# Drainage Master Plan Update

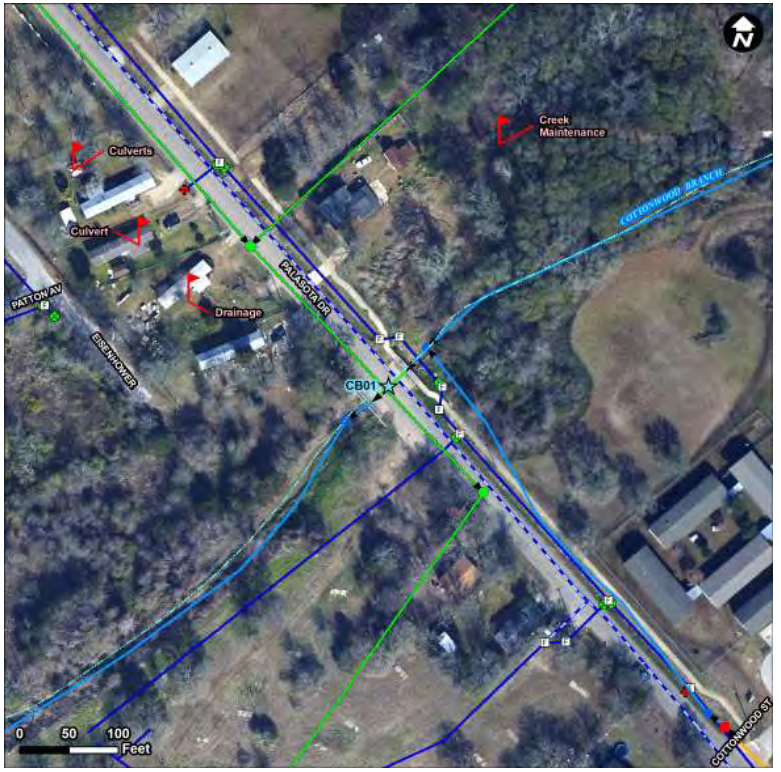
## Project: CB01 - Palasota Road Crossing

***Project Type:*** Flooding ***Drainage CIP Ranking:*** 25 ***Existing Study:*** No ***TxDot:*** No

***Date Identified:*** 2010 ***Total Weighted Score:*** 807 ***Panel #:*** P09

***Date Last Reported:*** ***Project Cost:*** $460,000 ***Council District:*** 1

***Original Cost Year:*** 2010 ***Study File Name:***




### Description:

Palasota Road is considered a collector street according to the City of Bryan Thoroughfare Plan. A study of the channel and detailed design phase needs to be completed to assess the flooding and propose culvert improvements to reduce road overtopping.

### Justification:

Cottonwood Branch flows underneath Palasota Road through box culverts that extend approximately 16 ft outside of the right of way on both the up and downstream sides. Adjacent to the crossing are residential homes and undeveloped land. The road is being overtopped and is flooded approximately 6 inches frequently, according to the City of Bryan bridges with drainage issues database.

### Funding Options:

### Funding Source Summary:

| Type | Original | Source | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|
| Stormwater | $60,000 | Stormwater | $0 | $0 | $0 | $0 | $0 |
| **Design/Survey** | **$60,000** | | **$0** | **$0** | **$0** | **$0** | **$0** |
| Stormwater | $400,000 | Stormwater | $0 | $0 | $0 | $0 | $0 |
| **Const** | **$400,000** | | **$0** | **$0** | **$0** | **$0** | **$0** |
| **Total** | **$460,000** | | **$0** | **$0** | **$0** | **$0** | **$0** |

### Ranking Criteria

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Life Safety:** | 5 | **Street Flooding:** | 5 | **Infrastructure Damage:** | 10 | **Maintenance:** | 0 |
| **Structures Flooding:** | 10 | **Frequency of Flooding:** | 2 | **Funding Source:** | 0 | **Project Cost:** | 7 |
| **Right-of-Way Availability:** | 10 | | | | | | |

