

BELL COUNTY
UNINCORPORATED URBANIZED AREAS

TPDES General Permit
No. TXR 040000

2007 - 2012

Storm Water Management Program

January 8, 2008

**(Revised as per comments received from
the TCEQ October 2, 2008)**

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SECTION A

OVERVIEW AND DEFINITIONS

SECTION A - OVERVIEW and DEFINITIONS

1. Storm Water Rule Overview

Phase 1 of the U.S. Environmental Protection Agency's (EPA) municipal storm water program started in 1990 under the authority of the Federal Clean Water Act (CWA). Phase 1 relies on National Pollutant Discharge Elimination System (NPDES) permit coverage to address pollutants from storm water runoff and dry weather discharges. Phase 1 permits are required for large and medium municipal separate storm sewer systems (MS4s), serving populations of 100,000 or greater.

The Storm Water Phase 2 Final Rule (Promulgated December 8, 1999) was the next step in the EPA's efforts to protect the nation's water resources from polluted storm water runoff and dry weather discharges into storm drain systems. The Phase 2 program requires local governments to implement programs and practices to control water pollution, to the maximum extent practicable (MEP) in urbanized areas of small MS4s (population less than 100,000). The six minimum control measures include: public education; public involvement; illicit discharge elimination; construction sites; post construction pollution; pollution prevention for municipal operations. There are significant penalties (up to \$27,500 per day) for non-compliance with Federal permit provisions.

The Texas Commission on Environmental Quality (TCEQ) is now authorized by EPA to issue and enforce the Texas Pollutant Discharge Elimination System (TPDES) Phase 1 and 2 storm water permits, in lieu of Federal NPDES permits. Effective August 13, 2007 TCEQ Commissioners approved the TPDES General Permit to authorize discharge of storm water from regulated Phase 2 MS4's. Permittees must submit applications for coverage to TCEQ before February 8, 2008. The application must include a Notice of Intent for coverage (NOI) and a Storm Water Management Program (SWMP). The NOI is a document that provides TCEQ with an official notification to seek permit coverage and identifies legally responsible parties for permit enforcement. The SWMP describes what actions are to be implemented by the permittee to address the required elements of a storm water program. The SWMP describes in detail which Best Management Practices (BMPs) will be implemented to meet permit requirements. The permit term covers 5 years (August 13, 2007 - August 12, 2012). The permit will be renewed at 5 year intervals, which will likely require significant changes to the SWMP for future permit approvals.

2. Definitions

Best Management Practices (BMPs) - Schedules of activities, prohibitions of practices, maintenance procedures, structural controls, local ordinances, and other management practices to prevent or reduce the discharge of pollutants. BMPs also include treatment requirements, operating procedures and practices to control runoff, spills, waste disposal, or drainage from raw material storage areas.

Classified Segment - Refers to a water body that is listed and described in Appendix A or Appendix C of the Texas Surface Water Quality Standards, at 30 TAC § 307.10.

Clean Water Act (CWA) - The Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972, Pub L. 92-500, as amended Pub. L. 95-576, Pub. L. 96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et seq.

Conveyance - Curbs, gutters, man-made channels and ditches, drains, pipes, and other constructed features designed or used for flood control or to otherwise transport storm water runoff.

Discharge - When used without a qualifier, refers to the discharge of storm water runoff or certain non-storm water discharges as allowed under the authorization of this general permit.

Illicit Connection - Any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer system.

Illicit Discharge - any discharge to municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to this general permit or a separate authorization and discharges resulting from emergency fire fighting activities.

Maximum Extent Practicable (MEP) - The technology-based discharge standard for MS4s to reduce pollutants in storm water discharges that was established by CWA § 402(p). A discussion of MEP as it applies to small MS-4s is found at 40 CFR § 122.34.

Municipal Separate Storm Sewer System (MS4 or small MW4) - a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curb, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by the United States, a state, city, town, borough, county, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of storm water; (ii) Designed or used for collecting or conveying storm water...

MS4 Operator - The public entity, and/or the entity contracted by the public entity responsible for management and operation of the small MS4 that is subject to terms of this general permit.

