project introduction

- Midtown Redevelopment Authority (TIRZ #2)
- Midtown Management District
Location Map

- Midtown TIRZ
- Key Maps 493 P&T
- One way
Existing Bagby Typical Sections

Between St. Joseph and Webster

Between Webster and Tuam
Existing Drainage

EL. 46.2'

EL. 48.7'

108"

108"

30"

60"

BRAZOS

SMITH
Design Vision

- Reconstruct street and the sidewalk
- Replace old and under capacity utilities
- Encourage and plan for redevelopment
- Improve the pedestrian experience
- Incorporate sustainable design
Proposed Bagby Layout
Data

- 9 AC project in ROW
- Large offsite contributing areas
- Net minor decrease impervious cover
- Detention or water quality not required
- 60” trunk line for future upstream dev.
- $Q(w/o \text{ rain gardens}) = 64.8 \text{ CFS}$
- Rain garden $A = 9,828 \text{ SF}$
- $Q(\text{rain gardens}) = 0.5 \text{ CFS}$
- Don’t convey storm water
Why use rain gardens?

- Water quality
- Landscape feature
- Reduce irrigation
- Detention
- Mimic pre-exist
- Save money
Bagby design

- Limited space (urban condition)
- Chamber design with weirs
- Drought tolerant plants
- Consider mosquitos
- Consider budget
- Maximize water quality (FocalPoint)
- Treating the first 1” for 2 AC
- $V=7,260$ CF (over 54,000 gal.)
- Removing heavy metals and other pollutants
In place examples
Bagby Rain Gardens
Rain Gardens and Education
Maintenance
What is Greenroads?

- Similar to LEED system
- Sustainable and LID
- Rating system
- Nonprofit review and education company
- First registered in Texas
- Expecting Certified or Silver certification
Questions?