# Drainage Master Plan Update

## Project: CB02 - Palasota Road Crossing Trib 5

***Project Type:*** Flooding ***Drainage CIP Ranking:*** 10 ***Existing Study:*** No ***TxDot:*** No

***Date Identified:*** 2010 ***Total Weighted Score:*** 901 ***Panel #:*** P09

***Date Last Reported:*** ***Project Cost:*** $230,000 ***Council District:*** 1

***Original Cost Year:*** 2010 ***Study File Name:***


### Description:

Palasota Road is considered a collector street, according to the City of Bryan Thoroughfare Plan. A study and detailed design needs to be completed to assess the flooding and propose culvert improvements to reduce road overtopping.

### Justification:

Cottonwood Branch Tributary 5 flows beneath Palasota Road through box culverts. The crossing is adjacent to baseball fields on the northwest and undeveloped land. This road provides access to a school and is a main thoroughfare. The bridge floods during low storm events based on observation. This bridge is a low water crossing drainage issues, according to the City of Bryan bridges with drainage issues database.

### Funding Options:

### Funding Source Summary:

| Type | Original | Source | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|
| Stormwater | $30,000 | Stormwater | $0 | $0 | $0 | $0 | $0 |
| **Design/Survey** | **$30,000** | | **$0** | **$0** | **$0** | **$0** | **$0** |
| Stormwater | $200,000 | Stormwater | $0 | $0 | $0 | $0 | $0 |
| **Const** | **$200,000** | | **$0** | **$0** | **$0** | **$0** | **$0** |
| **Total** | **$230,000** | | **$0** | **$0** | **$0** | **$0** | **$0** |

### Ranking Criteria

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Life Safety:** | 10 | **Street Flooding:** | 6 | **Infrastructure Damage:** | 7 | **Maintenance:** | 2 |
| **Structures Flooding:** | 3 | **Frequency of Flooding:** | 9 | **Funding Source:** | 0 | **Project Cost:** | 8 |
| **Right-of-Way Availability:** | 10 | | | | | | |

# Drainage Master Plan Update

## Project: CB03 - Industrial Boulevard Crossing

***Project Type:*** Flooding ***Drainage CIP Ranking:*** 39 ***Existing Study:*** No ***TxDot:*** No

***Date Identified:*** 2010 ***Total Weighted Score:*** 731 ***Panel #:*** P08

***Date Last Reported:*** ***Project Cost:*** $460,000 ***Council District:*** 1

***Original Cost Year:*** 2010 ***Study File Name:***


### Description:

Industrial Boulevard is considered a local street, according to the City of Bryan Thoroughfare Plan. A study and detailed design needs to be completed to assess the flooding and propose culvert improvements to reduce road overtopping.

### Justification:

Cottonwood Branch flows under Industrial Blvd through 4-9'x8' box culverts. The crossing is adjacent to commercial parking lots and undeveloped land and is overtopped by about 2.02 ft during the 100-year storm. The bridge begins flooding during the 2-year storm. The City identified this bridge as overtopping, according to the City of Bryan bridges with drainage issues database..

### Funding Options:

### Funding Source Summary:

| Type | Original | Source | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|
| Stormwater | $60,000 | Stormwater | $0 | $0 | $0 | $0 | $0 |
| **Design/Survey** | **$60,000** | | **$0** | **$0** | **$0** | **$0** | **$0** |
| Stormwater | $400,000 | Stormwater | $0 | $0 | $0 | $0 | $0 |
| **Const** | **$400,000** | | **$0** | **$0** | **$0** | **$0** | **$0** |
| **Total** | **$460,000** | | **$0** | **$0** | **$0** | **$0** | **$0** |

### Ranking Criteria

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Life Safety:** | 10 | **Street Flooding:** | 0 | **Infrastructure Damage:** | 4 | **Maintenance:** | 0 |
| **Structures Flooding:** | 3 | **Frequency of Flooding:** | 10 | **Funding Source:** | 0 | **Project Cost:** | 7 |
| **Right-of-Way Availability:** | 10 | | | | | | |

