



Drainage Master Plan Update

Project: TC01 - Villa Maria Crossing



Project Type: Flooding **Drainage CIP Ranking:** 27 **Existing Study:** No **TxDot:** Yes
Date Identified: 2005 **Total Weighted Score:** 797 **Panel #:** S09
Date Last Reported: **Project Cost:** \$431,250 **Council District:** 5
Original Cost Year: 2010 **Study File Name:**

Description:

Villa Maria is classified as a major arterial road, according to the City of Bryan Thoroughfare Plan. Culvert improvements are necessary at this crossing to reduce road overtopping. Detailed design for the 100-year storm event. There is currently not a study available for this area.

Justification:

There are two existing 9'x9' box culverts that convey flow from Turkey Creek beneath W Villa Maria Road, which is a TxDOT ROW. This street is the only access route for a small subdivision and residential buildings are adjacent to this crossing. Villa Maria Road beings flooding during the 10-year storm event and is overtopped by a depth of 2.67 ft during the 100-year storm event.

Funding Options:

Funding Source Summary:

Type	Original	Source	2011	2012	2013	2014	2015
Stormwater	\$56,250	Stormwater	\$0	\$0	\$0	\$0	\$0
Design/Survey	\$56,250		\$0	\$0	\$0	\$0	\$0
Stormwater	\$375,000	Stormwater	\$0	\$0	\$0	\$0	\$0
Const	\$375,000		\$0	\$0	\$0	\$0	\$0
Total	\$431,250		\$0	\$0	\$0	\$0	\$0



Ranking Criteria

Life Safety:	10	Street Flooding:	10	Infrastructure Damage:	4	Maintenance:	0
Structures Flooding:	3	Frequency of Flooding:	7	Funding Source:	0	Project Cost:	7
Right-of-Way Availability:	8						



Drainage Master Plan Update

Project: TC02 - London Bridge Crossing - FNI



Project Type: Flooding **Drainage CIP Ranking:** 78 **Existing Study:** No **TxDot:** No
Date Identified: 2005 **Total Weighted Score:** 490 **Panel #:** V08
Date Last Reported: **Project Cost:** \$230,000 **Council District:** 5
Original Cost Year: 2010 **Study File Name:**

Description:

Jones Road is classified as a collector street, according to the City of Bryan Thoroughfare plan. Culvert improvements are necessary at this crossing to reduce road overtopping. Detailed design for the 100-year storm event has not yet been studied.

Justification:

Turkey Creek flows under the London Bridge at Jones Road. The street is adjacent to undeveloped land and beings flooding during the 50-year storm event. The road is overtopped by a depth of 0.92 ft during the 100-year storm event.

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:	7	Street Flooding:	2	Infrastructure Damage:	0	Maintenance:	0
Structures Flooding:	3	Frequency of Flooding:	1	Funding Source:	0	Project Cost:	8
Right-of-Way Availability:	10						



Drainage Master Plan Update



Project: TC03 - Westwood Main Street Crossing SF Turkey Creek

Project Type: Flooding **Drainage CIP Ranking:** 52 **Existing Study:** No **TxDot:** No
Date Identified: 2010 **Total Weighted Score:** 683 **Panel #:** T09
Date Last Reported: **Project Cost:** \$345,000 **Council District:** 5
Original Cost Year: 2010 **Study File Name:**

Description:

Westwood Main Street is classified as a local 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:

The South Fork of Turkey Creek is conveyed under Westwood Main Street through a culvert. The crossing is adjacent to mostly undeveloped land and surrounded with trees. According to the City, the road experiences flooding of approximately less than 6 inches during storm events.

Funding Options:

Funding Source Summary:

Type	Original	Source	2011	2012	2013	2014	2015
Stormwater	\$45,000	Stormwater	\$0	\$0	\$0	\$0	\$0
Design/Survey	\$45,000		\$0	\$0	\$0	\$0	\$0
Stormwater	\$300,000	Stormwater	\$0	\$0	\$0	\$0	\$0
Const	\$300,000		\$0	\$0	\$0	\$0	\$0
Total	\$345,000		\$0	\$0	\$0	\$0	\$0



Ranking Criteria

Life Safety: 5 **Street Flooding:** 2 **Infrastructure Damage:** 10 **Maintenance:** 0
Structures Flooding: 3 **Frequency of Flooding:** 4 **Funding Source:** 0 **Project Cost:** 8
Right-of-Way Availability: 10



Drainage Master Plan Update

Project: TC04 - Leon Street Flooding



Project Type: Flooding **Drainage CIP Ranking:** 77 **Existing Study:** No **TxDot:** No
Date Identified: 2010 **Total Weighted Score:** 493 **Panel #:** S10
Date Last Reported: **Project Cost:** \$40,000 **Council District:** 5
Original Cost Year: 2010 **Study File Name:**

Description:

A study of the drainage and detailed design phase are needed to assess flooding and propose improvements to reduce flooding in the area. This project only includes the study phase. In the study phase alternatives should be recommended to eliminate flooding in the area.

