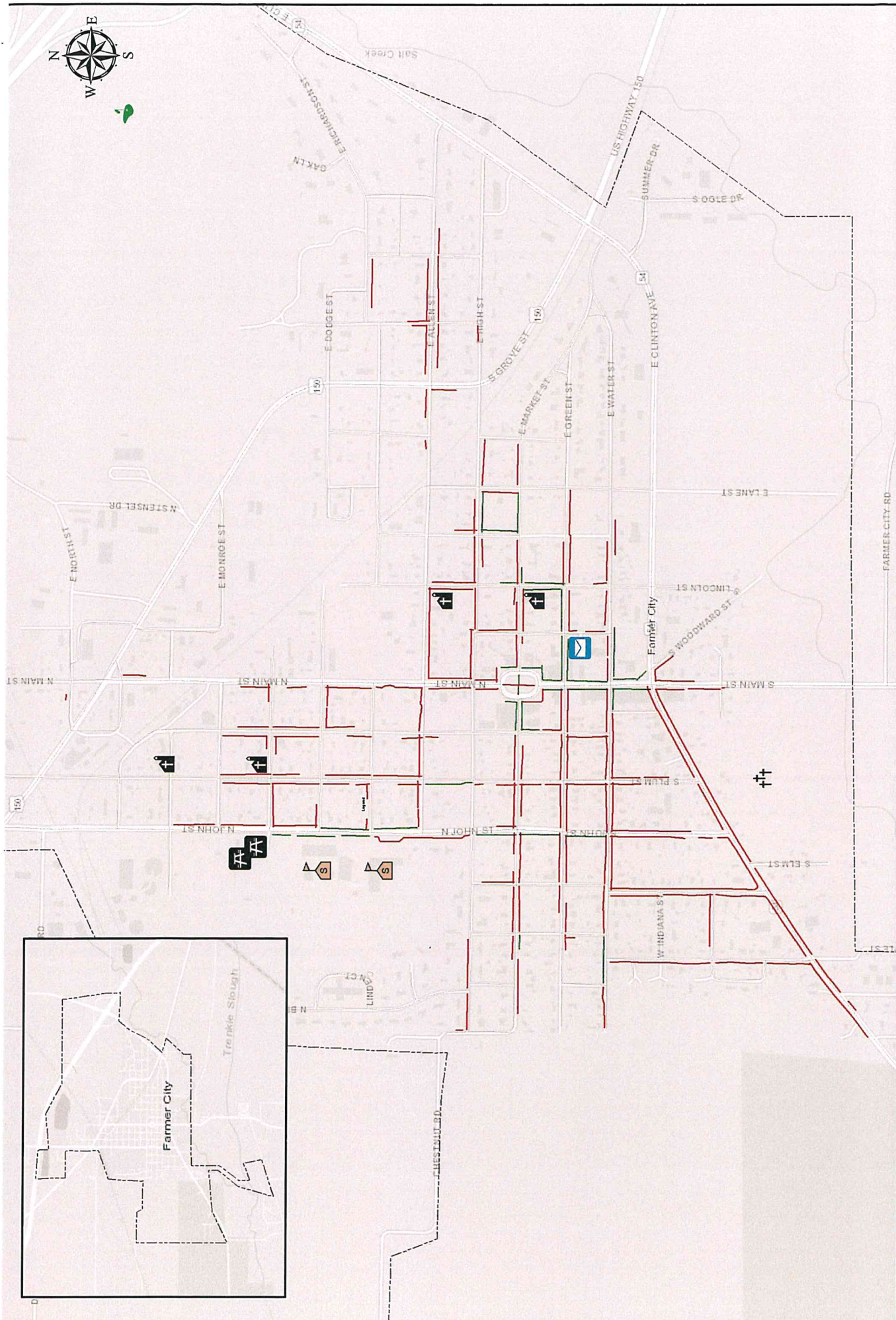
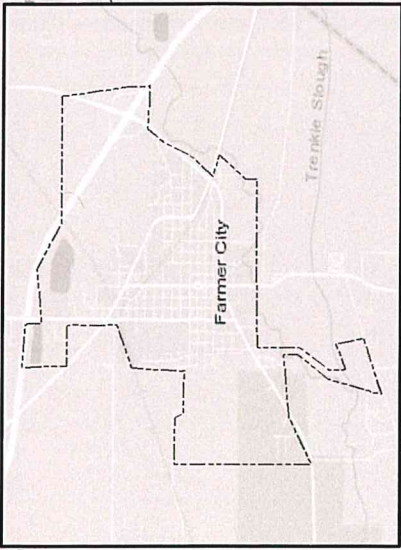


