

DOWNTOWN UTILITY ANALYSIS

OVERHEAD TO UNDERGROUND
UTILITY RELOCATIONS



Final Report: November 2021

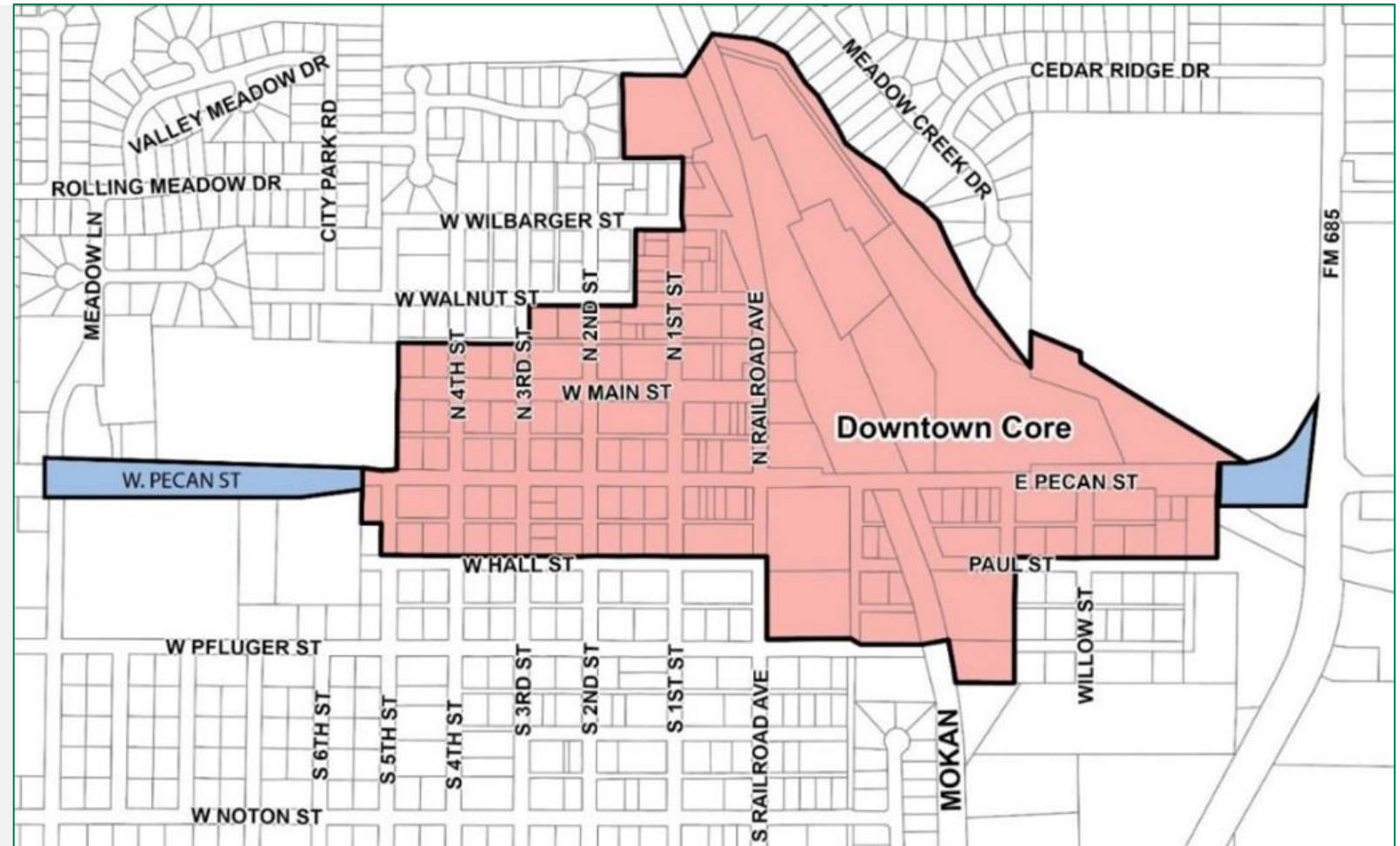
INTRODUCTION

Purpose

- Identify costs associated with relocating overhead utilities underground
- Understand existing infrastructure in study area
- Focus on the Downtown Core and areas along East and West Pecan Street