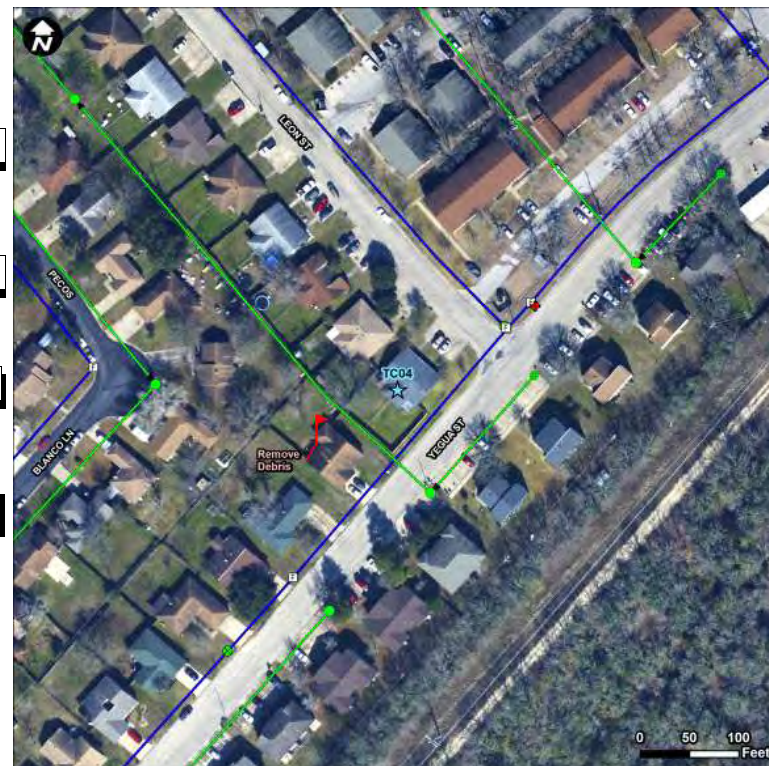
Justification:

3512 Leon Street is located at the intersection of Leon Street and Yegua Street and in a single family residential subdivision. The City identified general street flooding at this location due to runoff from the streets and subdivision.

Funding Options:

Funding Source Summary:

Type	Original	Source	2011	2012	2013	2014	2015
Stormwater	\$40,000	Stormwater	\$0	\$0	\$0	\$0	\$0
Design/Survey	\$40,000		\$0	\$0	\$0	\$0	\$0
Total	\$40,000		\$0	\$0	\$0	\$0	\$0



Ranking Criteria

Life Safety:	0	Street Flooding:	3	Infrastructure Damage:	0	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: TC05 - W Villa Maria Erosion



Project Type: Erosion **Drainage CIP Ranking:** 88 **Existing Study:** No **TxDot:** Yes
Date Identified: 2010 **Total Weighted Score:** 427 **Panel #:** S09
Date Last Reported: **Project Cost:** \$862,500 **Council District:** 5
Original Cost Year: 2010 **Study File Name:**

Description:

Erosion control and detailed design is needed to propose improvements that will reduce erosion along the channel. Culvert improvements are needed at this location (TC01), and could be completed concurrently with this project.

Justification:

Turkey Creek is conveyed under W Villa Maria Road through a culvert crossing. The crossing is adjacent to residential buildings on the south and undeveloped area to the north. The City identified erosion along the creek on the up and downstream sides of W Villa Maria Road.

Funding Options:

Funding Source Summary:

Type	Original	Source	2011	2012	2013	2014	2015
Stormwater	\$112,500	Stormwater	\$0	\$0	\$0	\$0	\$0
Design/Survey	\$112,500		\$0	\$0	\$0	\$0	\$0
Stormwater	\$750,000	Stormwater	\$0	\$0	\$0	\$0	\$0
Const	\$750,000		\$0	\$0	\$0	\$0	\$0
Total	\$862,500		\$0	\$0	\$0	\$0	\$0



Ranking Criteria

Life Safety:	0	Street Flooding:	4	Infrastructure Damage:	4	Maintenance:	2
Structures Flooding:	3	Frequency of Flooding:	0	Funding Source:	0	Project Cost:	6
Right-of-Way Availability:	10						



Drainage Master Plan Update

Project: TC06 - Unnamed Trib Miana Ct Erosion



Project Type: Erosion **Drainage CIP Ranking:** 98 **Existing Study:** No **TxDot:** No
Date Identified: 2010 **Total Weighted Score:** 313 **Panel #:** T09
Date Last Reported: **Project Cost:** \$310,500 **Council District:** 5
Original Cost Year: 2010 **Study File Name:**

Description:

Erosion control and detailed design is needed to propose improvements that will reduce erosion along the channel.

