



REQUEST FOR QUALIFICATIONS 21-012

Preliminary Design of South Castell Avenue

Kimley»Horn
Expect More. Experience Better.

OVERLAND



Castell Avenue Team



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Project Manager & Community Engagement



Sam Lundquist, P.E.
Roadway and Multimodal



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Drainage



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*Urban Design & Community Engagement
(Overland Partners)*



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Landscape and Architecture

Project Understanding



Use Castell as a template for appropriate streetscape improvements



Link catalytic convention site along Castell to Downtown



Connecting private spaces to the public realm



Improve drainage along Castell



Create a public plaza



Create downtown gateway



Improve walkability

Kimley-Horn's Approach to South Castell Avenue



Phase 1
Data Collection and Engineering Analysis

- ▶ Survey
- ▶ Drainage Issues and Solutions
- ▶ Traffic and Parking

Phase 2
Identify Basic Design Parameters

- ▶ Walkable
- ▶ Safe/comfortable
- ▶ Authentic/vibrant
- ▶ Connected

Phase 3
Design the Elements

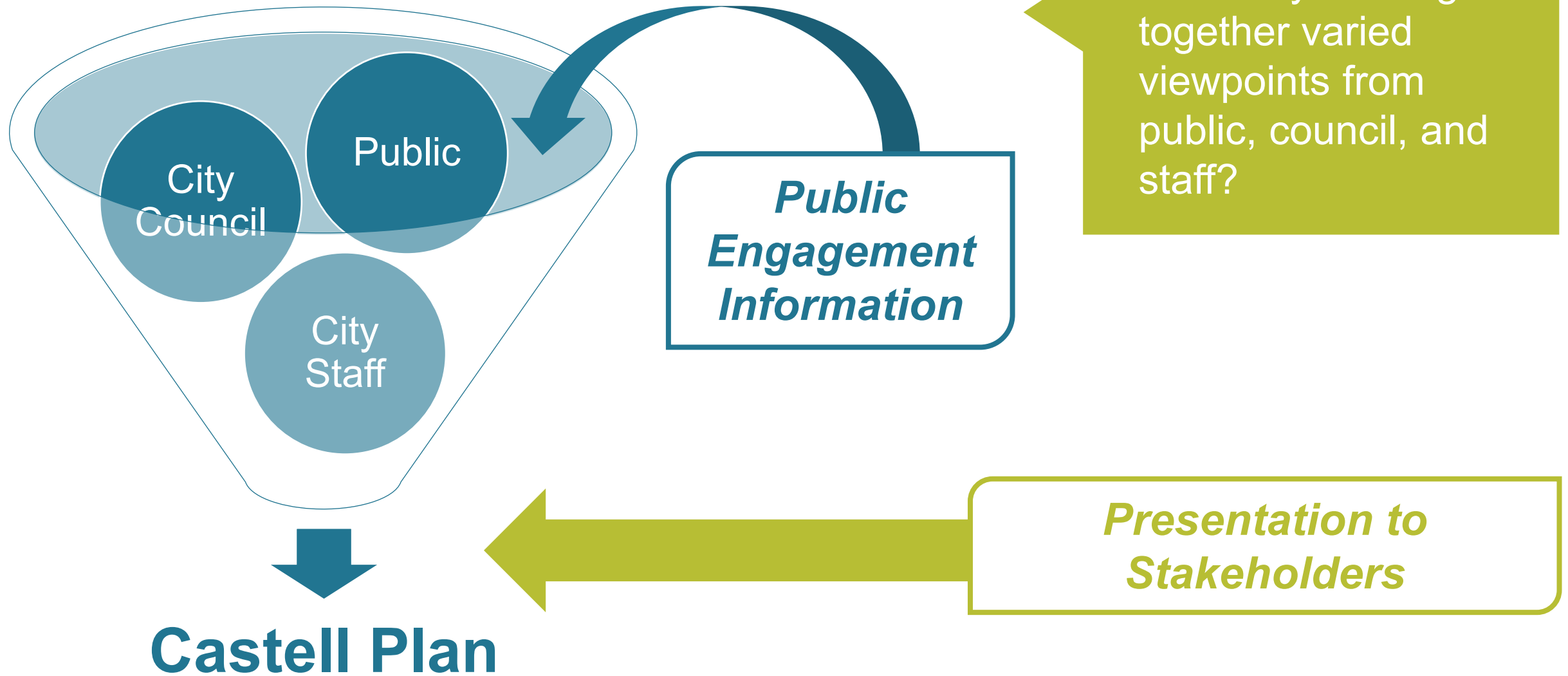
- ▶ Visualizations
- ▶ Preliminary Schematic & Engineering Report
- ▶ Cost Estimate