MS4 Small - Refers to a conveyance or system of conveyance (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by the U.S., a state, city, town, borough, county, district, association, or other public body (created pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district, or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under § 208 of the CWA; (ii) Designed or used for collecting or used for collecting or conveying storm water; (iii) Which is not a combined sewer; (iv) Which was not previously authorized

under a NPDES or TPDES individual permit as a medium or large MS4, as defined at 40 CFR §§ 122.26(b)(7). This term includes systems similar to separate storm sewer systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. This term does not include separate storm sewers in very discreet areas, such as individual buildings. For the purpose of this permit, a very discreet system also includes storm drains associated with certain municipal offices and education facilities serving a nonresidential population, where those storm drains do not function as a system, and where the buildings are not physically interconnected to an MS4 that is also operated by the public entity.

Outfall - A point source at the point where a MS4 discharges to waters of the U.S. and does not include open conveyances connecting two MS4s, or pipes, tunnels, or other conveyances that connect segments of the same stream or other waters of the U.S. and are used to convey waters of the U.S.

Surface Water In The State - Lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, wetlands, marshes, inlets, canals, the Gulf of Mexico inside the territorial limits of the State...,and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable, or non-navigable, and including the beds and banks of all water-courses and bodies of surface water, that are wholly or partially inside or bordering the State or subject to the jurisdiction of the State; except that waters in treatment system which are authorized by State or Federal law, regulation, or permit, and which are created for the purpose of waste treatment are not considered to be water in the State.

Urbanized Area (UA) - an area of high population density, which may include multiple MS4s, as defined and used by the U.S. Census Bureau in the 2000 decennial census.

Waters of the U.S. - Means: (a) all waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (b) all interstate waters, including interstate wetlands; (c) all other waters such as intrastate lakes, rivers, streams including intermittent streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, that the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters: (1) which are or could be used by interstate or foreign travelers for recreational or other purposes; (2) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (3) which are used or could be used for industrial purposes by industries in interstate commerce; (d) all impoundments of waters otherwise defined as waters of the U.S. under this definition; (e) tributaries of waters identified in paragraphs (a) through (d) of this definition; (f) the territorial sea; (g) wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA...are not waters of the U.S. This exclusion applies only to manmade bodies of waters which neither were originally created in waters of the U.S. (such as disposal area in wetlands) nor resulted from the impoundment of waters of the U.S. Waters of the U.S. do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any

other Federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with EPA.

SECTION B

PERMIT APPLICABILITY

AND COVERAGE

SECTION B - PERMIT APPLICABILITY AND COVERAGE

1. Urbanized Areas

The TPDES Permit requirements apply only to the portions of unincorporated Bell County that are identified as urbanized areas. There are ten (10) non-contiguous urbanized areas in unincorporated Bell County according to the 2000 Census. These areas are depicted on the Killeen and Temple area Index Maps found on Pages 30 and 35, respectively. Note that the proposed City of Killeen Storm Water Management Plan states that they are including the two (2) unincorporated urbanized areas located just outside their City limits in their SWMP. (These areas are noted as areas “A” and “B” on the map on Page 30.) The annexation of these areas, as well as much more land, is to be completed by the City of Killeen on Jan. 28, 2008. (Though we do include an Outfall map of these areas, we will not implement the remainder of this Plan in the areas that have been annexed.) Note, also, that the City of Temple completed (on Jan. 14, 2008) the process of annexing a significant portion of the urbanized area that is depicted on the map on Page 35 as Areas “D1” and “D2”, centered on highway F.M. 2305 and bounded on the west, north and south by Lake Belton. More detailed maps of the new city limits for Killeen and Temple will be incorporated into this document when available. (Probably, after submission of this document to the TCEQ.) The County is committed to coordinating its “Public Education and Outreach” and “Public Involvement/Participation” Measures with the Cities of Killeen, Temple, Belton, Nolanville and Morgan’s Point Resort.

The Bell County SWMP addresses the MS4 Permit requirements only in the unincorporated urbanized areas of the County. However, certain elements of the SWMP may be voluntarily implemented by the permittee within greater Bell County. Examples are “Public Education and Outreach” and “Public Involvement/Participation”, portions of which may be accomplished regionally through television, radio and newspaper announcements that are broadcast or read on a County-wide basis.