**Sidewalk Inventory
Farmer City, Illinois**



Appendix I

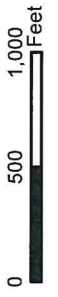
Sidewalk Minimum Widths



- Post Office
- Cemetery
- Church
- Park
- School
- Golf Course

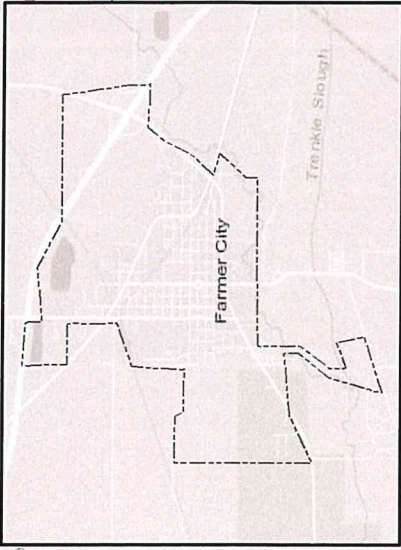
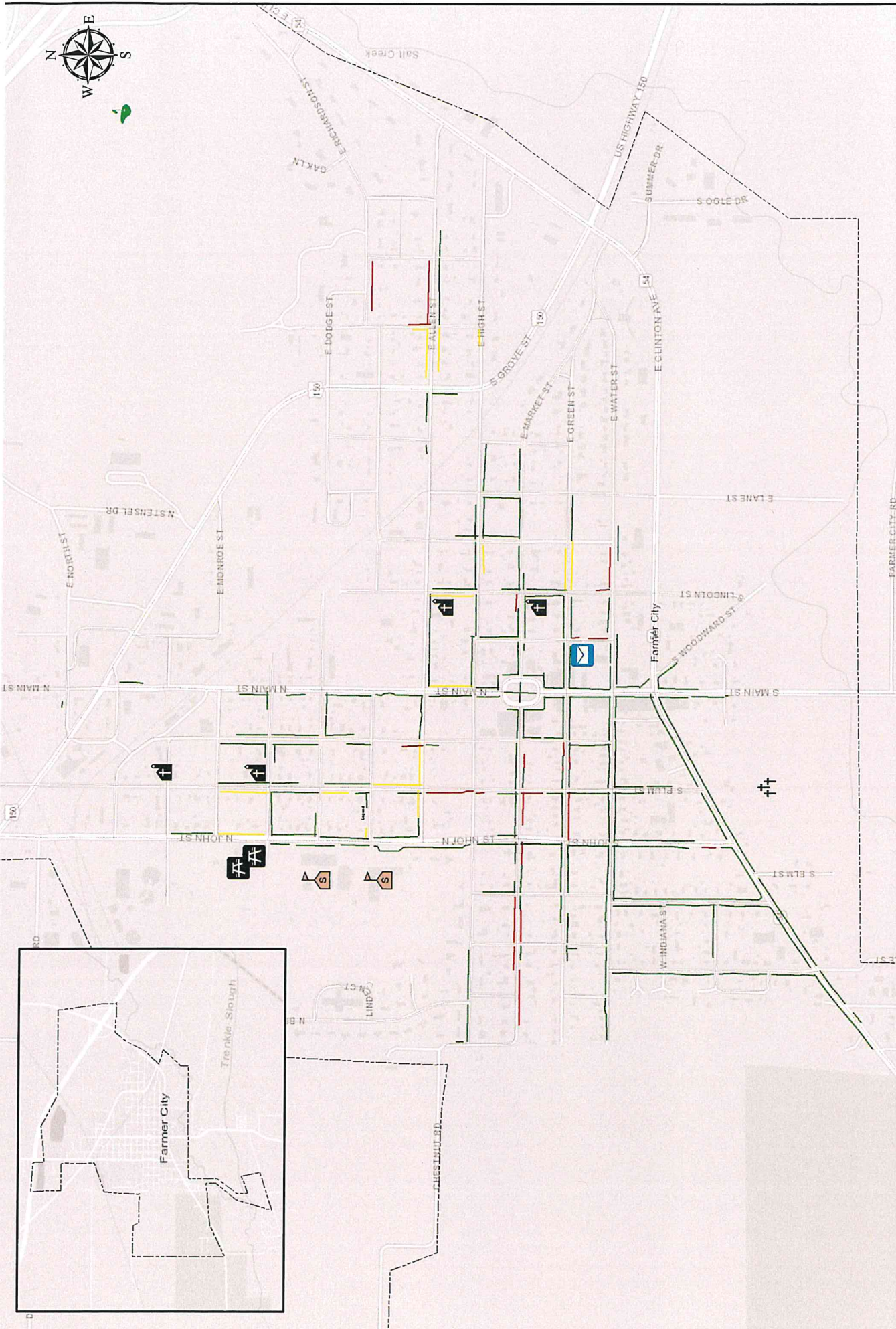
- Roads
- City Boundary