Engagement Strategy & Techniques

1. Mine Past Engagements
2. Corridor Walk
3. Meetings
4. Community Event



Stakeholder Engagement



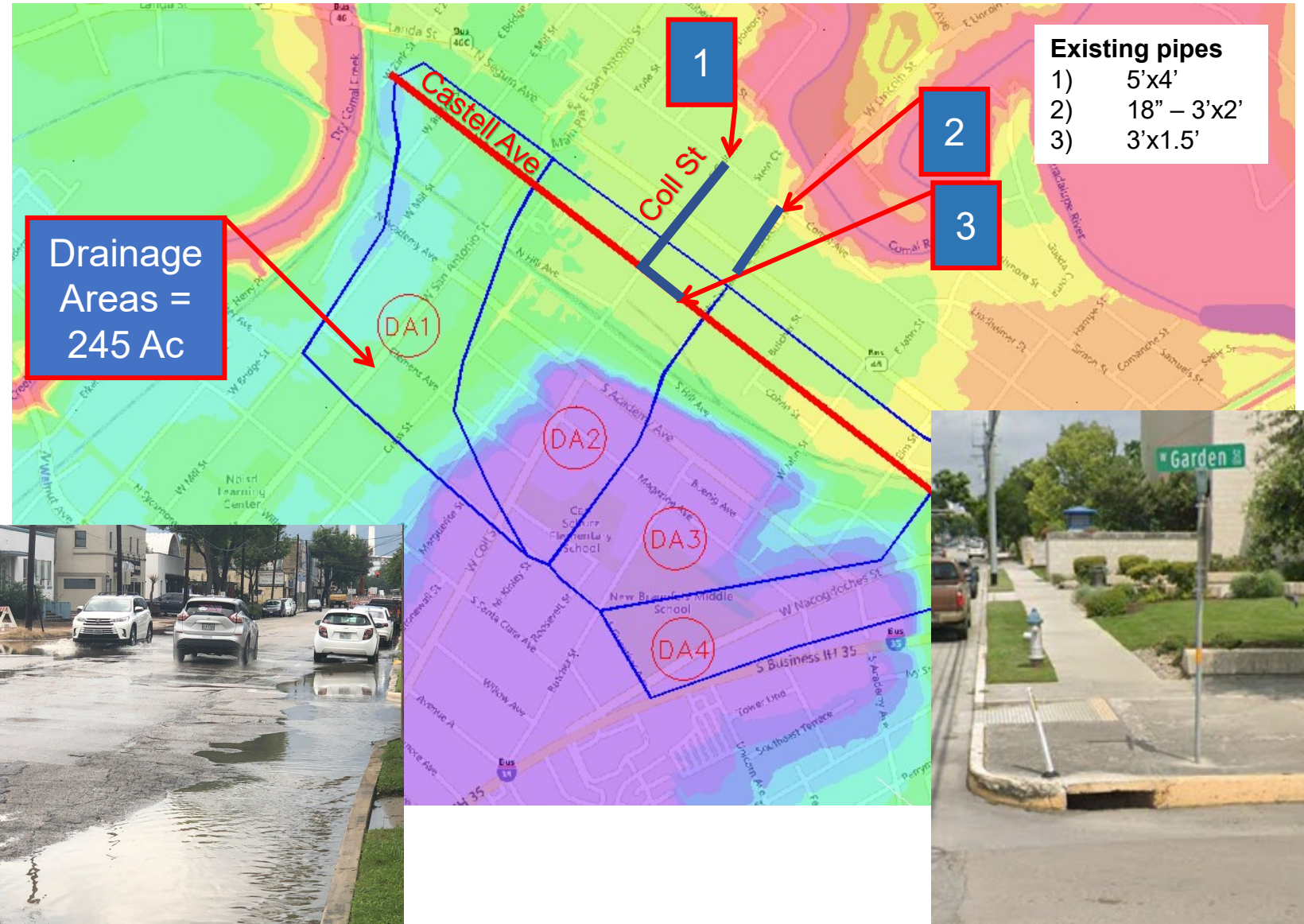


Phase 1: Data Collection and Engineering Analysis

- ▶ Survey
- ▶ Drainage Issues and Solutions
- ▶ Traffic and Parking

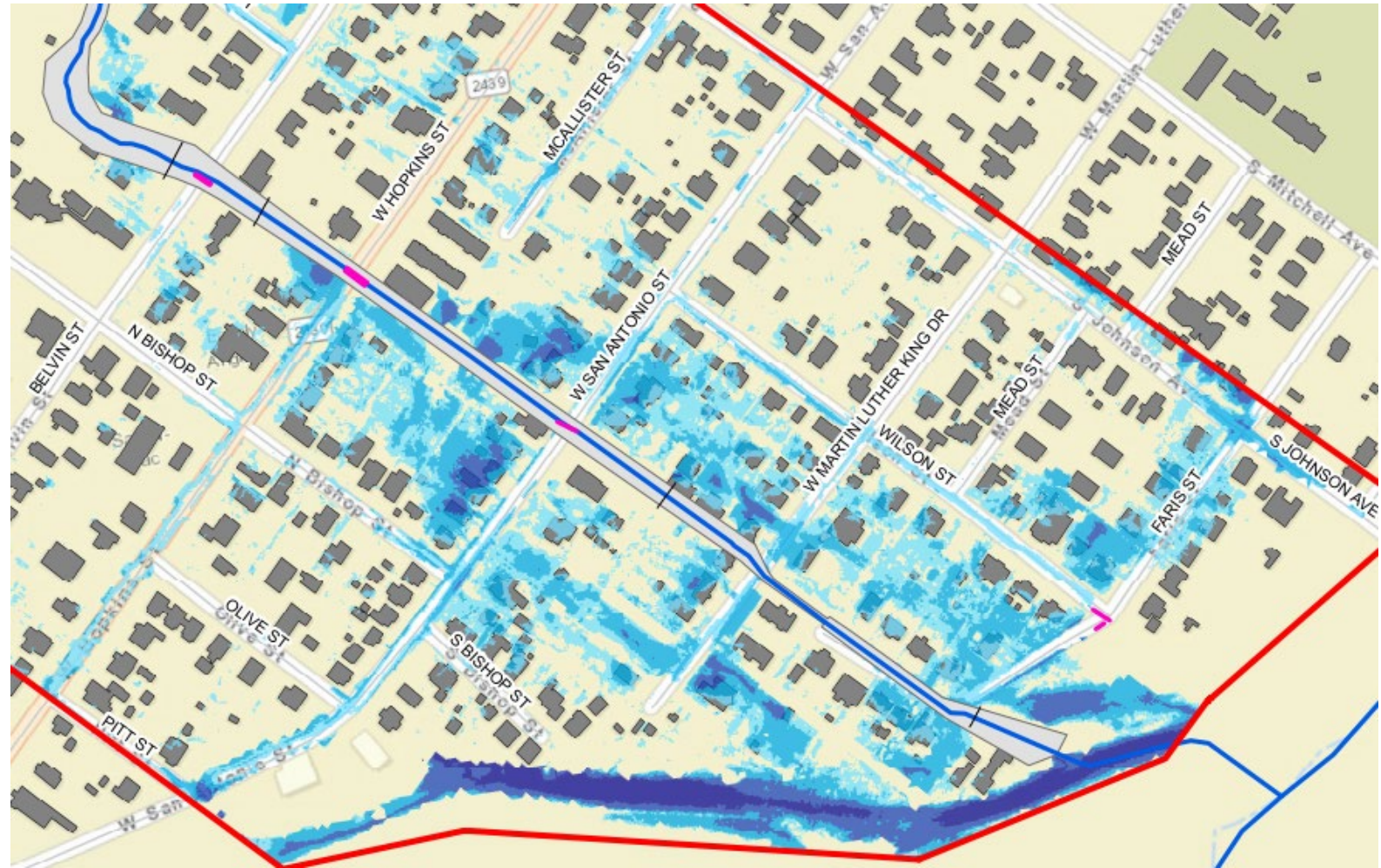
Drainage Issues

- Tailwater at Comal
- Large Offsite Drainage Areas
- Steep to Flat Topography in Project Area
- Undersized Outfall Pipes
- Insufficient and Undersized Inlets
- Deteriorated Pavement



Drainage Solutions

- Model H&H - Consider 2D Modeling Approach
- Analyzes Overland Flow and Volume
 - Makes problem areas more apparent
- Analyze proposed water ponding in ROW
- Drainage Criteria compliance
- Unforeseen Adverse Impacts
- Efficacy in value engineering