# Drainage Master Plan Update

## Project: CB04 - Commerce Street Property Flooding

***Project Type:*** Flooding ***Drainage CIP Ranking:*** 72 ***Existing Study:*** No ***TxDot:*** No

***Date Identified:*** 2010 ***Total Weighted Score:*** 582 ***Panel #:*** O09

***Date Last Reported:*** ***Project Cost:*** $402,500 ***Council District:*** 1

***Original Cost Year:*** 2010 ***Study File Name:***


## Description:

A study and detailed design needs to be completed to assess the flooding and propose culvert improvements to reduce road overtopping.

## Justification:

Cottonwood Branch flows under Commerce Street through 2-6'x5.5' box culverts. The crossing is adjacent to residential buildings. According to the City of Bryan flooding and erosion issues database, the properties along Commerce Street at the crossing experience flooding.

## Funding Options:

## Funding Source Summary:

| Type | Original | Source | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|
| Stormwater | $52,500 | Stormwater | $0 | $0 | $0 | $0 | $0 |
| **Design/Survey** | **$52,500** | | **$0** | **$0** | **$0** | **$0** | **$0** |
| Stormwater | $350,000 | Stormwater | $0 | $0 | $0 | $0 | $0 |
| **Const** | **$350,000** | | **$0** | **$0** | **$0** | **$0** | **$0** |
| **Total** | **$402,500** | | **$0** | **$0** | **$0** | **$0** | **$0** |

## Ranking Criteria

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Life Safety:** | 5 | **Street Flooding:** | 4 | **Infrastructure Damage:** | 4 | **Maintenance:** | 0 |
| **Structures Flooding:** | 3 | **Frequency of Flooding:** | 4 | **Funding Source:** | 0 | **Project Cost:** | 7 |
| **Right-of-Way Availability:** | 10 | | | | | | |

# Drainage Master Plan Update

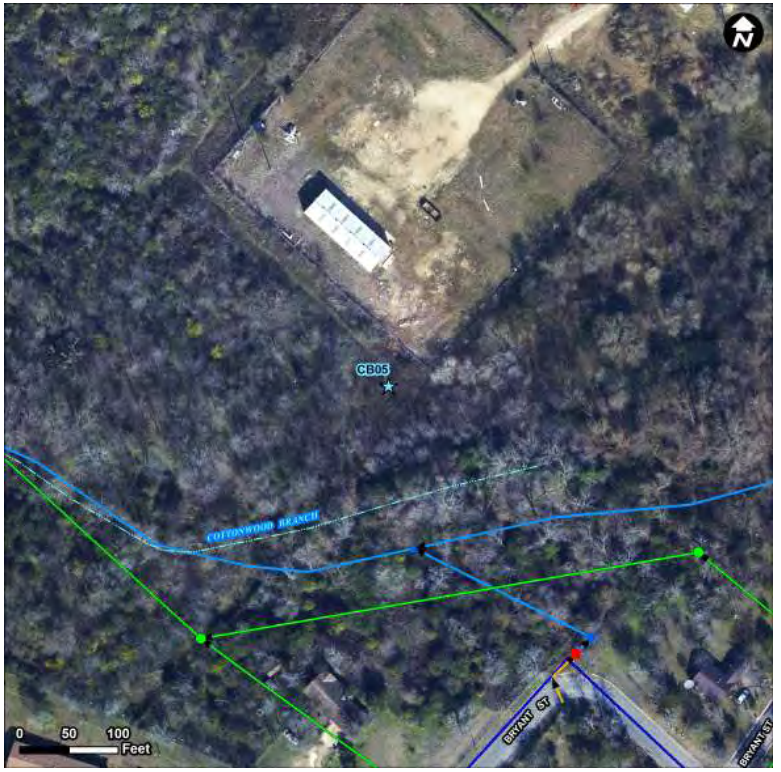
## Project: CB05 - Lee Street Project and Twin City Missions Property Flooding