2. Regulatory Restrictions for Counties

Texas is rather unique in the restrictions it has placed upon counties. The Texas Constitution and State Statutes do not grant Texas counties the ability to create and enforce ordinances, an authority given to Texas cities. To address this restriction the TCEQ rules contain text stating: “to the extent allowable under State and local law”. Bell County will address the various elements in the General Permit SWMP requirements “to the extent allowable under State and local law”.

SECTION C

STORM WATER MANAGEMENT PLAN

SECTION C - STORM WATER MANAGEMENT PLAN (SWMP)

1. Overview of Bell County's SWMP

To the extent allowable under State law, Bell County's SWMP was developed and will be implemented according to the requirements of Part III of the TPDES General Permit TX040000, for the discharges of storm water to surface water in the State. This SWMP was developed to prevent pollution in storm drainage systems to the maximum extent practicable, with control measures being phased in during the five year term of the permit. The SWMP addresses six minimum control measures (MCM's) as required by TCEQ rules. MCM's will be implemented in urbanized areas of unincorporated Bell County and may be voluntarily implemented in other unincorporated areas of Bell County if warranted by special conditions such as participation in regional programs. MCM's will be evaluated based upon the accomplishment of activities (BMP's) listed under each Minimum Control Measure.

2. Contrast With Cities

a. Legal Authority (Contrast with Cities)

Unlike cities, counties are not authorized by the State to enact ordinances and implement all of the regulatory requirements that Phase 2, MS-4 requires. Bell County addresses these regulatory requirements to the extent allowable under State and local law.

b. Ditch Drainage System (Contrast with Cities)

Unlike most cities, Bell County's storm drainage system is not a traditional underground drainage system (curb inlets, underground storm sewer and outfall discharges from pipes). Instead, Bell County's storm drainage system is mostly comprised of grass-lined ditches. Benefits and challenges associated with this type of system will be addressed in the appropriate MCM sections.

c. Large Area and Long Distances Between Non-Contiguous Urbanized Areas (Contrast with Cities)

Unlike cities, Bell County now has approximately seven (7) small, non-contiguous urbanized areas scattered across a total area of 1,077 square miles. Long travel distances, often exceeding those found in large MS-4 cities, will be required by a small County staff to implement daily activities associated with this program. This extra challenge is another element to consider when comparing the SWMP's of the County and the cities in the area.

d. Annexation and De-annexation (Contrast with Cities)

Unlike cities, counties can only lose land area as the incorporated cities expand their boundaries through the annexation processes. As noted in Sect. B.1, the cities of Killeen and Temple have recently completed the process of annexing substantial portions of what was the unincorporated

urbanized areas of the County. Bell County will only add urbanized area as the population density increases according to future U.S. Census Bureau data.

3. Storm Water Management Plan (SWMP)

1. Public Education and Outreach: Bell County will inform the public about water quality issues regarding storm water runoff and illicit discharges by providing informational materials in multiple formats and media in conjunction with the Cities of Killeen, Harker Heights, Nolanville, Belton, Morgan's Point Resort and Temple. If practical, Bell County will work with these participating cities in the development of suitable community materials for website postings and/or distribution at various County offices now located in Killeen, Belton and Temple.

a. Educational Materials and Distribution

Bell County will distribute storm water related materials at County offices located in Killeen, Belton and Temple. We will also coordinate with the U.S. Army Corps of Engineers regarding the display and distribution of these materials at the various lakeside parks and boat ramps managed by the Corps. This will directly impact most visitors to the urbanized areas which are in the vicinity of the two lakes (Belton and Stillhouse Hollow). It is these two lakes that draw most visitors to the area. Additionally, the County will work with the Agricultural Extension Service and Master Gardeners, as well as the area homebuilders associations, to get the word out to the public regarding the SWMP. During the first five years of the Storm Water Program it is anticipated that we will utilize, mostly, readily available materials from the TCEQ, EPA and any other suitable materials developed in conjunction with the cities.