Sidewalk Minimum Width



Sidewalk Inventory Farmer City, Illinois

Appendix J
Sidewalk Material

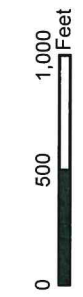


- Post Office
- Cemetery
- Church
- Park
- School
- Golf Course

- Roads
- City Boundary

- Brick
- Brick and concrete
- Concrete

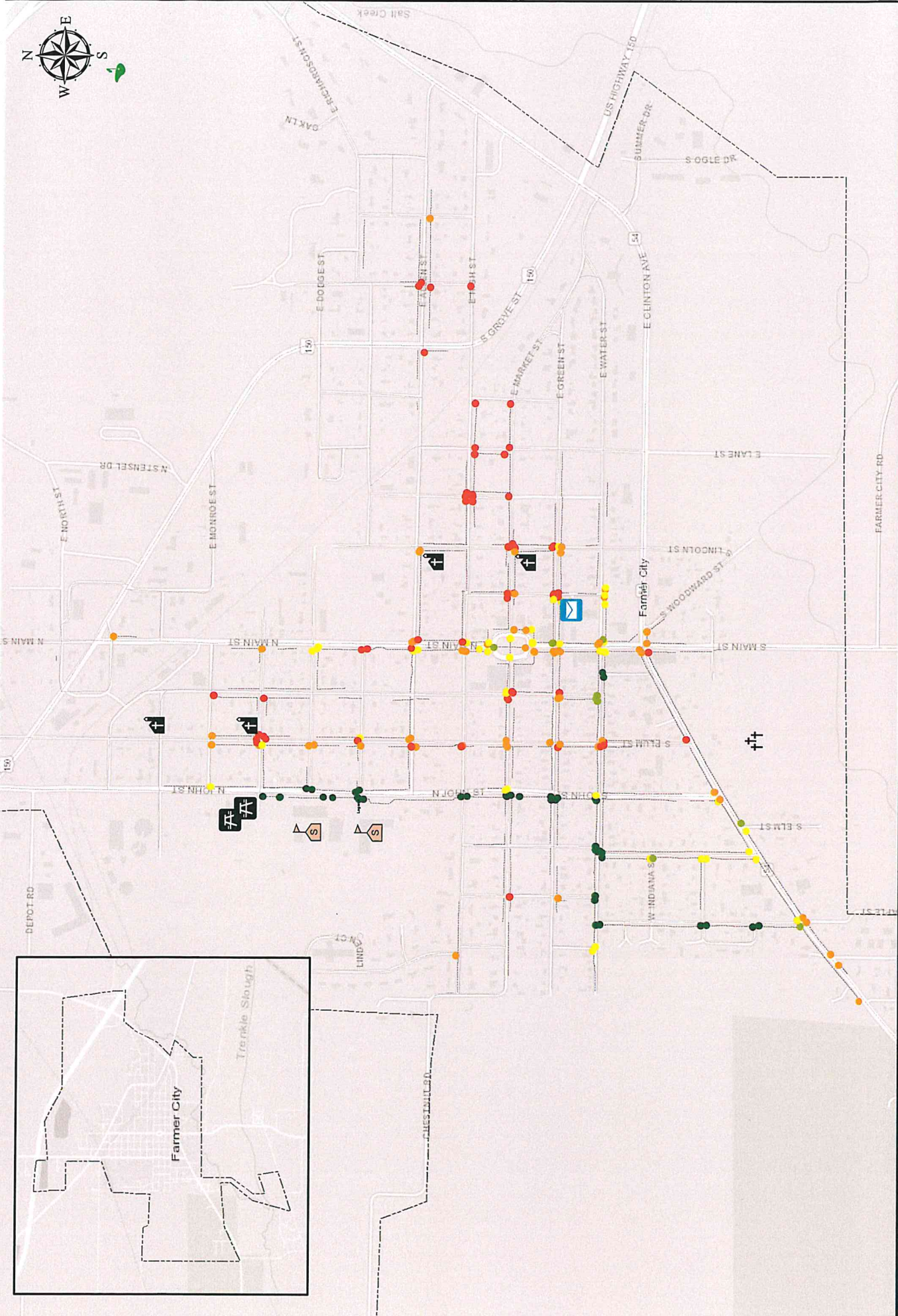