***Project Type:*** Flooding ***Drainage CIP Ranking:*** 72 ***Existing Study:*** No ***TxDot:*** No

***Date Identified:*** 2010 ***Total Weighted Score:*** 582 ***Panel #:*** O09

***Date Last Reported:*** ***Project Cost:*** $30,000 ***Council District:*** 1

***Original Cost Year:*** 2010 ***Study File Name:***




### *Description:*

A study needs to be completed to assess the flooding and propose improvements to prevent property flooding and damage.

### *Justification:*

Cottonwood Branch flows through the Twin City Missions property near the intersection of Bryant Street and Gainer Street near Lee Street. The area is mostly undeveloped and the channel banks are lined with trees and brush. According to the City of Bryan flooding and erosion issues database, the area is experiencing flooding assumed to be approximately less than 6 inches.

### *Funding Options:*

### *Funding Source Summary:*

| Type | Original | Source | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|
| Stormwater | $30,000 | Stormwater | $0 | $0 | $0 | $0 | $0 |
| **Design/Survey** | **$30,000** | | **$0** | **$0** | **$0** | **$0** | **$0** |
| **Total** | **$30,000** | | **$0** | **$0** | **$0** | **$0** | **$0** |

### *Ranking Criteria*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Life Safety:** | 5 | **Street Flooding:** | 0 | **Infrastructure Damage:** | 4 | **Maintenance:** | 4 |
| **Structures Flooding:** | 5 | **Frequency of Flooding:** | 4 | **Funding Source:** | 0 | **Project Cost:** | 10 |
| **Right-of-Way Availability:** | 3 | | | | | | |

