

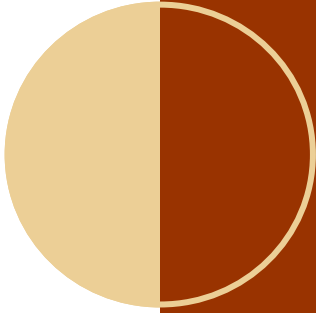


# Minimizing Site Visits Using Modern Surveying Technologies

Kevin Hanley, PLS, Regional Director  
Dawood Engineering, Inc.  
Braintree, MA



# Introduction

- What is Modern Surveying Technology?
  - Applications of Modern Surveying Technologies
  - Minimizing Site Visits – Project Examples
  - Considerations for a Surveying Scope of Work
- 

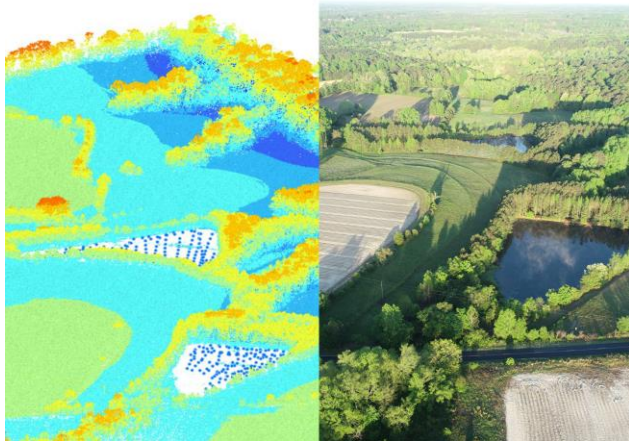
# WHAT IS MODERN SURVEYING TECHNOLOGY?



Laser Scanning



Mobile LiDAR



Aerial LiDAR



UAV (Drone)