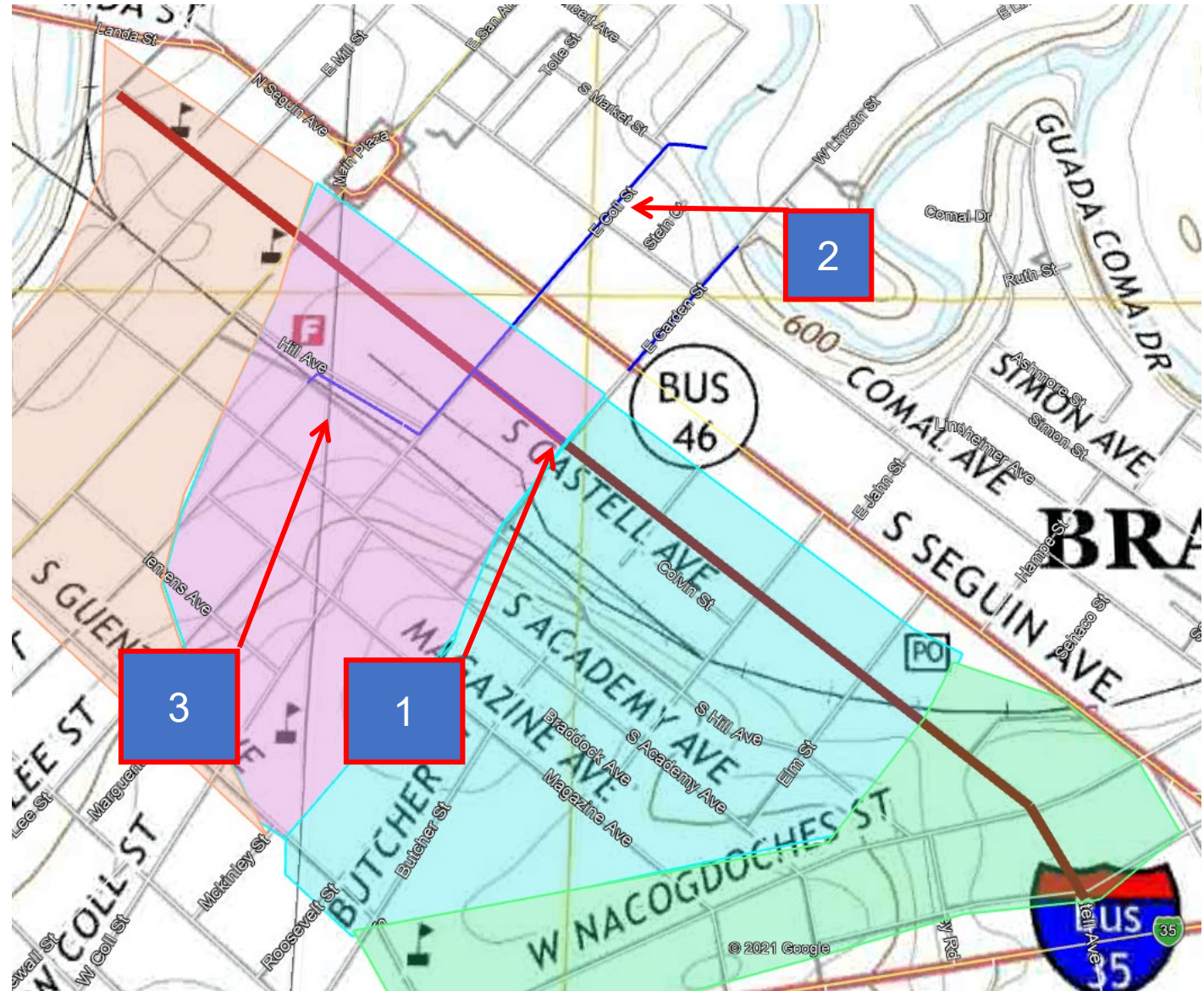


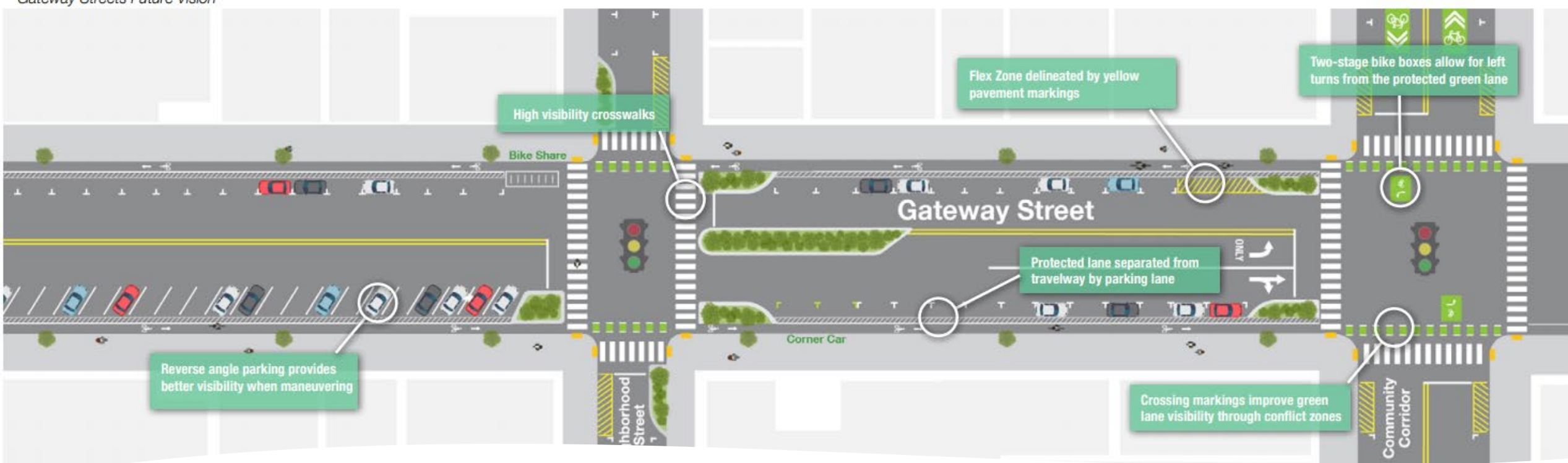
Ex. 2D Model Output

Drainage Solutions

Possible Solutions

- 1) Design to CoNB Drainage Criteria – Inlets and Pipes
- 2) Evaluate and Recommend Upgrades to downstream pipes:
 - a) Phased Approach with Alternatives with respect to Budget
- 3) Capture Offsite Stormwater
- 4) Low Impact Development
- 5) Underground Detention





Traffic and Parking

- **Sight Distance**
 - Bulb Outs. Utilize the edge parking space for enhancements
- **Speed Management**