Sidewalk Material



**Sidewalk Inventory
Farmer City, Illinois**

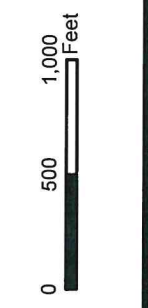
Appendix K

Ramp Visual Condition

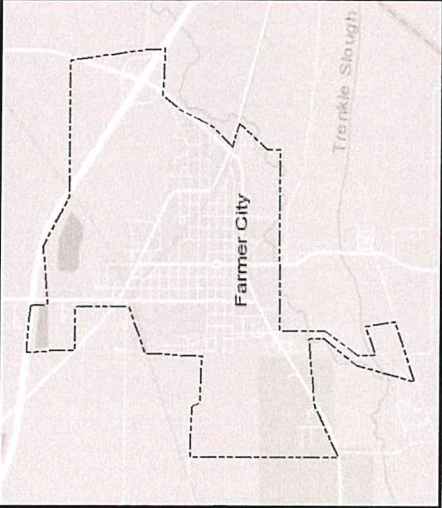


- Failed (Red dot)
- Poor (Orange dot)
- Fair (Yellow dot)
- Good (Light Green dot)
- Excellent (Dark Green dot)
- Sidewalks (Dashed line)
- Roads (Solid line)
- City Boundary (Dashed line)
- Cemetery (Coffin icon)
- Church (Church icon)
- Park (Park icon)
- Post Office (Post office icon)
- School (School icon)
- Golf Course (Golf course icon)

Sidewalk Ramps Visual Condition

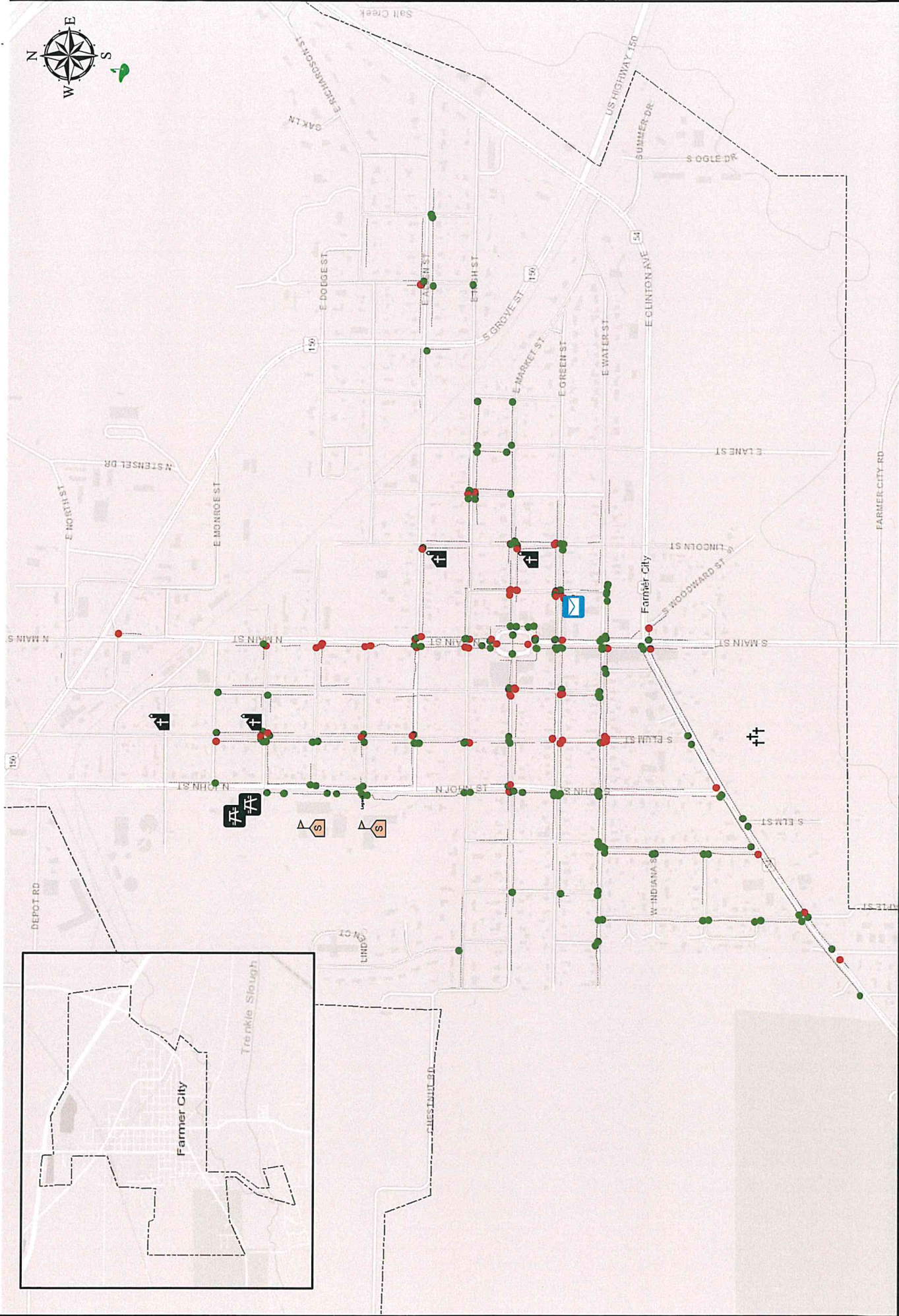
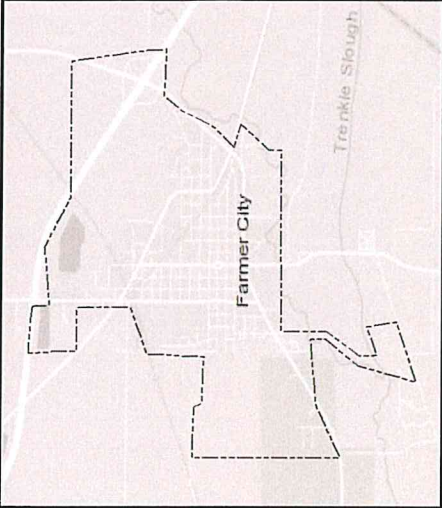