Goals:

Year 1: Initiate contact and begin negotiations with various cities and the Corps of Engineers over the distribution and/or display of materials to insure maximum exposure to the targeted population. Determine where to set up displays and materials in various County buildings. Acquire materials deemed appropriate.

Year 2: Establish displays in various County buildings and report on numbers of materials distributed. Also, report on the status of any agreements with the cities and Corps of Engineers.

Year 3-5: Set up displays at parks and boat ramps. Report on the status of the contacts and negotiations noted in Year 1 and the numbers/quantity of materials distributed and displays set up.

b. Web Sites

It is not anticipated that the establishment of a dedicated Storm Water Web Site will be practical over the life of this permit. Both the Cities of Killeen and Temple include the development of storm water web sites in their plans and most residents of the County's urbanized areas will have access to these sites. We will work with the Bell County Information Services

and Bell County Health District to provide information on storm water related materials and links to other contacts. The Proposed SWMP has already been placed on the County Engineer web page (<http://www.co.bell.tx.us/engineer/bcestormwater.htm>). Links to other sites, both local and regional/national will be developed over time.

Goals:

Years 1-2: Work with the County IS Department and Bell County Health District in setting up appropriate materials and links on those sites.

Years 3-5: Maintain and update the web site information and contacts and track the number of hits received on each.

c. School Book Covers and Book Marks

The children who reside in the unincorporated urbanized areas of Bell County are, primarily, students in the Killeen ISD, Belton ISD or Temple ISD. A very few attend private, parochial schools located in the County. The County will work with the designated cities and share in the cost of any book cover and book mark programs developed, as necessary.

Goals:

Year 1: Coordinate with the cities for the sharing of costs and the implementation of the book cover/book mark programs.

Years 2-5: Track and report the number of book covers and/or book marks that are distributed.

d. Utility Bill Inserts

For those portions of the unincorporated urbanized area that receive water service from the City of Temple, it is anticipated that they will be included in any utility bill insert program developed by the City of Temple. Their draft Storm Water Plan indicates that this program will be developed in Years 1-2, with the first inserts being mailed in Year 3. Bell County will coordinate with the City of Temple to insure that the residents in the unincorporated area also receive these inserts. As noted in earlier sections of this Plan, the City of Killeen will incorporate all urbanized areas located in their Extra Territorial Jurisdiction by the time this Plan is implemented. Therefore, we will not consider a Utility Bill Insert program for this segment of the population. Most of the remaining population in the Unincorporated Urbanized Area are serviced by 439 Water Supply or Armstrong Water Supply. The County will work with both of these water supply corporations to develop a utility bill insert program.

Goals:

Year 1-2: Coordinate with the City of Temple and the other two water supply corporations to develop a utility bill insert program. Report on program development.

Year 3-5: Report on the number of utility bill inserts that are sent out to the residents in the unincorporated urbanized areas of the County.

2. Public Involvement/Participation: Bell County will rely upon compliance with public notice requirements regarding public meetings of the Bell County Commissioners' Court to receive public input into the storm water program development and implementation. Also, the Draft SWMP will be posted on the County Website prior to submitting it to the TCEQ for review and approval.

a. Public Notice For Meetings

Bell County Commissioners' Court meetings are subject to state public notice requirements, which meet TCEQ minimum requirements for public involvement/participation.

Goals: Staff will verify that all Commissioners' Court meetings that include agenda items related to the Storm Water Management Program are properly posted. This will include annual reports. Public notice for said meetings is already in effect and will continue from Year 1-5.

Status: Accomplished and ongoing

b. Posting of Draft SWMP on County Website

After review of the Draft SWMP by staff and elected officials of Bell County, and prior to submittal of the plan to the TCEQ for review and approval, the plan will be posted on the Bell County Website. The posting of the plan on the website will be noted in the Commissioners' Court agenda and will include a request for comments and questions to be addressed by staff.

Goals: Staff will post the Draft SWMP on the County Website at least 14 days prior to submitting the plan to the TCEQ. Links to other sites will be developed during years one and two.