 - Design for Pedestrians with Gateways and Traffic Calming
- **Curbside Management**
 - On-street parking is valuable and should be purposeful



Phase 2: Identify Basic Design Parameters

- ▶ Walkable
- ▶ Safe/comfortable
- ▶ Authentic/vibrant
- ▶ Connected



Approach

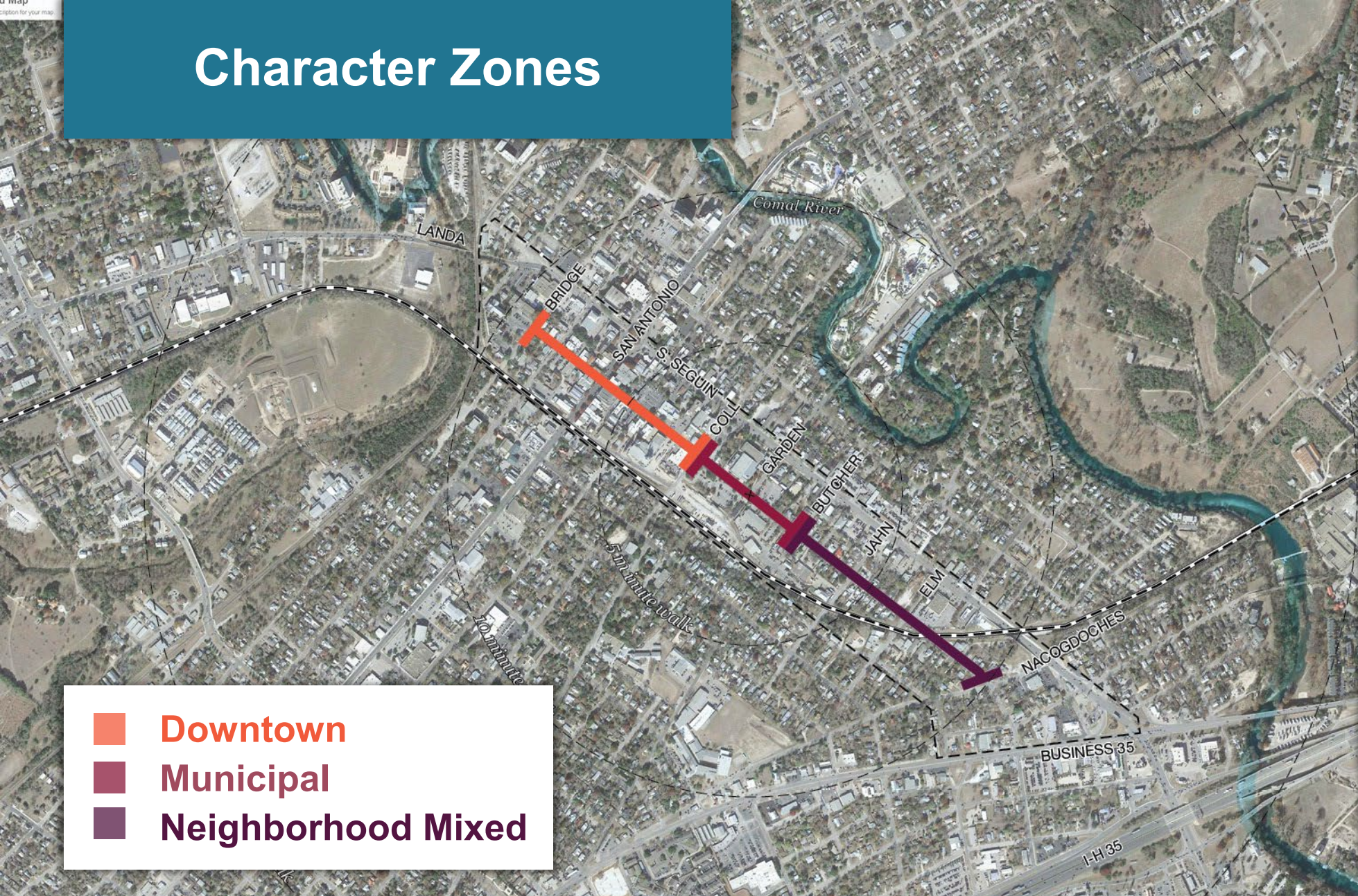
- Build on prior planning efforts.
- Co-create Placemaking and Urban Design strategies through stakeholder engagement.
- Design a complete street that improves pedestrian safety and comfort, enhances connectivity, establishes key gateways, and fosters a more vibrant downtown.