# Drainage Master Plan Update

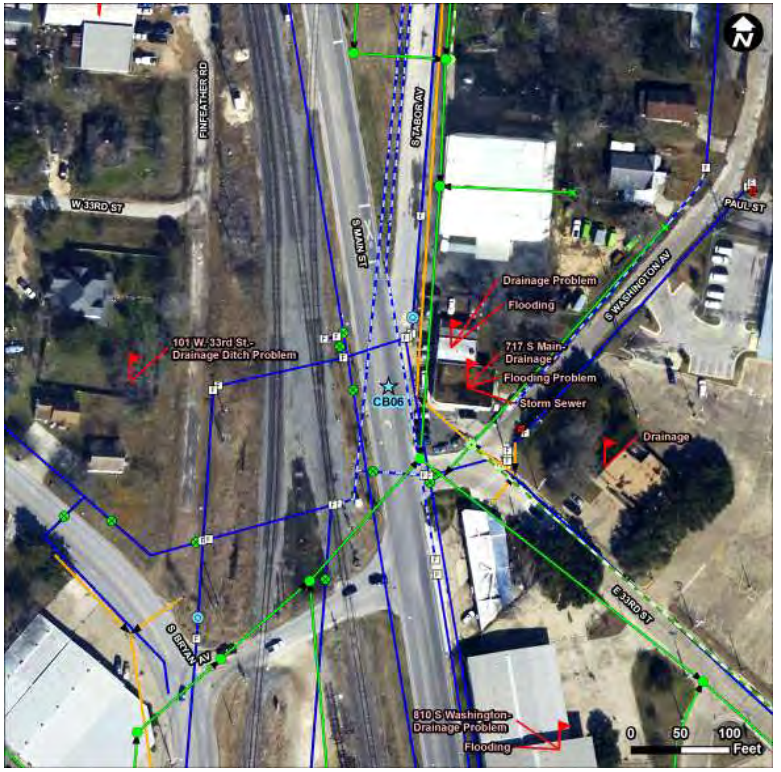
## Project: CB06 - S Main Ave Flooding

***Project Type:*** Flooding ***Drainage CIP Ranking:*** 57 ***Existing Study:*** No ***TxDot:*** No

***Date Identified:*** 2003 ***Total Weighted Score:*** 665 ***Panel #:*** O10

***Date Last Reported:*** ***Project Cost:*** $3,400,700 ***Council District:*** 1

***Original Cost Year:*** 2010 ***Study File Name:***




## Description:

Main Avenue is considered a local street, according to the City of Bryan Thoroughfare Plan. The Thompson Report proposes to upsize the existing system along Main Street up to a 36" RCP and the system along Tabor Street to a 60" RCP. The system will outfall into a 5'x6' RCB leading to Finfeather Lake. The proposed improvements will prevent Main Street and Tabor Road from flooding during the 10-year storm event.

## Justification:

The intersection of S Main Avenue and Groesbeck Street is located on the border of the Cottonwood Creek and Burton Creek watersheds. The railroad runs through the area, which is mostly commercial. Runoff from S. Main Avenue flows into Finfeather Lake. S Main Avenue is experiencing flooding, according to the City of Bryan flooding and erosion issues database. The Thompson "Storm Water Modeling and Infrastructure Mapping Project" project number O2028 identifies this area as flooding during the 10-year storm event.

## Funding Options:

If cost beneficial, this project may qualify for the Flood Mitigation Assistance grant, Hazard Mitigation Grant Program, or the Pre-Disaster Mitigation Grant. These funding options are suggestions and further investigation is needed to determine if this project qualifies for the suggested grants.

## Funding Source Summary:

| Type | Original | Source | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|
| Stormwater | $443,570 | Stormwater | $0 | $0 | $0 | $0 | $0 |
| **Design/Survey** | **$443,570** | | **$0** | **$0** | **$0** | **$0** | **$0** |
| Stormwater | $2,957,130 | Stormwater | $0 | $0 | $0 | $0 | $0 |
| **Const** | **$2,957,130** | | **$0** | **$0** | **$0** | **$0** | **$0** |
| **Total** | **$3,400,700** | | **$0** | **$0** | **$0** | **$0** | **$0** |

## Ranking Criteria

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Life Safety:** | 5 | **Street Flooding:** | 3 | **Infrastructure Damage:** | 4 | **Maintenance:** | 2 |
| **Structures Flooding:** | 7 | **Frequency of Flooding:** | 7 | **Funding Source:** | 0 | **Project Cost:** | 3 |
| **Right-of-Way Availability:** | 10 | | | | | | |

# Drainage Master Plan Update

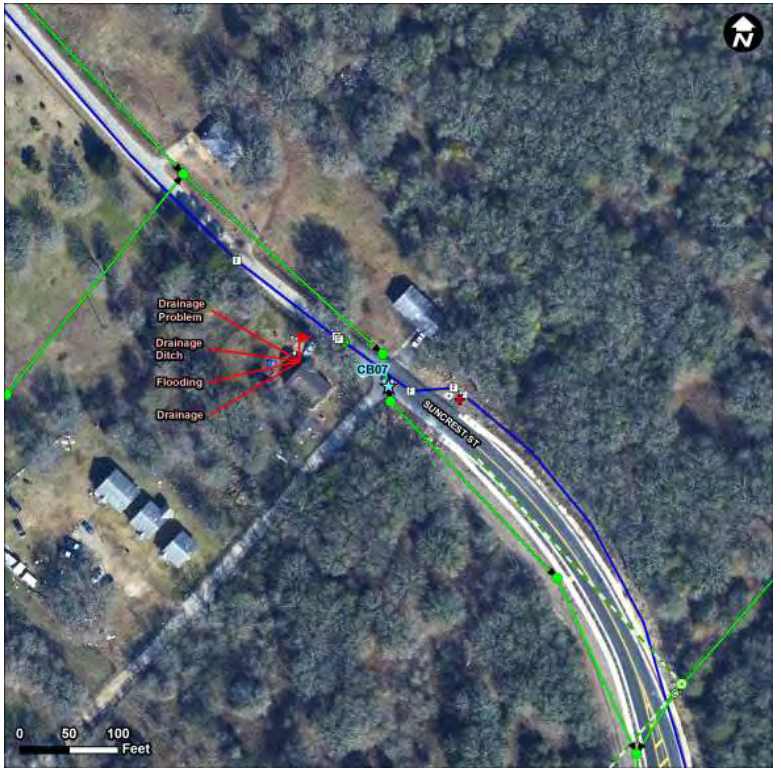
## Project: CB07 - Suncrest Street Drainage