**Sidewalk Inventory
Farmer City, Illinois**



Appendix L

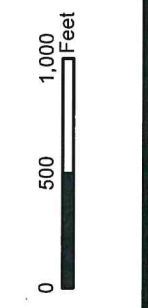
Ramp Maximum Cross Slope Percentages



- Post Office
- Cemetery
- Church
- School
- Park
- Golf Course

- ≤ 2.0%
- > 2.0%
- Sidewalks
- Roads
- City Boundary

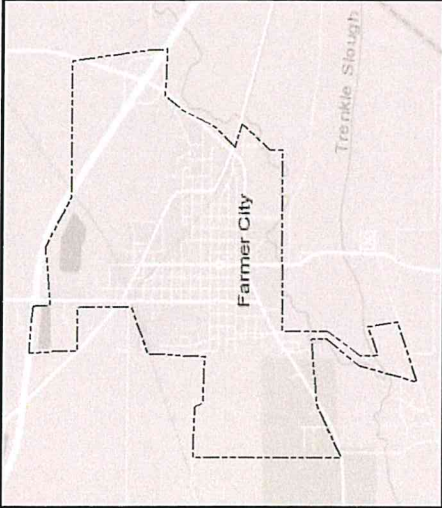
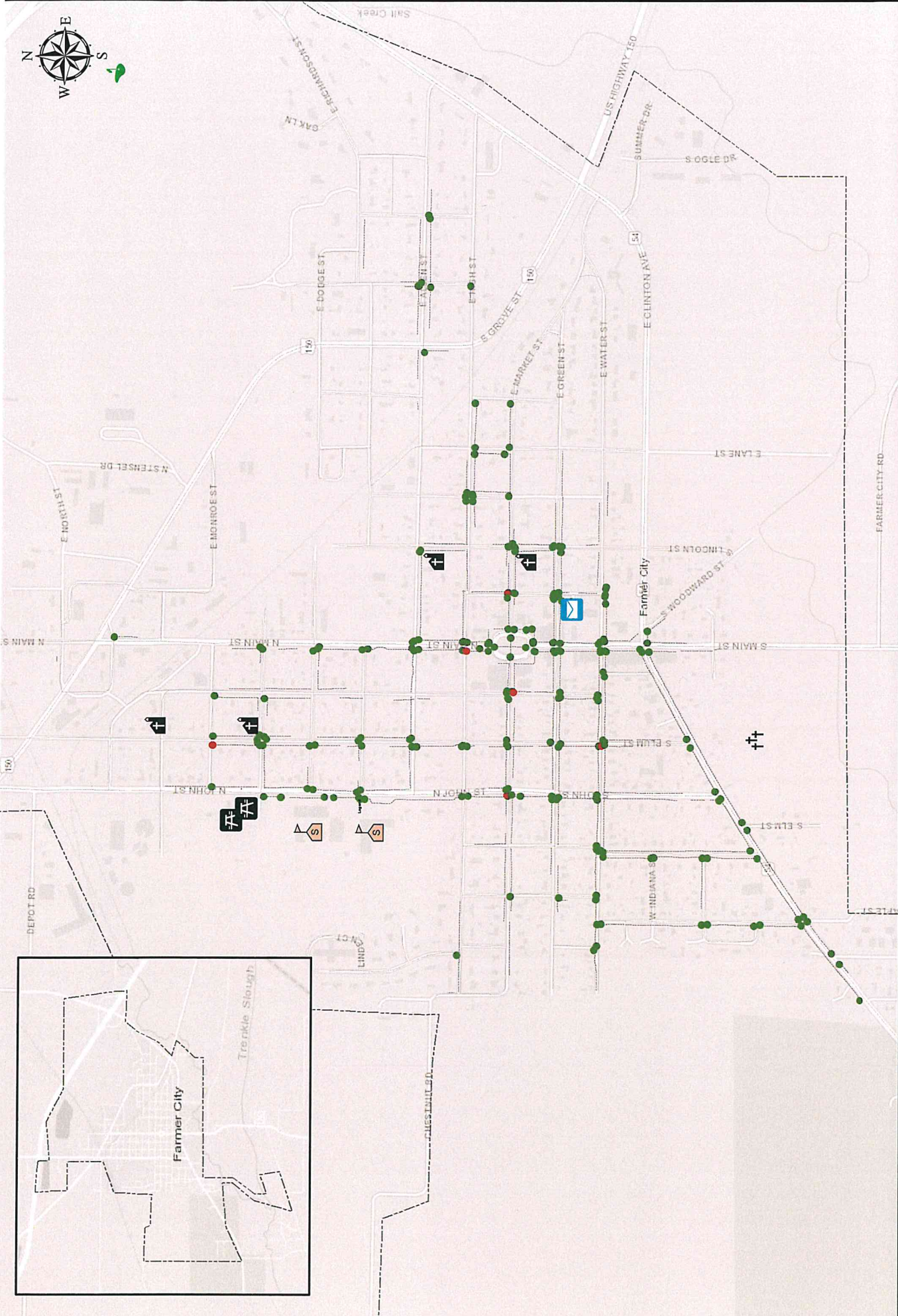
**Sidewalk
Ramps Maximum
Cross Slope**



**Sidewalk Inventory
Farmer City, Illinois**

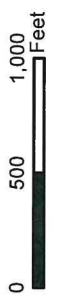
Appendix M

Ramp Maximum Longitudinal Slope Percentages



- < 8.3%
- ≥ 8.3%
- City Boundary
- Roads
- Park
- Church
- Cemetery
- School
- Golf Course

