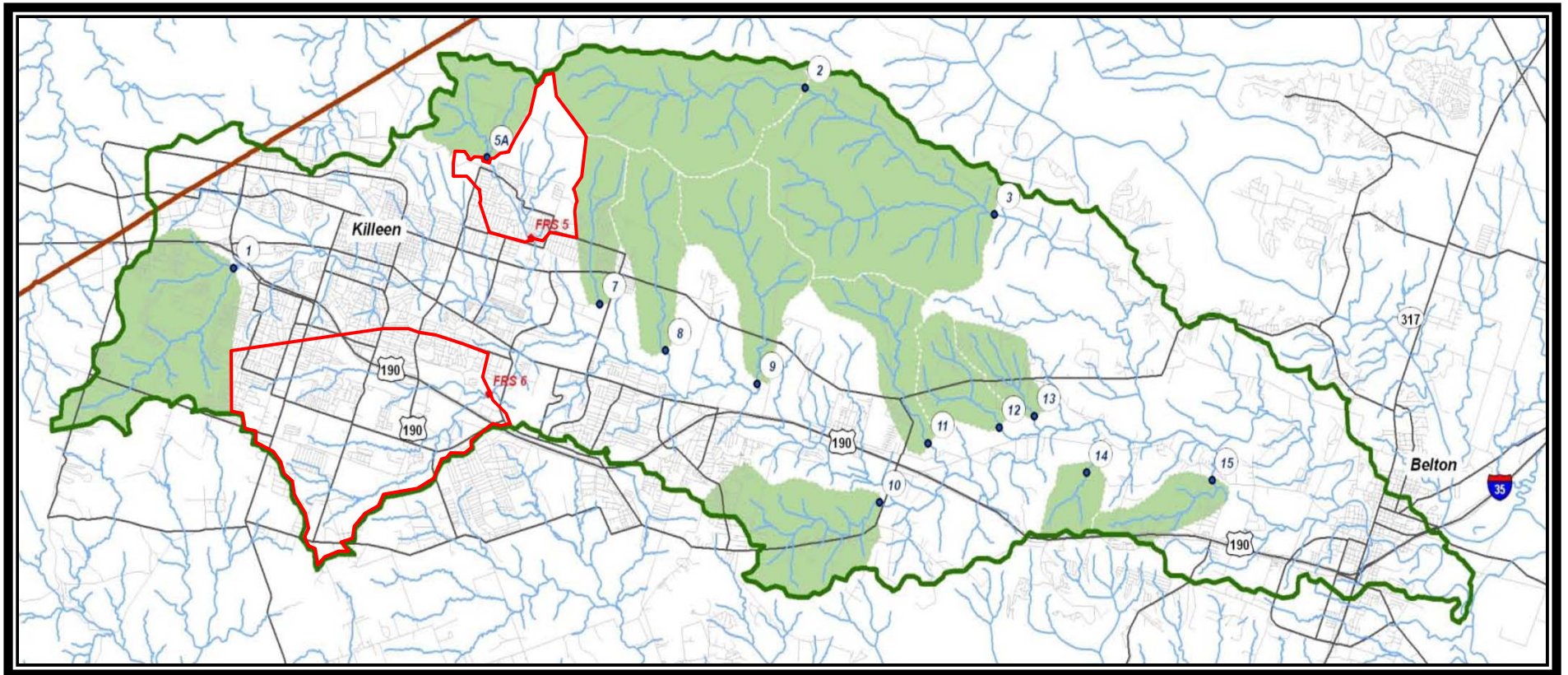


Nolan Creek Flood Protection Plan - TWDB Grant Opportunity

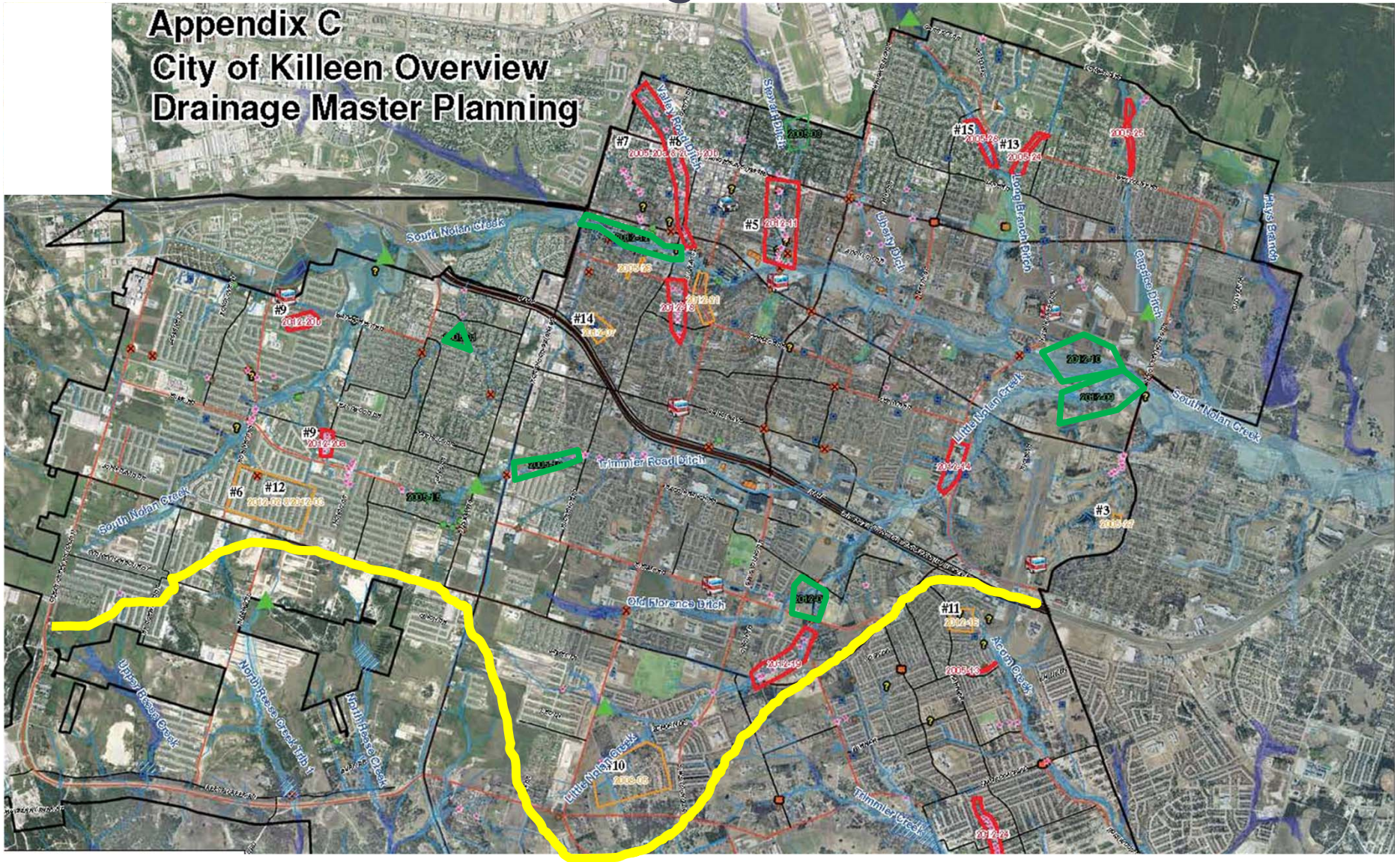
December 6, 2016

Nolan Creek Watershed



2012 Drainage Master Plan

Appendix C City of Killeen Overview Drainage Master Planning



Nolan Creek Flood Protection Plan

Benefits

- Coordinate additional monitoring stations along Nolan Creek and its tributaries.
- Develop early warning software.
- Update/amend Special Flood Hazard Area (SFHA) maps.