# APPLICATIONS OF MODERN SURVEYING TECHNOLOGY



Water & Sewer



Energy



Transportation



Tunnels



Utilities



# MINIMIZING SITE VISITS - TUNNELS



Montreal Highway Tunnel



Boston - Williams Tunnel

# MINIMIZING SITE VISITS - TUNNELS



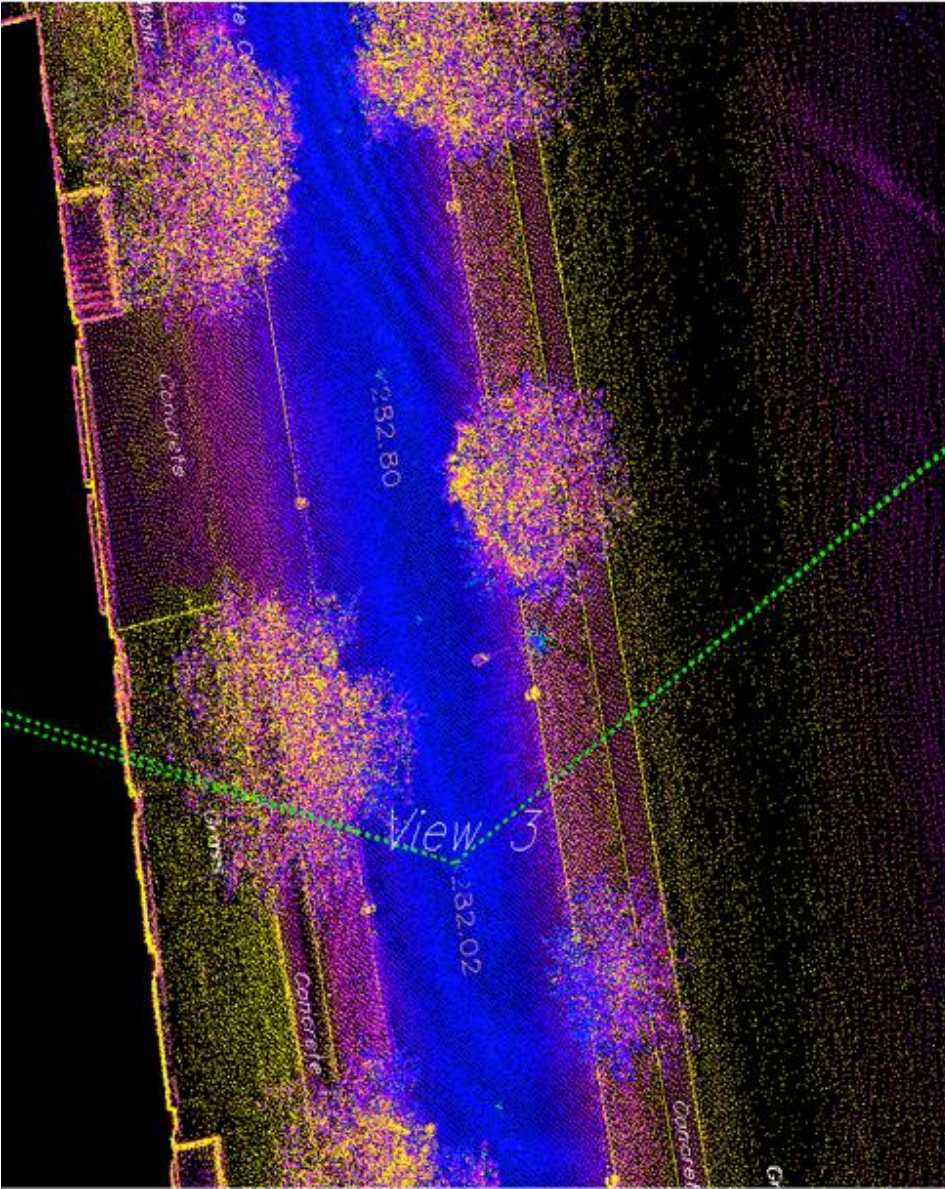
Boston – Bowker Bridge



Boston – Utility Tunnel



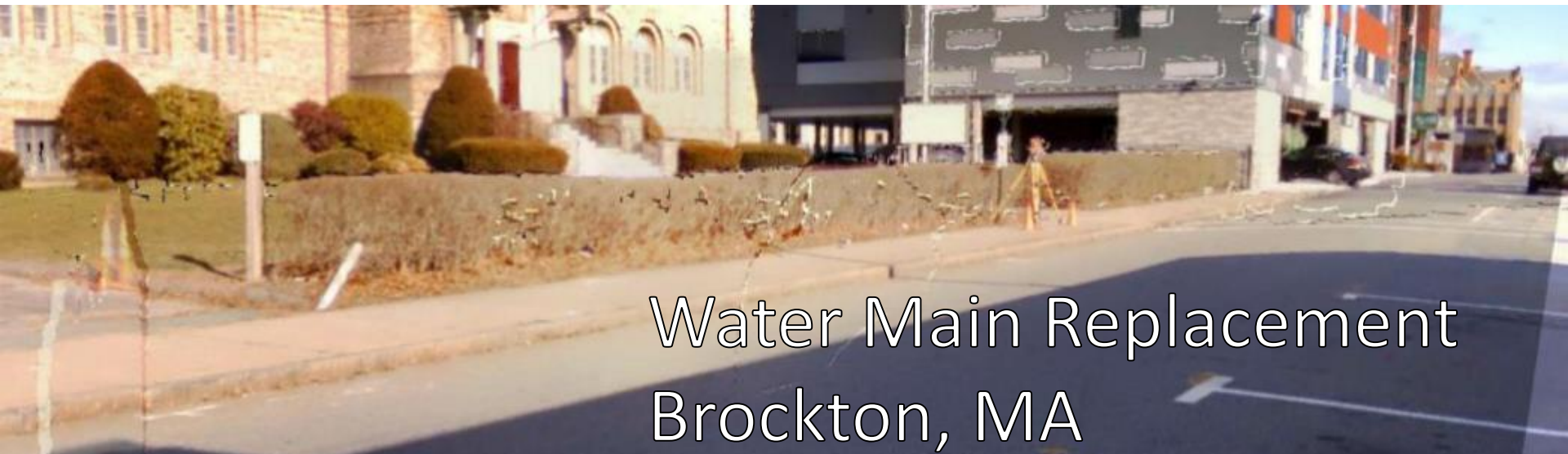
# MINIMIZING SITE VISITS - INFRASTRUCTURE