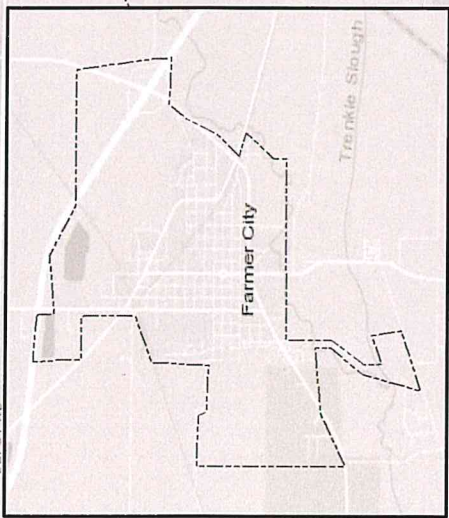
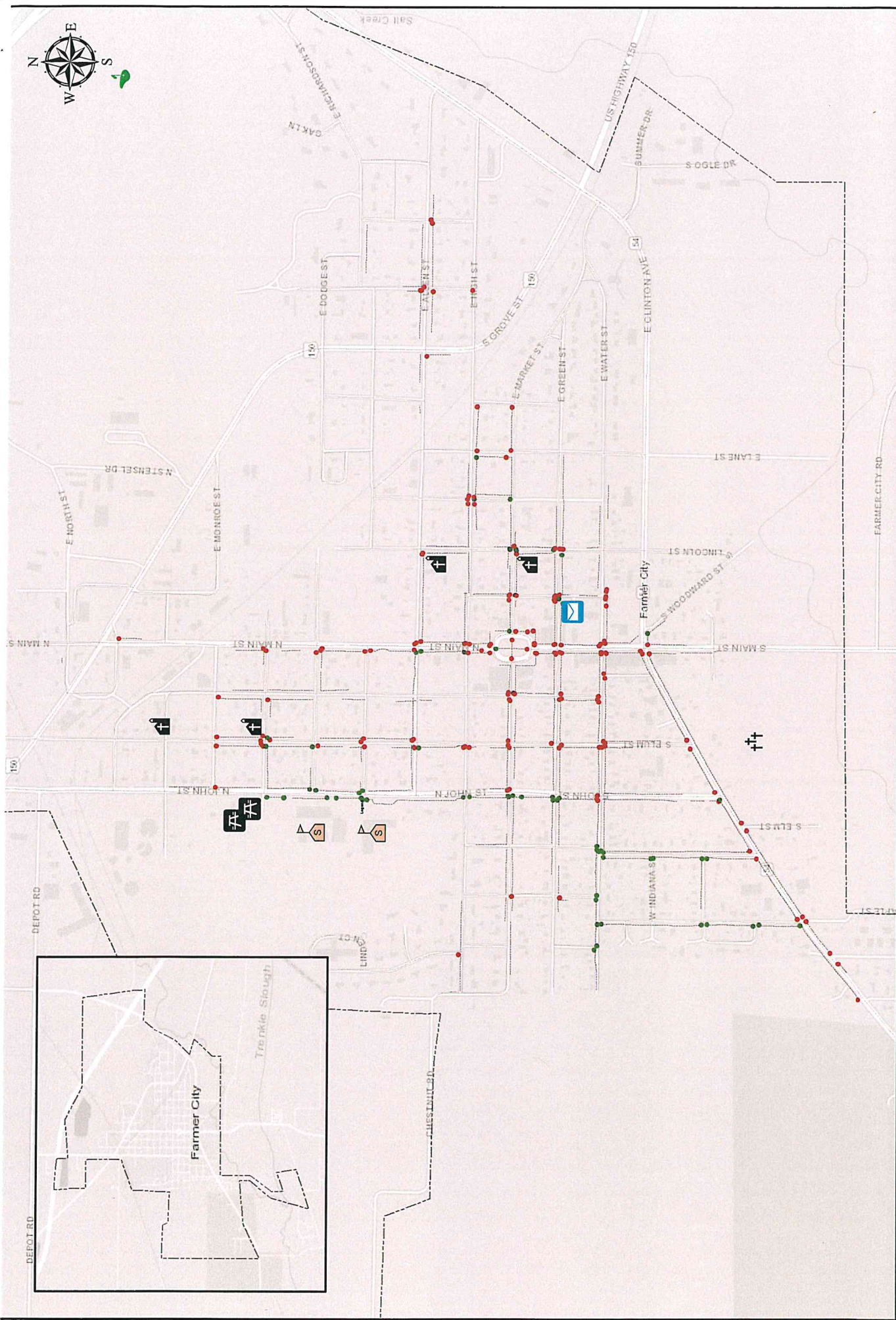
Sidewalk Ramps Longitudinal Slope



Sidewalk Inventory Farmer City, Illinois

Appendix N

Ramp Minimum Width

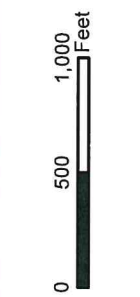


Sidewalk Ramps Minimum Width

- < 4.0'
- ≥ 4.0'