Benefits

Reliability and Aesthetics

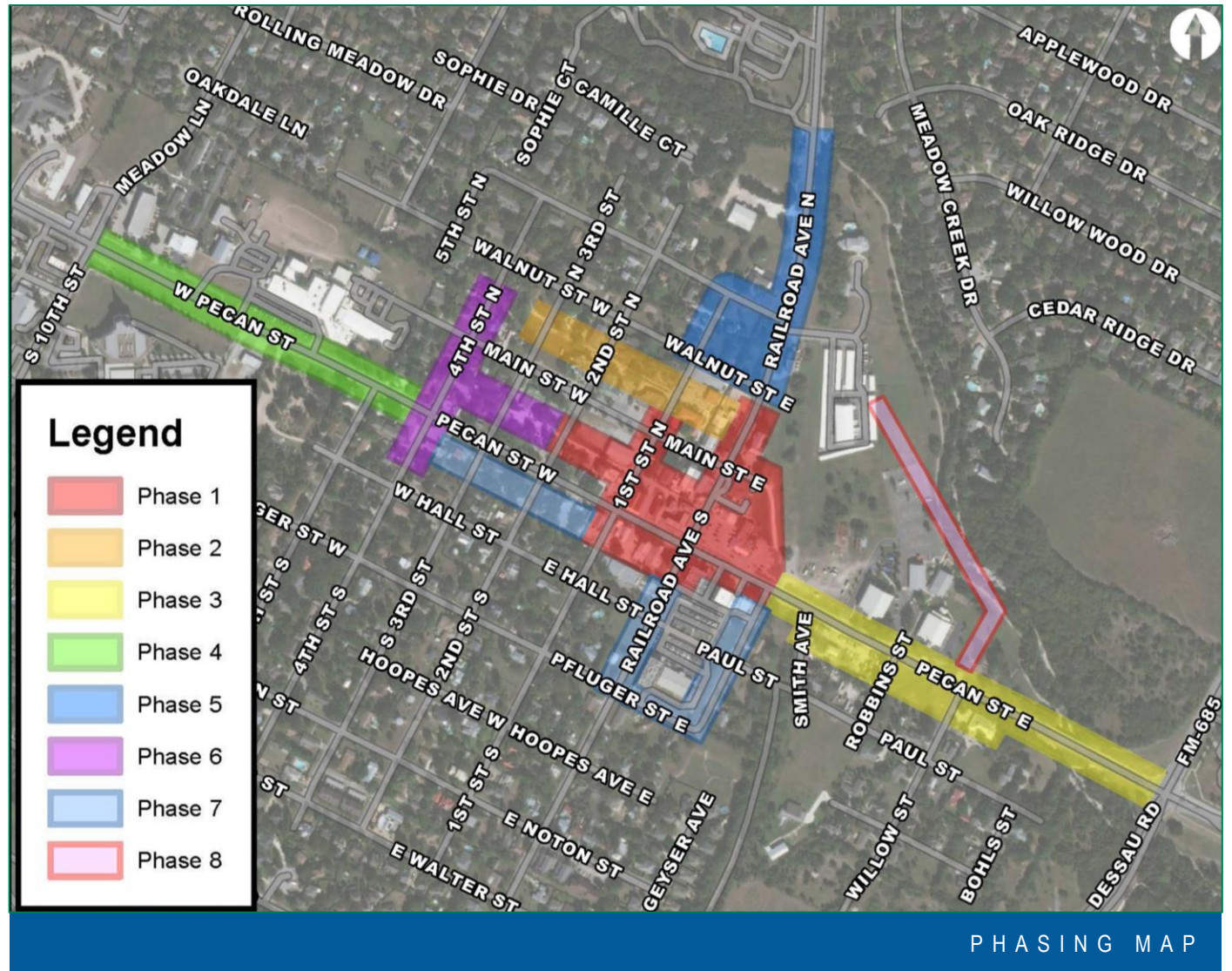


DOWNTOWN CORE AND PECAN STREET WITHIN DOWNTOWN DISTRICT OVERLAY - CITY OF PFLUGERVILLE

PHASES

Study included

- Records research (Subsurface Utility Engineering Level D)
- Data collection from field audits of overhead infrastructure
- Conceptual overhead to underground design and analysis
- Cost estimates
- Potential project phasing
- Schematic level water and wastewater analysis of the Project Area to identify potential concurrent construction opportunities



RECORDS RESEARCH

D

Compile a drawing of all utilities based on the records.