Status: The Draft SWMP was placed on the Bell County Web Site on January 16, 2008.

c. Public Notice in Newspaper

After reviewing Bell County's NOI and SWMP, the TCEQ will issue "the Executive Director's Preliminary Determination". This public notice must be published by Bell County at least once in the largest circulated newspaper in the County. In addition, this public notice must provide an opportunity for the public to submit comments on the NOI and SWMP and request a public meeting. A public meeting will be held if the TCEQ determines there is sufficient interest.

Goal: Publish the TCEQ Executive Director's Preliminary Determination in the Killeen Daily Herald and Temple Daily Telegram, including information about public comment and public meeting request within thirty (30) days after being notified by the TCEQ Office of Chief Clerk.

d. Participation in the Bell County Water Symposium

Each year, in the Fall, Clear Water Underground Water District conducts what is called the "Bell County Water Symposium". This is a one-day event that highlights various issues that impact water quality and availability in Bell County and some of the surrounding counties. Recognized authorities from throughout the State and region are invited to speak and present information. The Symposium includes displays set up by numerous agencies and organizations that are interested in water quality issues and the environment. Bell County officials have

participated in this event each year. It is proposed that the County take on a more active role in the program to include briefing attendees on the SWMP and future annual reports to the SWMP that will be submitted to the TCEQ; setting up a display of appropriate brochures and posters, etc.; and possible cost sharing of some of the expenses for putting on the program. This program is open to the public.

Goals:

Year 1-2: Work with Clear Water Underground Water District and coordinate the County's participation in the Symposium with the staff and elected board of Clear Water. Report on progress.

Year 3-5: Continue participation and report on the number of participants at the Symposium, the program agenda and the materials distributed.

e. Public Hearing on SWMP

The Bell County Commissioners' Court conducted a public hearing on the proposed Storm Water Management Program on January 16, 2008, at 6:00 p.m. Proper notice procedures were followed and copies of the proposed SWMP were made available to the public for comment or questions. The Commissioners Court will also invite selected individuals who live in the unincorporated urbanized areas to attend this hearing.

Goals & Reporting: A record of attendees will be obtained and retained in Program records. (The hearing was conducted on Jan. 16, 2008, with thirteen residents in attendance. A copy of the attendance list as well as copies of the notices appearing in the Killeen and Temple newspapers are on file.)

3. Illicit Discharge Detection and Elimination: To the extent allowable under State law, Bell County will develop and implement an Illicit Discharge Detection and Elimination program. Since Texas counties do not have the rule/ordinance making authority of Texas cities, Bell County may have to seek enforcement against polluters through the TCEQ Region 9 Office in Waco. TCEQ assistance in the enforcement action will be utilized whenever voluntary cooperation cannot be obtained from the polluter. Malfunctioning on-site sewage facilities (OSSF), such as septic systems, are subject to corrective actions enforced by the Bell County Health District and its inspectors.

Another issue that impacts the development of this Minimum Control Measure is the actual nature of the MS4 system in the County. There is no "storm sewer" system within the designated urbanized area. (Storm sewer being defined as a system of underground piping meant to convey storm water off of the streets and into outfalls.) Rather, for the most part, the storm sewer system consists of a series of grass lined ditches and swales. At the time this Plan is being prepared, there are only two developments in the urbanized areas that do not utilize ditches. Instead, they utilize curb and gutter to convey storm water to outfalls. This makes it far easier for County personnel, or the public, to notice any illicit discharges and report them.

Bell County accepts the TCEQ list of allowable non-storm water discharges in its MS-4. These non-storm water sources may be discharged into and from the MS-4 and are not subject to the Illicit Discharge and Detection program of this Plan. The allowable discharges are:

1. Water line flushing with stipulations sited in TPDES General Permit No. TXR040000.
2. Runoff or return flow from landscape irrigation, lawn irrigation, and other irrigation utilizing potable water, ground water or surface water.
3. Discharges from potable water sources.
4. Diverted stream flows.
5. Rising ground waters and springs.
6. Uncontaminated ground water infiltration.
7. Uncontaminated pumped ground water.
8. Foundation and footing drains.
9. Air conditioning condensation.
10. Water from crawl space pumps.
11. Individual residential vehicle washing.
12. Flows from wet land and riparian habitats.
13. Dechlorinated swimming pool discharges.
14. Street wash water.
15. Discharges or flows from fire fighting activities. (Not to include washing of trucks, run-off from training activities, test water from fire suppression systems, and similar activities.
16. Other allowable non-storm water discharges listed in 40 CFR § 122.26(d)(2)(iv)(B)(1).
17. Non-storm water discharges that are specifically listed in the TPDES Multi Sector General Permit or the TPDES Construction General Permit.
18. Other similar occasional incidental non-storm water discharges, unless the TCEQ develops permits or regulations addressing these discharges.

a. Detection-Monitoring Drainage System by County Personnel

Illicit discharge detection is already being conducted by County staff who, on a daily basis, are riding and surveying the County's road network. To better monitor any illicit activity in the urbanized areas, the County will formalize an inspection process that will include a monthly report to be submitted by designated supervisory personnel. These reports will be kept on file for the duration of this permit and the results will be incorporated into the annual report. All illicit discharges will be reported to the Bell County Health District. If a discharge is found to be from an OSSF, the Bell County Health District will take the appropriate action. If the discharge is from some other source, and if we cannot obtain voluntary compliance with water quality rules, the issue will be forwarded to the TCEQ Regional office in Waco.

Goals:

Year 1: Establish routes and assign specific inspectors to check the drainage systems in the urbanized areas; prepare inspection forms and set up files in the County Engineer's Office. Report on progress at end of year.

Year 2-5: Continue to monitor the MS-4 for illicit discharges and maintain reports in files. Annually, report results of inspections.

b. Detection & Correction: Citizen Complaints

Most residents in the unincorporated areas of the County are aware that the reporting of water pollution or illegal discharges into the ditches and creeks is to be made to the County Engineer's Office, the Road and Bridge Department or the Bell County Health District. In the development of brochures and posters to be used in the Public Education and Outreach MCM, we will insure that the phone numbers for these offices are provided. Note that these activities are already pursued, and not just within the urbanized areas. The goal at all times is to respond to citizen complaints within the same day it is received. Corrective action may take longer depending on the situation encountered.

Goals:

Year 1: Prepare forms on which to log citizen complaints and organize files for the storage of these forms. Report on status of files at end of Year 1.

Year 2-5: Continue to aggressively investigate all reported illicit discharges and seek corrective action through the appropriate agency when voluntary corrective actions fail. (Bell County Health District or TCEQ.) Report on the numbers of reported discharges and actions taken for Years 2-5.

c. Detection & Correction: On-Site Sewage Facilities (OSSF)

The Bell County Health District staff now maintains reports and records of all reported (alleged) and confirmed OSSF failures. The results of these reported violations and the corrective action taken will be reported to the County Engineer's Office annually for incorporation into the annual report.

Goals:

Years 1-5: Collect information from Health District and report on the results of this on-going and active program.

d. Detection: Storm Drainage Map

Bell County has already prepared Outfall maps for the unincorporated urbanized areas. These maps may be found at Appendix II. The basis for these outfall maps are the USGS 7.5 minute topographic maps and street maps provide by the Central Texas Council of Governments. These maps will be updated as new developments take place within the urbanized areas.

Goals:

Year 1-5: The mapping as prepared and included in this Plan will be updated on an annual basis. All changes, to include new development and city annexations will be reported on an annual basis.

e. Detection & Correction: Illegal Dumping

The Bell County Engineer's Office, Road and Bridge Department and the Sheriff's Office work as a team in the correction of illegal dumping activities. The Sheriff's Office staff takes care of the investigation and legal processes, while the Road & Bridge Department, generally, takes care of the removal and disposal of illegally dumped materials. This is an on-going program that is in place and active throughout the County, not just in the urbanized areas. The results of this process have not been documented in the past. The County Engineer's Office will coordinate with the Sheriff's staff to prepare annual reports of activities and enforcement actions and will prepare forms to be utilized by the Road & Bridge Department in order to track the amount of material disposed of.