District Concept

- Establish a series of experiences and nodes of activity that reflect the authentic character zones of S. Castell.
- Curate a high-quality public realm that connects existing historic and cultural assets and reinforces development opportunities.



Character Zones

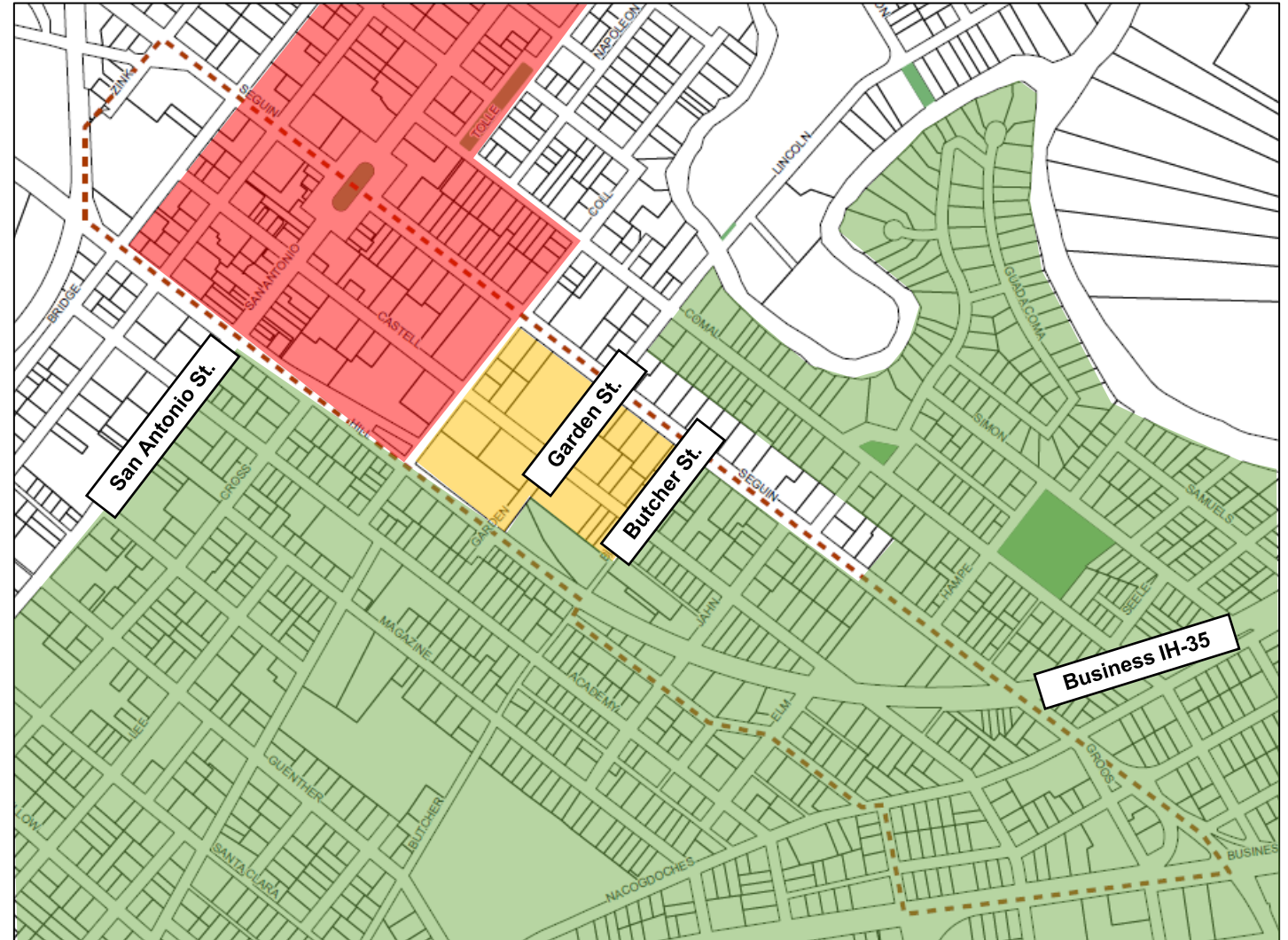


Connection Opportunities



Landscape Influence Zones

- **Downtown Core**
- **Municipal**
- **Neighborhood Mixed**





Downtown Core

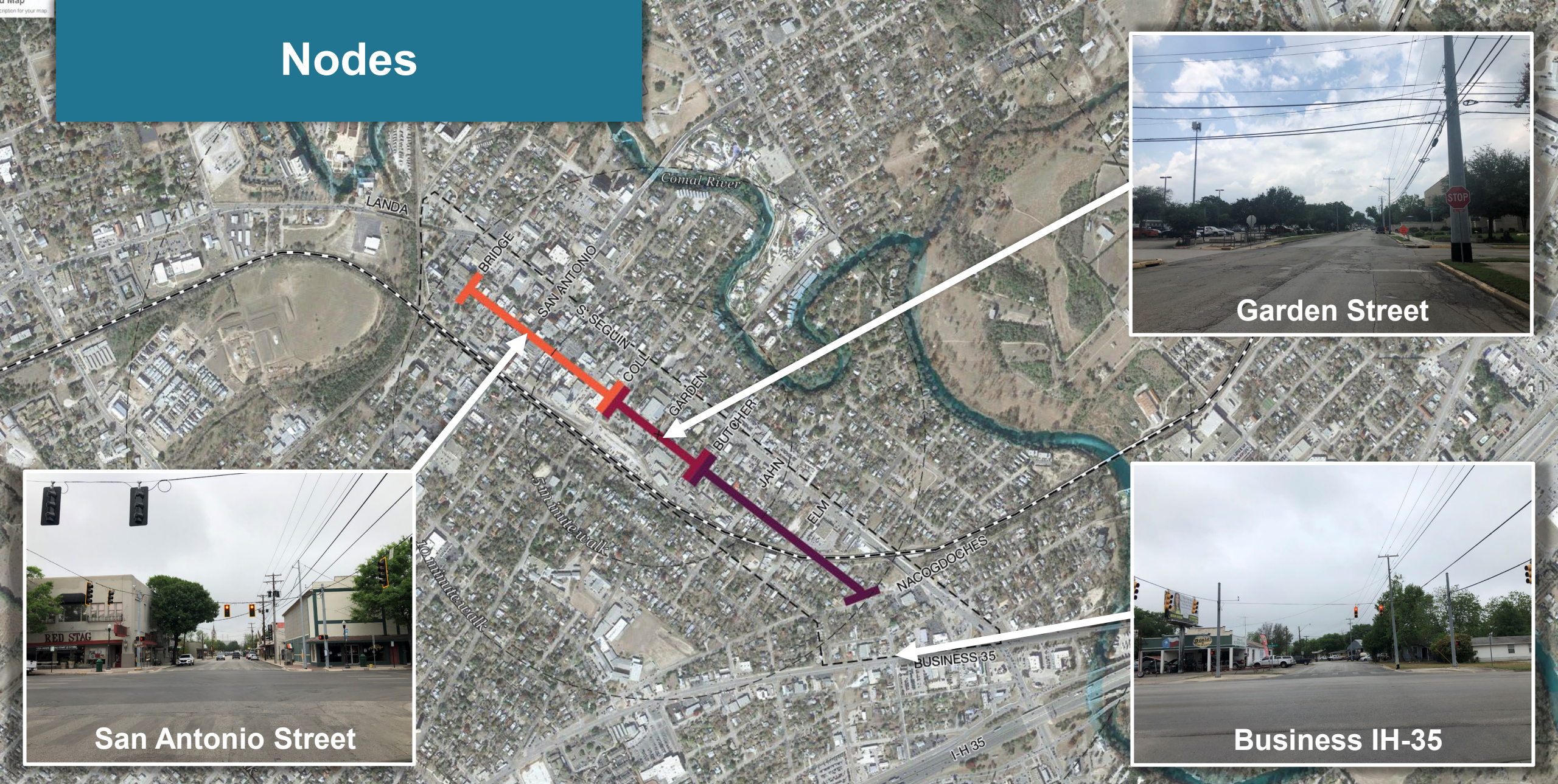


Municipal



Neighborhood Mixed

Nodes



Garden Street

San Antonio Street

Business IH-35

Nodes



San Antonio Street



Garden Street