Green Infrastructure  
Lancaster, PA



# MINIMIZING SITE VISITS - INFRASTRUCTURE





# MINIMIZING SITE VISITS - INFRASTRUCTURE

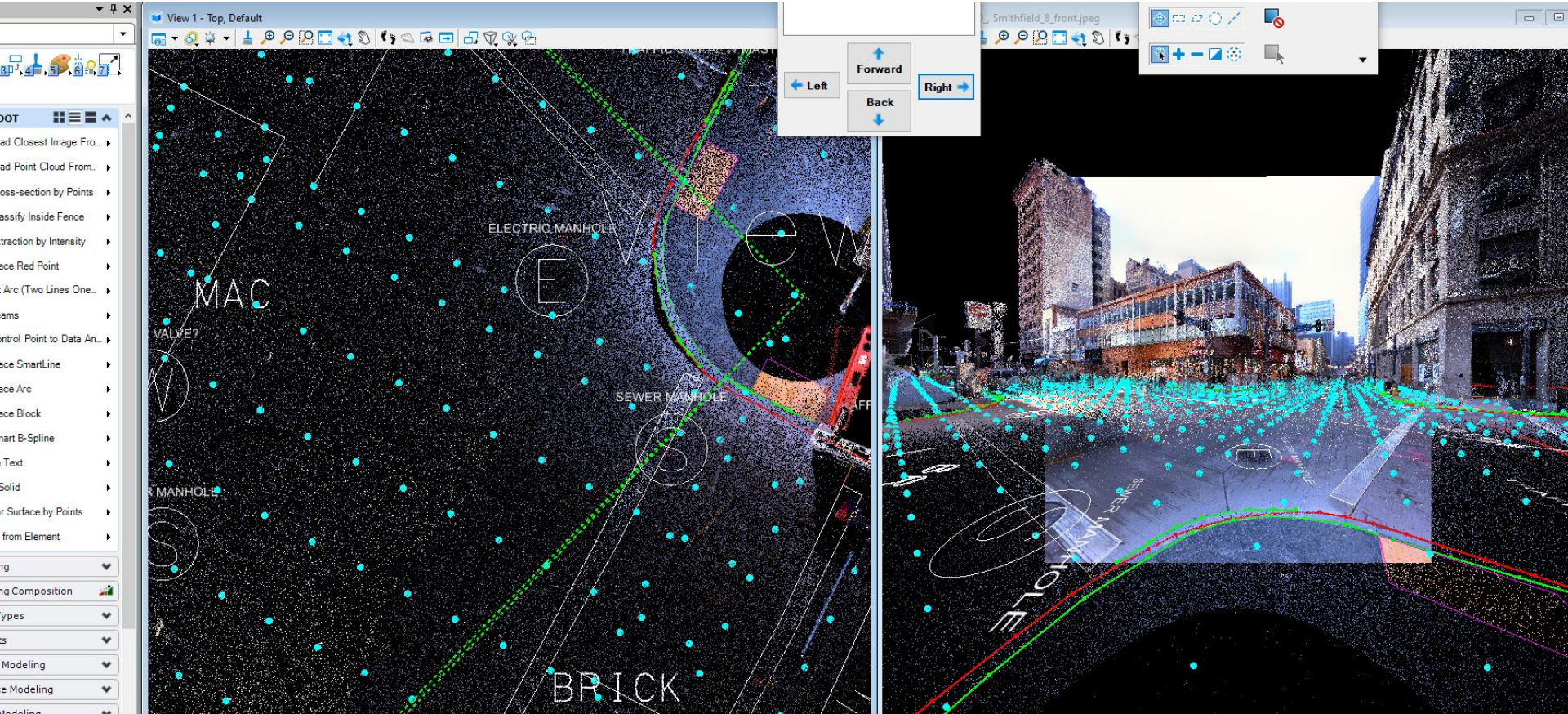