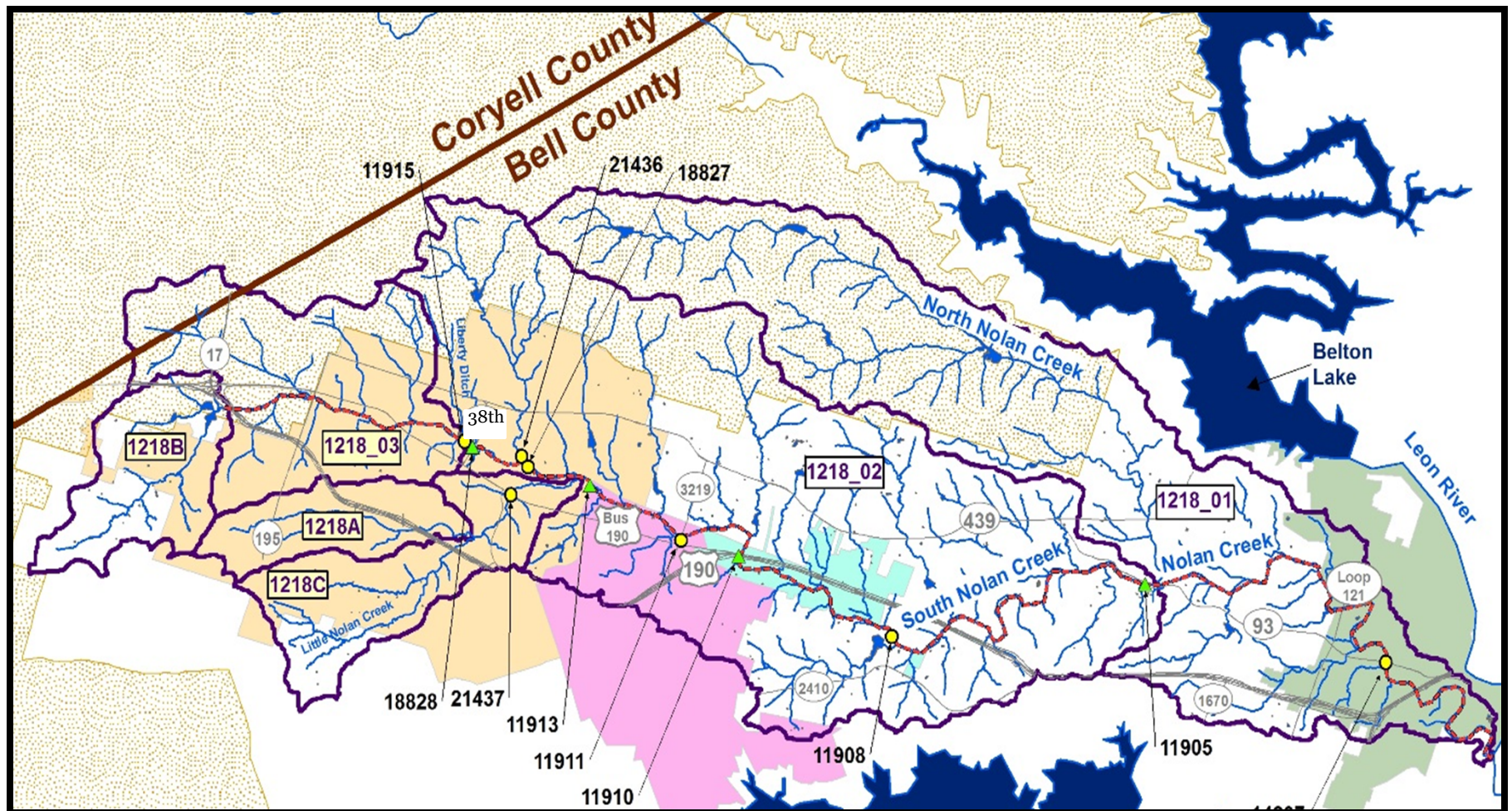


Nolan Creek Flood Protection Plan

Benefits

- Positions each entity and the watershed for participation in other grant programs to fund some of the projects identified.
- Identify construction projects within each entity that could lead to increased storage capacity & water quality. These projects may assist the City in avoiding issuance of a regulated Total Maximum Daily Load (TMDL) by the TCEQ.

Nolan Creek Watershed



2012 Drainage Master Plan

Table 7-1
Summary of CIPs Recommended for Capital Improvement Bond Funding

Overall Priority	Project Reference Number	Capital Improvement Project (CIP)	Type of Project	Description of Project	Estimated Cost (\$)*
1	N/A	Regional Watershed Modeling and Floodplain Mapping	Study	In light of the more recent information and rapid development a revised floodplain study is recommended. This study would allow for an organized and concise set of hydrologic/hydraulic models that could be used in watershed management and would serve as a starting point to build upon for the regional detention analysis.	250,000
2	N/A	Regional Detention Pond Analysis	Study	As the City continues to develop rapidly, it is recommended that a comprehensive watershed wide detention analysis be performed in order to assess the best locations for future regional detention ponds and to ensure that watershed timing is properly accounted for considering all detention ponds.	250,000



Nolan Creek Flood Protection Plan

- **Regional Support of Grant Project:**
 - Bell County WCID #6
 - Belton
 - Brazos River Authority
 - Harker Heights
 - Nolanville
 - Killeen

Nolan Creek Flood Protection Plan

Cost of Participation

- CTCOG provided a preliminary cost breakdown for the \$462,038 project based on four areas:
 - Hydrology
 - Hydraulics
 - Field survey
 - Population
- Based on those areas, the City of Killeen's identified portion is \$146,599, which is approximately 63.5% of the required grant match (\$231,019).

Nolan Creek Flood Protection Plan

Cost of Killeen's Participation

- Cash Contribution: \$54,227.67
- In-Kind Services: \$92,371.33

	Hours	Expenses
GIS	489.00	\$ 9,914.97
Engineering	449.00	\$ 18,515.86
Environmental Services	59.00	\$ 3,214.02
Drainage Engineering	364.00	\$ 9,823.37
Drainage Maintenance	1,559.00	\$ 29,966.74
Transportation/CIP	614.00	\$ 20,936.36
Totals	3,534.00	\$ 92,371.33

Nolan Creek Flood Protection Plan

Questions?