Business IH-35

Shared Street

- A shared street is designed to emphasize pedestrian mobility by slowing traffic speeds using pedestrian volume, street design, landscaping, lighting, and material selections to help influence driver behavior and contribute to the quality of place.
- The shared street could also be closed to vehicular traffic for special events and festivals.
- Drainage Evaluation
- Water Quality
- Material Type





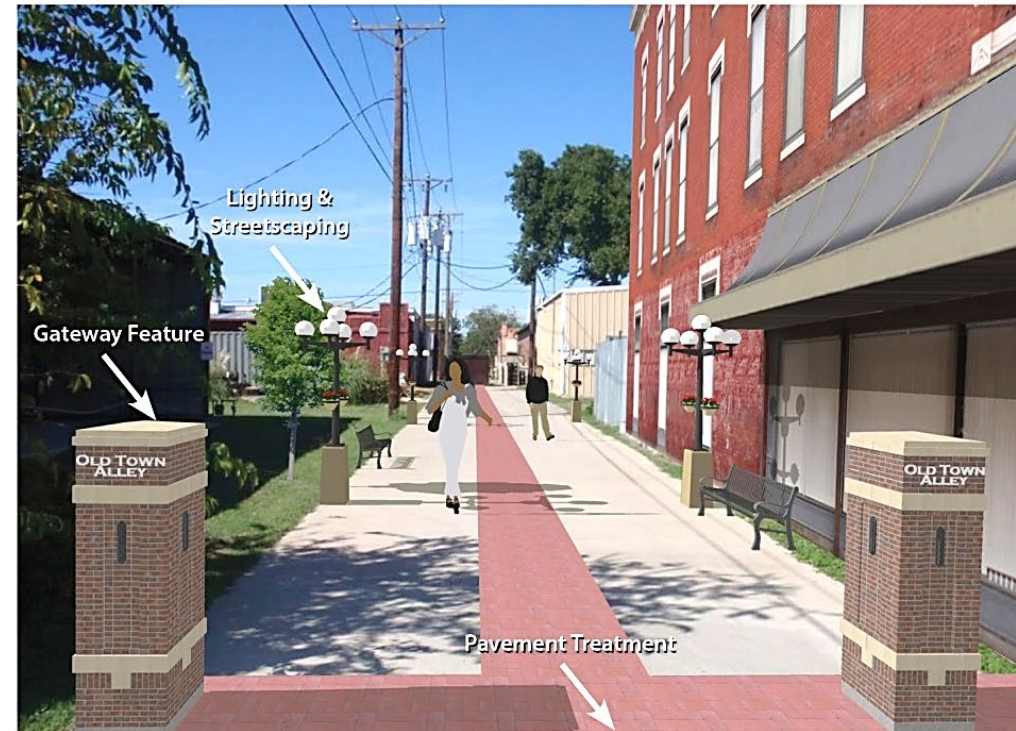
Phase 3: Design the Elements

- Visualizations
- Preliminary Schematic & Engineering Report
- Cost Estimate

*Existing
(Looking north from Bufford St.)*



Pedestrian Alley Concept



Rehabilitate alleys or make new connections to provide pedestrian-priority connections to shops and restaurants



***Business Owner Coordination
Converted Parking for Parklet***



***Details Matter
Things We Noticed During
Design/Construction***



Adjacent Development Collaboration

Worked with Babe's to Create Outdoor Seating



Before



After



Before



After



Pedestrian and Motorist Wayfinding





Design and Safety Elements

- Park Place Example



Preliminary Schematic & Engineering Report

- Utility Assignments
- Short Term vs Long Term Improvements
- Accurate Cost Estimate
- Funding Sources