***Project Type:*** Flooding ***Drainage CIP Ranking:*** 63 ***Existing Study:*** No ***TxDot:*** No

***Date Identified:*** 2010 ***Total Weighted Score:*** 637 ***Panel #:*** P09

***Date Last Reported:*** ***Project Cost:*** $35,000 ***Council District:*** 1

***Original Cost Year:*** 2010 ***Study File Name:***




### Description:

Suncrest Street is considered a local street, according to the City of Bryan Thoroughfare Plan. A study of the drainage in the area is needed to assess the flooding and propose improvements to prevent structure flooding and damage.

### Justification:

Suncrest Street runs north and south along Cottonwood Branch. From 807 to 601 Suncrest Street, there are few residential buildings, but mostly undeveloped land. There is a small pond located to the west of the road. According to the City of Bryan flooding and erosion issues database, there is general street flooding of approximately less than 6 inches along this stretch of road near the low point.

### Funding Options:

### Funding Source Summary:

| Type | Original | Source | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|
| Stormwater | $35,000 | Stormwater | $0 | $0 | $0 | $0 | $0 |
| **Design/Survey** | **$35,000** | | **$0** | **$0** | **$0** | **$0** | **$0** |
| **Total** | **$35,000** | | **$0** | **$0** | **$0** | **$0** | **$0** |

### Ranking Criteria

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Life Safety:** | 5 | **Street Flooding:** | 0 | **Infrastructure Damage:** | 4 | **Maintenance:** | 2 |
| **Structures Flooding:** | 5 | **Frequency of Flooding:** | 4 | **Funding Source:** | 0 | **Project Cost:** | 10 |
| **Right-of-Way Availability:** | 10 | | | | | | |

# Drainage Master Plan Update

## Project: CB08 - Richard St. and Mockingbird St Drainage

***Project Type:*** Flooding ***Drainage CIP Ranking:*** 65 ***Existing Study:*** No ***TxDot:*** No

***Date Identified:*** 2010 ***Total Weighted Score:*** 634 ***Panel #:*** P09

***Date Last Reported:*** ***Project Cost:*** $35,000 ***Council District:*** 1

***Original Cost Year:*** 2010 ***Study File Name:***


## Description:

A study of the drainage in the area is needed to assess the flooding and propose improvements to prevent structure flooding and damage.

## Justification:

The intersection of Richard Street and Mockingbird Street is located adjacent to the Cottonwood Branch Creek. A residential subdivision is located along the west side of the intersection. There is general flooding from Cottonwood Branch of approximately less than 6 inches, according to the City of Bryan flooding and drainage issues database.1907 is a repetitive loss structure located in the area.

## Funding Options:

## Funding Source Summary:

| Type | Original | Source | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|
| Stormwater | $35,000 | Stormwater | $0 | $0 | $0 | $0 | $0 |
| **Design/Survey** | **$35,000** | | **$0** | **$0** | **$0** | **$0** | **$0** |
| **Total** | **$35,000** | | **$0** | **$0** | **$0** | **$0** | **$0** |

## Ranking Criteria

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Life Safety:** | 5 | **Street Flooding:** | 0 | **Infrastructure Damage:** | 4 | **Maintenance:** | 4 |
| **Structures Flooding:** | 3 | **Frequency of Flooding:** | 4 | **Funding Source:** | 0 | **Project Cost:** | 10 |
| **Right-of-Way Availability:** | 10 | | | | | | |