Goals:

Year 1: Coordinate with the Sheriff's staff regarding reporting of investigative efforts and enforcement actions taken. Prepare report forms for the Road & Bridge Department and prepare files for the storage of all reported information. Report on status of these activities.

Year 2-5: Continue program as now established, acquire required information from the Sheriff's staff and Road & Bridge Department and prepare annual reports.

f. Correction: Household Hazardous Waste

The Central Texas Council of Governments has, for several years, conducted household hazardous waste collection events at cities throughout the seven counties that comprise the COG. These collection events are open to all county citizens. This is a current program and is on-going.

Goals:

Year 1-5: Document yearly participation, starting in Year 1 and continuing through Year 5. These results are going to be available for the County, or region, as a whole.

g. Correction: Collection of Waste Tires

Starting in 2007, Bell County made the decision to conduct one or two waste tire-collection events each year. In 2007, the County conducted two events: one in Belton and one in Heidenheimer. These events were open to all County residents and resulted in the collection and disposal of approximately 10,794 tires at a cost to the County of approximately \$28,800. This program will continue as long as the Commissioners' Court deems it worthwhile and allocates money for the disposal of the tires in the annual budget process.

Goals:

Year 1-5: Continue to conduct the tire collection events at various sites around the County. The results of the events will be reported in the annual report.

4. CONSTRUCTION SITE STORM WATER RUNOFF CONTROL: To the extent allowable under State law, the County will develop and implement a construction inspection

program to address storm water runoff from construction activities of one acre and greater, including those that are part of a larger common plan of development in the urbanized areas of unincorporated Bell County. Since Texas counties do not have the rule/ordinance making authority that cities have, the County cannot enforce a program to reduce pollutants in storm water runoff from construction sites. The County will participate in the MCM by providing general information about the TCEQ requirements to construction site operators, conducting voluntary reactive and proactive inspections and maintaining a file of Notices of Intent (NOI) for operators to be covered under the TCEQ General Storm Water Permit for construction sites. The file will be readily accessible to TCEQ staff. Any required enforcement will be provided by the TCEQ.

Many of the areas designated urbanized and unincorporated are subdivisions/developments that are totally “built out”. That is, all available lots are built on and all street and drainage features have been completed. Also, all designated urbanized and unincorporated areas are within the extra territorial jurisdiction (ETJ) of cities that are subject to the General Permit. By State law, Section 242.001 of the Local Government Code, counties and cities were to enter into interlocal agreements for the review and imposition of plat and construction detail standards for all subdivisions in the ETJ. This was accomplished in 2002. Therefore, any future developments will have to comply with the construction standards and storm water plans developed and imposed by the cities that have ETJ jurisdiction. Developments controlled by “condominium regimes” are not required, by State law, to submit development plans to the County for approval. Additionally, the County lacks the authority to require building permits and or site plans from homebuilders or commercial building contractors who are not subdividing property in accordance with the County’s Subdivision Regulations.

a. NOI File for Construction

Since the TCEQ requires NOI’s and CSN’s (Construction Site Notices) from construction site operators to be submitted directly to MS-4’s, the County will set up a file for this material. This file will be set up in two sections: one for urbanized area NOI’s and CSN’s, and one for non-urbanized area NOI’s and CSN’s. Urbanized areas will be determined using the maps at Appendix I of this plan and any future revisions to the maps. Small construction site operators are not required to submit NOI’s to the TCEQ. However, they are required to submit CSN’s to the MS-4. To the extent allowed by State law, the County will enforce the State Construction Storm Water regulations, relying on voluntary compliance by homebuilders/developers and reporting to the TCEQ those who refuse to comply.

Goals:

Year 1: Set up files for NOI’s and CSN’s submitted. Report results at end of permit year.

Year 2-5: Continue to accept NOI’s and CSN’s and report results at end of year.

b. Public Submittal of Complaints

The County Engineer’s Office is already recognized by the public as the office to call for environmental issues in the County. This office will log all complaint calls related to construction activities and investigate all such complaints within two working days of receipt. The record of

calls and the results of our investigations, voluntary actions on the part of the construction site operator and any follow-up action by the County will be tracked in files that are available to the TCEQ for review. If a complaint is found to be valid and we cannot obtain the voluntary compliance of the site operator, the matter will be forwarded to the Region 9 TCEQ Office in Waco.