†† Cemetery
 † Church
 † Park
 † Post Office
 † School
 † Golf Course

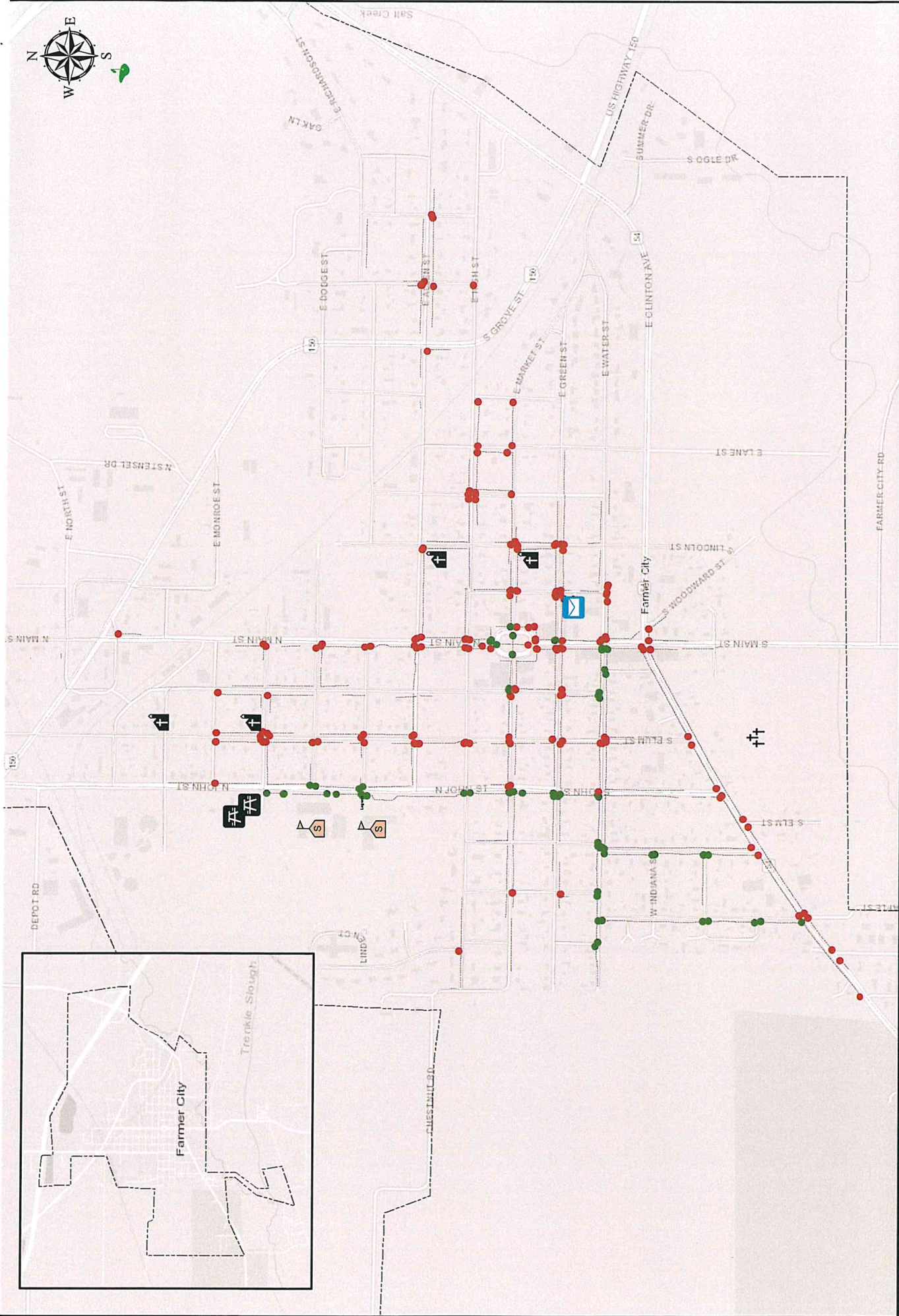
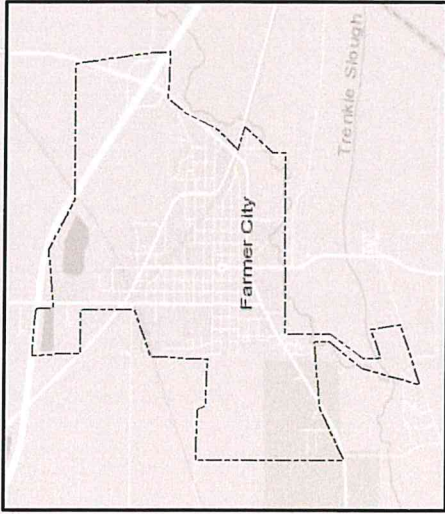
— Sidewalks
 — Roads
 - - - City Boundary



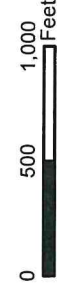
**Sidewalk Inventory
Farmer City, Illinois**

Appendix O

Ramp Detectable Warnings



Sidewalk Inventory Farmer City, Illinois



Sidewalk Ramps Detectable Warning

- Absent
- Present
- Cemetery
- Church
- Sidewalks
- Roads
- City Boundary
- Post Office
- School
- Golf Course
- Park