C

Visit site to refine with visible utility features.

B

Non-destructive designating of all underground utilities.

A

Expose utilities underground to obtain horizontal and vertical location.

RECORDS RESEARCH

- As-built information from all utilities
- GIS information from City of Pflugerville
 - Parcel data
 - Water and wastewater data

DATA COLLECTION

- Field crews audited each pole
- Collected:
 - Pole owner
 - Pole size
 - Primary/secondary wire
 - Transformer
 - Telecommunication attachments
 - Photographs
 - Latitude and longitude



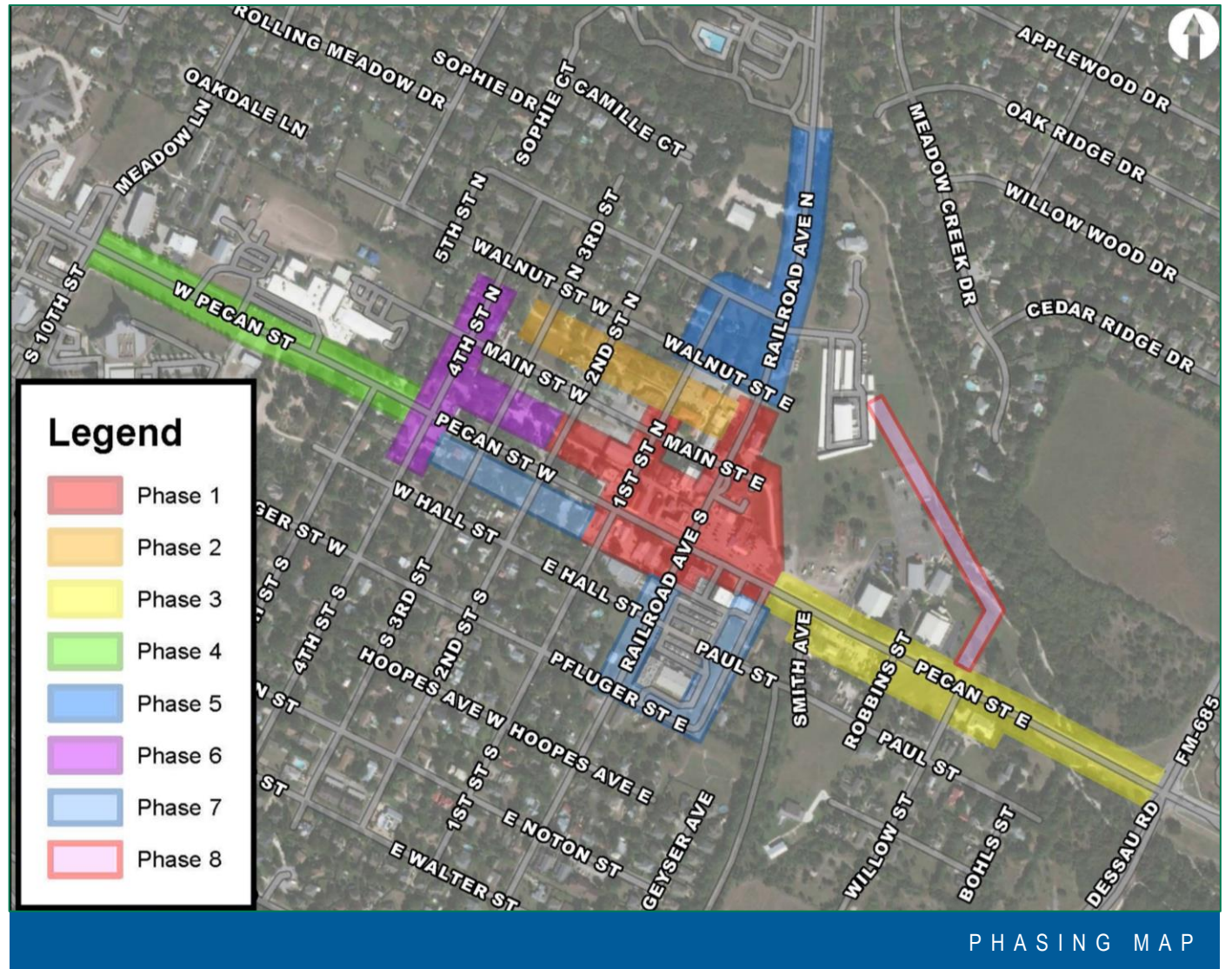
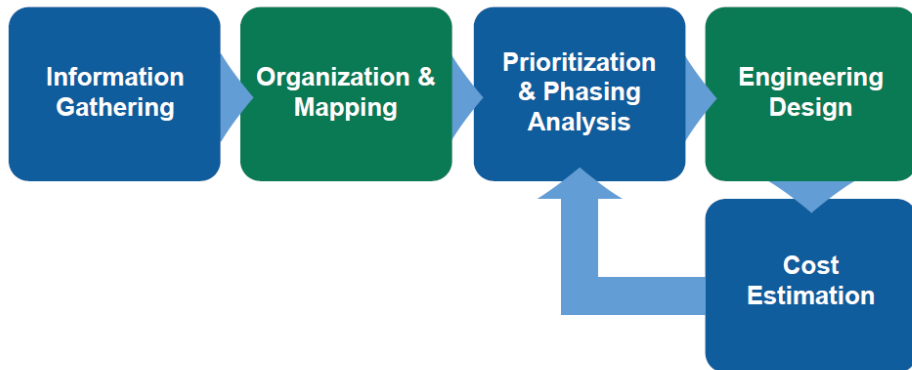
CONCEPTUAL OVERHEAD TO UNDERGROUND DESIGN