Justification:

Turkey Creek Unnamed Tributary flows east of the Miana Court cul-de-sac and is conveyed under Villa Maria Road. The area is mainly small subdivisions and undeveloped land. According to the City, there is erosion along the channel behind the homes at 2100 and 2102 Miana court.

Funding Options:

Funding Source Summary:

Type	Original	Source	2011	2012	2013	2014	2015
Stormwater	\$40,500	Stormwater	\$0	\$0	\$0	\$0	\$0
Design/Survey	\$40,500		\$0	\$0	\$0	\$0	\$0
Stormwater	\$270,000	Stormwater	\$0	\$0	\$0	\$0	\$0
Const	\$270,000		\$0	\$0	\$0	\$0	\$0
Total	\$310,500		\$0	\$0	\$0	\$0	\$0



Ranking Criteria

Life Safety:	0	Street Flooding:	0	Infrastructure Damage:	4	Maintenance:	0
Structures Flooding:	0	Frequency of Flooding:	0	Funding Source:	0	Project Cost:	8
Right-of-Way Availability:	10						



Drainage Master Plan Update

Project: TC07 - N Traditions Dr Erosion



Project Type: Erosion **Drainage CIP Ranking:** 102 **Existing Study:** No **TxDot:** No
Date Identified: 2010 **Total Weighted Score:** 285 **Panel #:** T09
Date Last Reported: **Project Cost:** \$690,200 **Council District:** 5
Original Cost Year: 2010 **Study File Name:**

Description:

Erosion control and detailed design is needed to propose improvements that will reduce erosion along approximately 1700 LF of channel.

Justification:

Turkey Creek is conveyed under North Traditions Drive. Turkey Creek Tributary D combines with Turkey Creek near this crossing. The creek flows through the Traditions Golf Course and surrounded by trees with a small detention pond to the southwest. According to the City, there is erosion along Turkey Creek.

Funding Options:

Funding Source Summary:

Type	Original	Source	2011	2012	2013	2014	2015
Stormwater	\$10,200	Stormwater	\$0	\$0	\$0	\$0	\$0
Design/Survev	\$10,200		\$0	\$0	\$0	\$0	\$0
Stormwater	\$680,000	Stormwater	\$0	\$0	\$0	\$0	\$0
Const	\$680,000		\$0	\$0	\$0	\$0	\$0
Total	\$690,200		\$0	\$0	\$0	\$0	\$0



Ranking Criteria

Life Safety:	0	Street Flooding:	0	Infrastructure Damage:	4	Maintenance:	0
Structures Flooding:	0	Frequency of Flooding:	0	Funding Source:	0	Project Cost:	6
Right-of-Way Availability:	10						



Drainage Master Plan Update

Project: TC08 - S Traditions Dr Erosion



Project Type: Erosion **Drainage CIP Ranking:** 98 **Existing Study:** No **TxDot:** No
Date Identified: 2010 **Total Weighted Score:** 313 **Panel #:** U09
Date Last Reported: **Project Cost:** \$207,000 **Council District:** 5
Original Cost Year: 2010 **Study File Name:**

Description:

Erosion control and detailed design is needed to propose improvements that will reduce erosion along the channel.

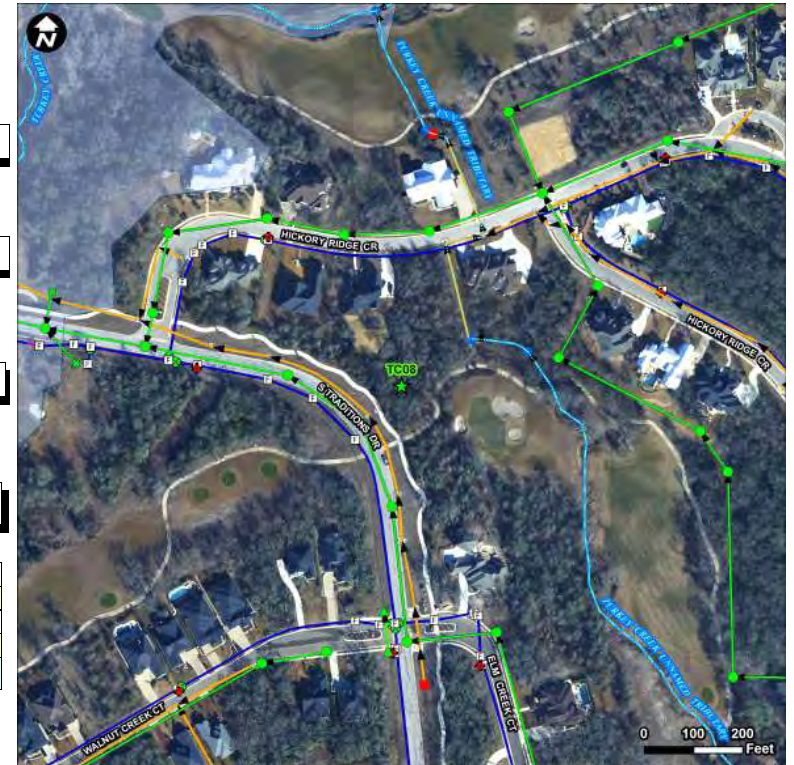
Justification:

Turkey Creek is conveyed under a bridge at South Tradition Drive west of Hickory Ridge. The creek flows through the Traditions Golf Course up and downstream of S Traditions Drive. According to the City, there is erosion along the creek and causes flooding near the Traditions Ph 4 subdivision to the south.

Funding Options:

Funding Source Summary:

Type	Original	Source	2011	2012	2013	2014	2015
Stormwater	\$27,000	Stormwater	\$0	\$0	\$0	\$0	\$0
Design/Survey	\$27,000		\$0	\$0	\$0	\$0	\$0
Stormwater	\$180,000	Stormwater	\$0	\$0	\$0	\$0	\$0
Const	\$180,000		\$0	\$0	\$0	\$0	\$0
Total	\$207,000		\$0	\$0	\$0	\$0	\$0



Ranking Criteria

Life Safety:	0	Street Flooding:	0	Infrastructure Damage:	4	Maintenance:	0
Structures Flooding:	0	Frequency of Flooding:	0	Funding Source:	0	Project Cost:	8
Right-of-Way Availability:	10						



Drainage Master Plan Update



Project: TC09 - Traditions Golf Course Area Erosion

Project Type: Erosion **Drainage CIP Ranking:** 119 **Existing Study:** No **TxDot:** No
Date Identified: 2010 **Total Weighted Score:** 146 **Panel #:** T09
Date Last Reported: **Project Cost:** \$1,840,000 **Council District:** 5
Original Cost Year: 2010 **Study File Name:**

Description:

Erosion control and detailed design is needed to propose improvements that will reduce erosion along approximately 4000 LF of channel.

Justification:

Turkey Creek flows through the Traditions Golf Course southwest of Traditions Blvd and N Traditions Drive. The channel experiences erosion along its banks.

Funding Options:

Funding Source Summary:

Type	Original	Source	2011	2012	2013	2014	2015
Stormwater	\$240,000	Stormwater	\$0	\$0	\$0	\$0	\$0
Design/Survey	\$240,000		\$0	\$0	\$0	\$0	\$0
Stormwater	\$1,600,000	Stormwater	\$0	\$0	\$0	\$0	\$0
Const	\$1,600,000		\$0	\$0	\$0	\$0	\$0
Total	\$1,840,000		\$0	\$0	\$0	\$0	\$0



Ranking Criteria

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



Drainage Master Plan Update

Project: TC10 - Hummingbird Lane Erosion



Project Type: Erosion **Drainage CIP Ranking:** 75 **Existing Study:** No **TxDot:** No
Date Identified: 2010 **Total Weighted Score:** 544 **Panel #:** T09
Date Last Reported: **Project Cost:** \$143,750 **Council District:** 5
Original Cost Year: 2010 **Study File Name:**

Description:

The northwest corner of the residence is threatened by erosion of the slope. The project requires an extension of the storm drain and armory of the slope to prevent future erosion.

Justification:

There is severe erosion near 3009 Hummingbird Lane due to storm drain discharge into a tributary of Turkey Creek. There is limited access to the subdivision and severe elevation differential caused by the erosion.

Funding Options:

Funding Source Summary:

Type	Original	Source	2011	2012	2013	2014	2015
Stormwater	\$18,750	Stormwater	\$0	\$0	\$0	\$0	\$0
Design/Survey	\$18,750		\$0	\$0	\$0	\$0	\$0
Stormwater	\$125,000	Stormwater	\$0	\$0	\$0	\$0	\$0
Const	\$125,000		\$0	\$0	\$0	\$0	\$0
Total	\$143,750		\$0	\$0	\$0	\$0	\$0



Ranking Criteria

Life Safety:	0	Street Flooding:	3	Infrastructure Damage:	10	Maintenance:	2
Structures Flooding:	5	Frequency of Flooding:	4	Funding Source:	0	Project Cost:	9
Right-of-Way Availability:	0						