Route 138/Central Street  
Stoughton, MA





# MINIMIZING SITE VISITS - INFRASTRUCTURE

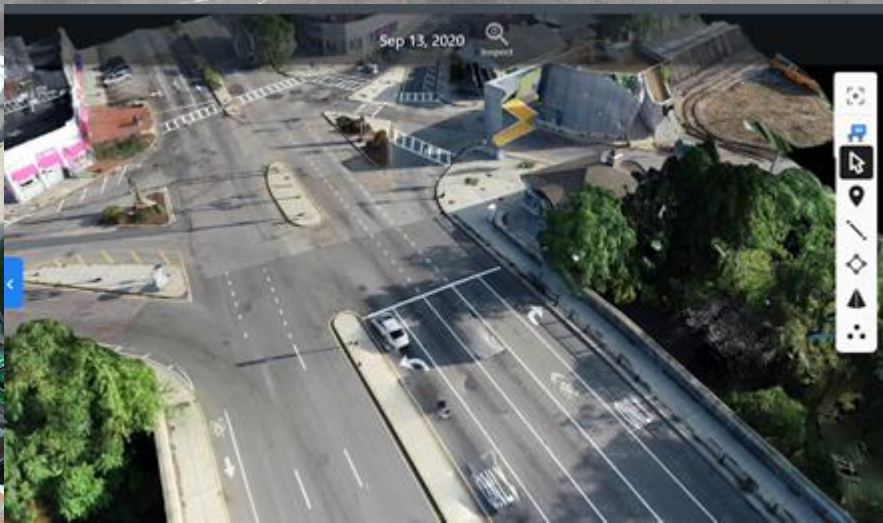
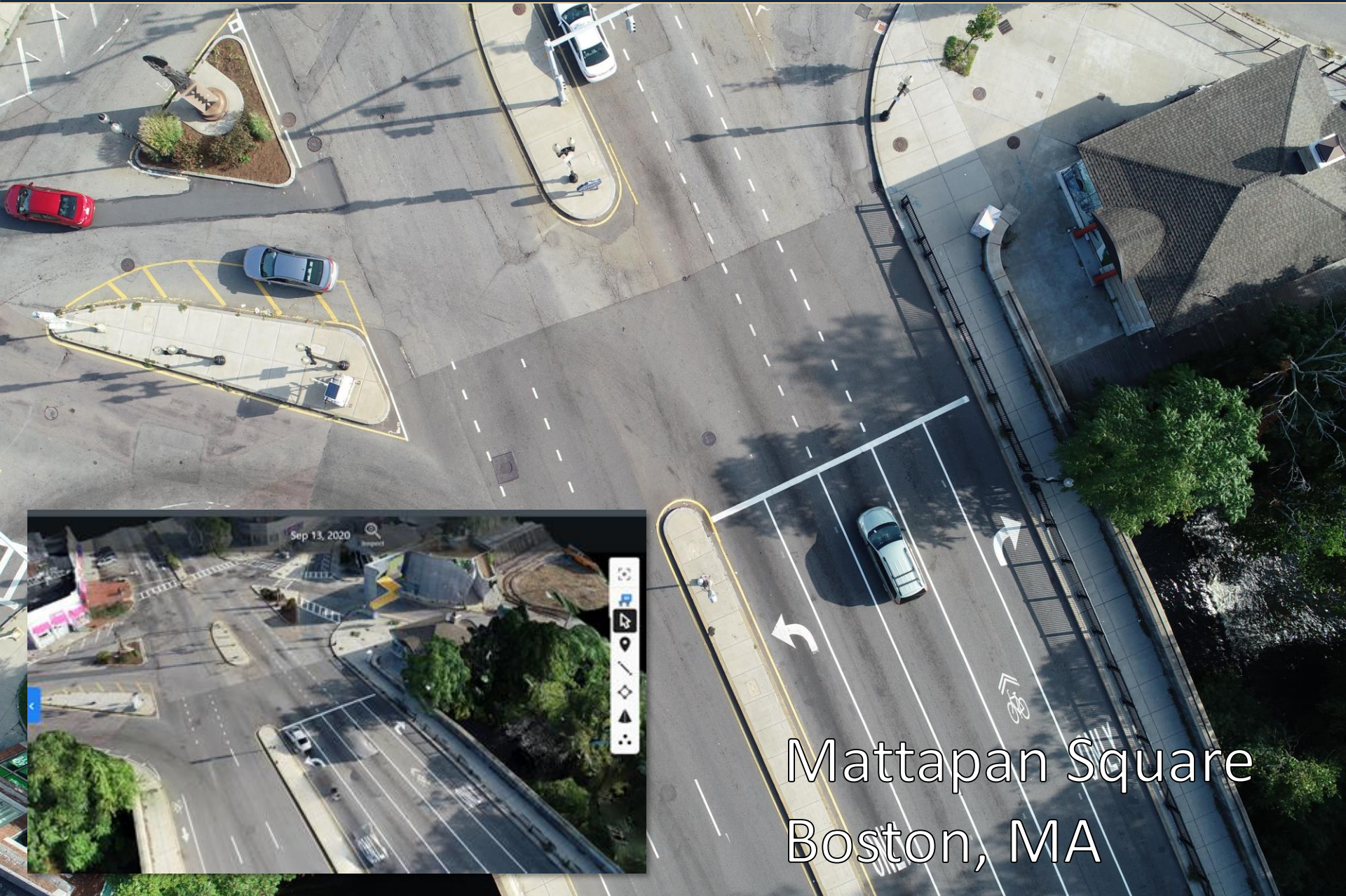