- Provide flexibility for future expansion to the system by providing additional conduits
- Replace the existing system in a comparable underground format
- Identify potential easement sizes
- Used to create schematic level cost estimates



PHASING PLAN

- Visibility
- Development opportunity
- Vehicular and pedestrian activity
- Planned public projects



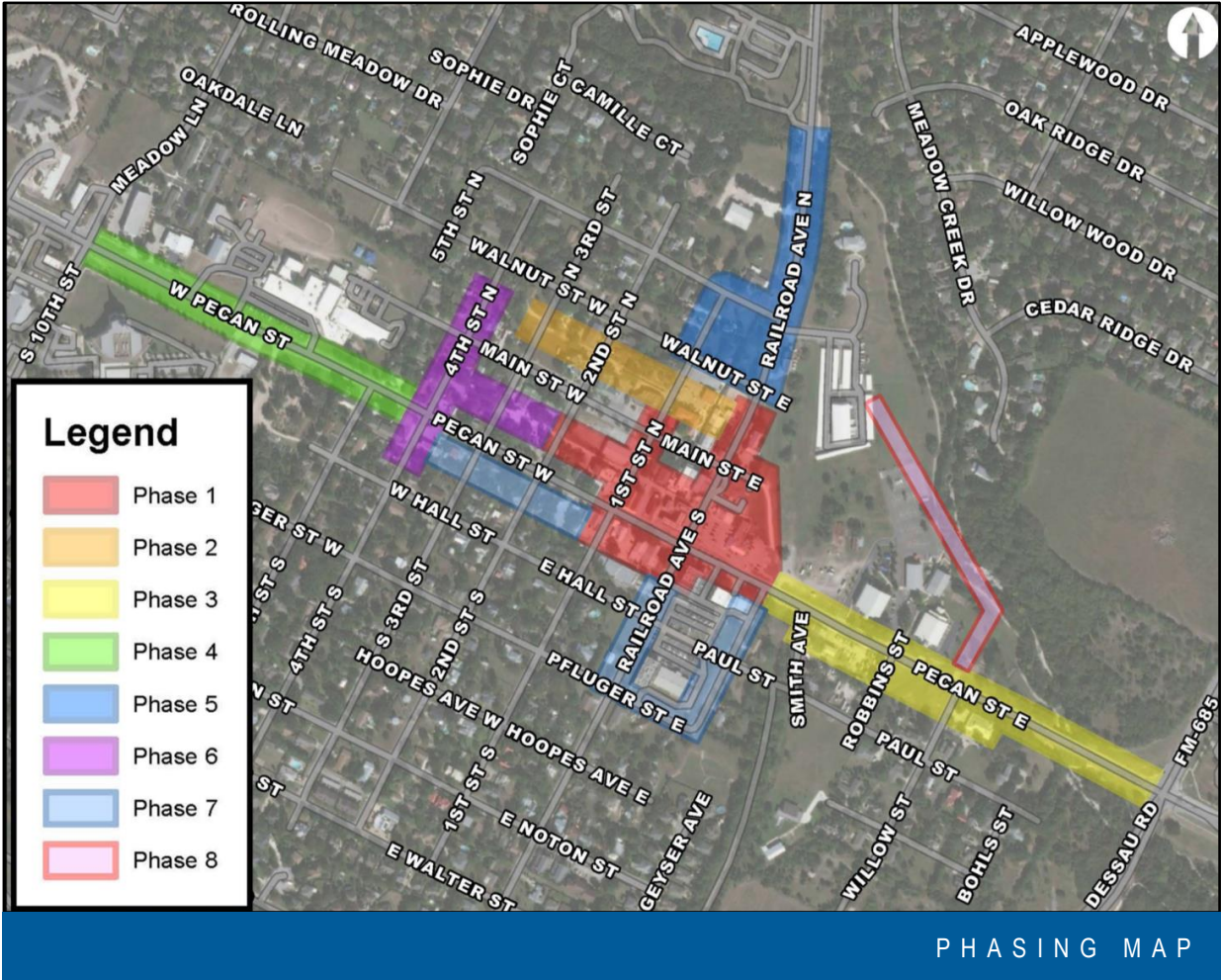
COST ESTIMATES

- Estimates created for each phase
- Includes:
 - 10% site contingency
 - 10% professional services and design support
 - 25% construction contingency
- Provides for all civil infrastructure, equipment, and cable to remove overhead facilities
- Potential easement costs
- Retrofit existing buildings
- Pandemic related cost escalations



COST ESTIMATES

Cost Estimate by Phase		
Cost Estimates by Phase		Unit Price
1	Downtown Commercial Core	\$5,917,686
2	Northern Main Street Alley	\$1,180,000
3	East Pecan Street	\$4,805,086
4	West Pecan Street Gateway	\$4,664,127
5	North Railroad Gateway	\$3,506,035
6	Western Downtown Core	\$2,991,680
7	Downtown Core South	\$4,562,909
8	Main Street Extension / Gilleland Creek	\$1,886,116
Overall Cost Estimate		\$29,513,639