Smithfield Street  
Pittsburgh, PA





# MINIMIZING SITE VISITS - INFRASTRUCTURE



Mattapan Square  
Boston, MA

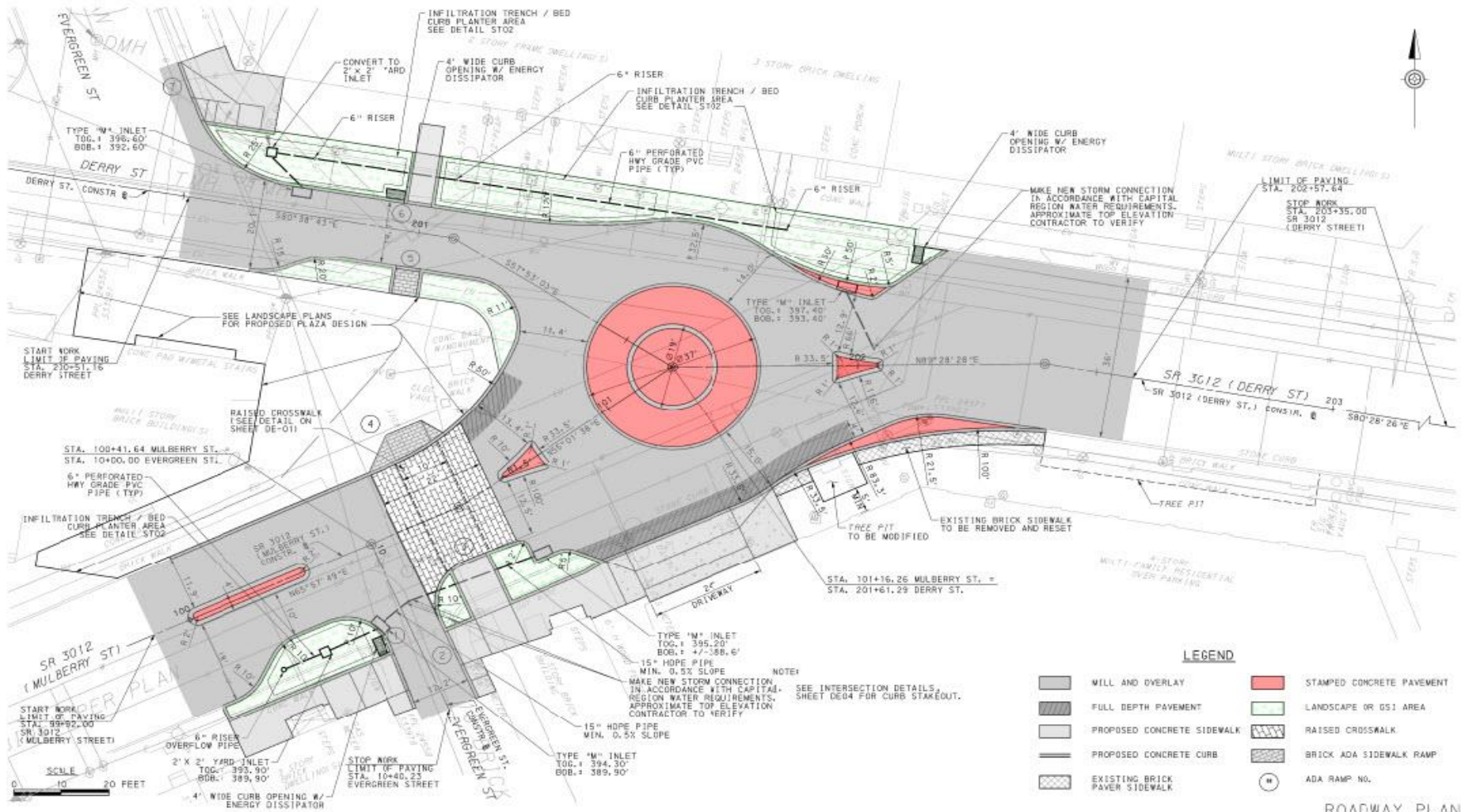
# MINIMIZING SITE VISITS - INFRASTRUCTURE





# CONSIDERATIONS FOR A SURVEYING SCOPE OF WORK

## Plans



# CONSIDERATIONS FOR A SURVEYING SCOPE OF WORK

## Images





# CONSIDERATIONS FOR A SURVEYING SCOPE OF WORK

## Revit Models



Dept. of Health & Services,  
Harrisburg, PA



# CONSIDERATIONS FOR A SURVEYING SCOPE OF WORK





# Thank you!

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