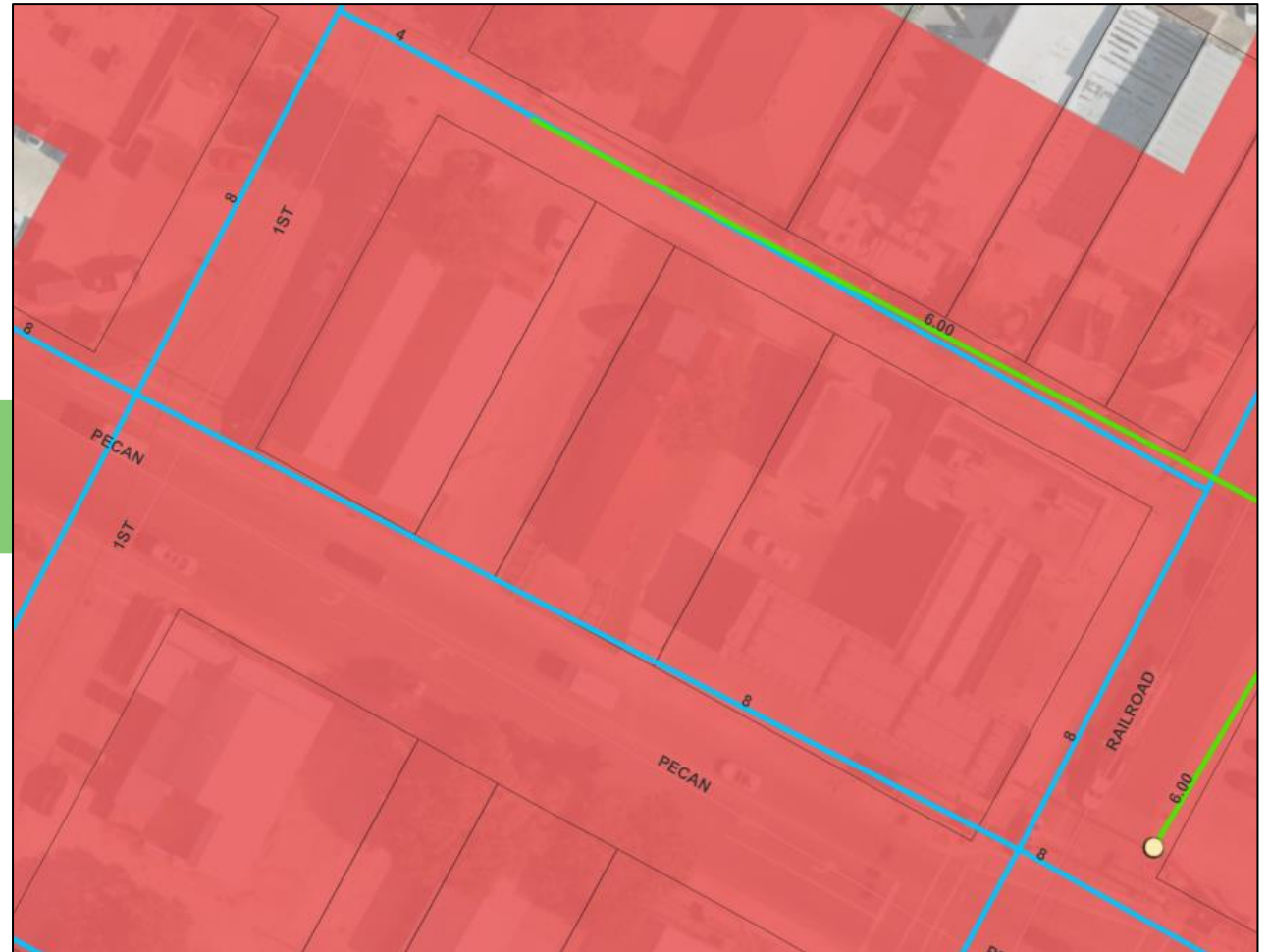


SCHEMATIC WATER AND WASTEWATER ANALYSIS

Identify opportunities for water and wastewater improvements to occur concurrently with the overhead to underground conversion

Based on SUE Level D research

Review for TCEQ clearance requirements

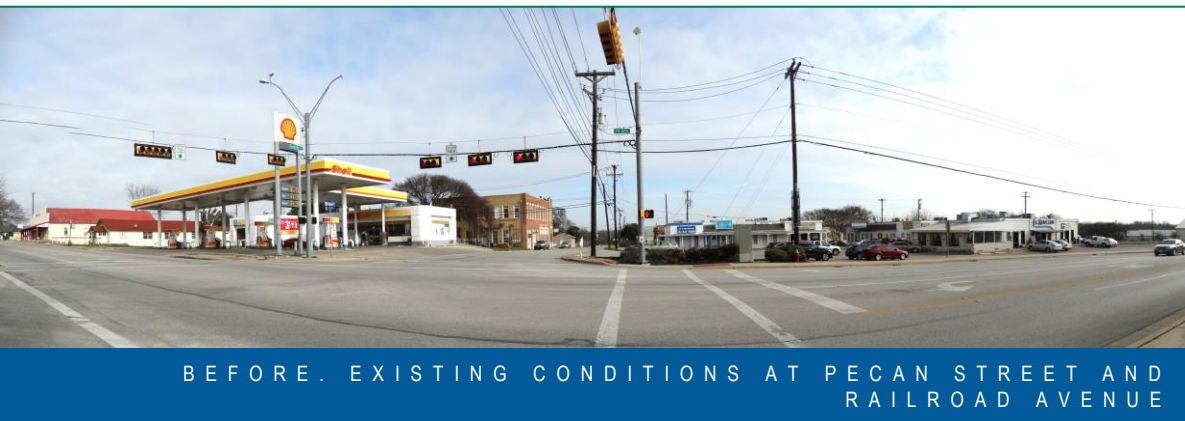


DOWNTOWN COMMERCIAL CORE

RECOMMENDATIONS

STEPS PFORWARD

1. Identify other desired improvements within the study area that may be coupled with the overhead to underground project phases (e.g., streetscape, pedestrian, street, drainage, utilities, and alley improvements)
2. Conduct further detailed water and wastewater systems analysis within Downtown
3. Once funding is secured, pursue detailed design and a thorough SUE investigation



QUESTIONS?