Goals:

Year 1-2: Set up log and files for tracking all complaints. Report status at end of year.

Year 2-5: Continue to track all complaints and report the status of the program at end of year.

c. Site Plan Review

As mentioned above, all subdivision plats in the urbanized, unincorporated areas are subject to plat and plan review by cities subject to the General Permit. The County does provide input to the cities during the review process. However, city standards will always take precedence over County standards in accordance with the established interlocal agreements with the cities. All development may not be subject to subdivision plat/plan review. It is conceivable that a multi-family, commercial or condominium development could be developed in the unincorporated urbanized area without a subdivision plat or a review by the County. Bell County does not have authority to require the submittal of development plans under these circumstances and will have to rely on the voluntary compliance of the construction site operator with waste management and erosion control measures. We have one staff member who is responsible for inspection of all public improvements in subdivision development. This individual will be responsible for noting any other construction activities that may take place within the urbanized areas. This individual will report such activities to the County Engineer's Office. A file will be developed and maintained that will include the date the activity is first discovered; a record of any communication with the site operator; a determination of whether or not the site is being operated in an acceptable manner; whether or not the site operator has developed and/or submitted an NOI or CSN to some other entity, or if the requirement was ignored. If the site operator is found to be ignorant of the rules he will be informed of the requirements and it will be up to the operator to prepare and submit the required forms and plans. If he chooses to ignore our requests the issue will be turned over to the TCEQ Regional office in Waco.

Goals:

Year 1-2: Develop the record forms and create files. Begin the inspection process. Report on status of program at end of Year 1 and 2.

Year 3-5: The program should be fully implemented and records will be on file. Any results will be noted in the year end report.

5. POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW

DEVELOPMENT AND REDEVELOPMENT: To the extent allowable under State law, the County will develop and implement a Post-Construction MCM for the unincorporated urbanized areas of the County. The intent of the MCM is to lessen the adverse impact of storm water on the overall quality of water in the County due to new development or redevelopment projects that disturb one (1) acre or more of land, including projects less than one acre that are part of a larger common plan of development or sale that will result in a disturbance of one or more acres, that discharge into the MS-4.

Since Texas counties do not have the rule/ordinance making authority that cities have, the County cannot enforce a program to reduce pollutants in post-construction storm water runoff. However, the County will participate in this MCM by allowing the use of unlined or pervious drainage ditches instead of impervious concrete gutter and underground storm drain systems which cities typically favor.

Compared to impervious underground storm drain systems, above ground open, grassy drainage ditch systems allow more storm water runoff to soak into the ground. This reduces downstream runoff and the velocity of runoff (reducing erosion). The grass-lined ditches, to some extent, provide a means of detaining and treating, or reducing, the presence of some pollutants (sediment, nutrients, fertilizers, detergents, etc.).

Bell County maintains drainage ditches and channels that serve County roads and will continue to do so throughout the term of this permit.

a. Allow Pervious Drainage Systems

Bell County will continue to allow the use of pervious ditches in the design of roads in the unincorporated urbanized areas of the County. This has proven to be an effective and cost efficient method to control storm water runoff and reduce the impact the added storm water runoff has on the overall quality of water in the County. However, as mentioned earlier, the County has legal agreements with each of the cities that control the development/platting within each of the urbanized areas. The cities will ultimately decide what type of drainage system to allow, and the BMP's to be required to attain the goals of their programs and in accordance with their permits.

Goals and Date: Bell County will continue to allow open, grassy drainage ditches and channels to convey storm water runoff from roads and other impervious surfaces such as roofs, driveways and sidewalks. The County will track and report on an annual basis, throughout the period of the permit, the number of feet of grass-lined ditches and concrete curb and gutter that is installed during the year.

b. Detention/Retention Ponds and Drainage Easements

In the development of subdivisions plats and construction plans, the County currently stresses the importance of storm water runoff control. As with the cities, this control usually takes the form of detention/retention ponds. Because the County lacks the authority to maintain these ponds, and the cities cannot commit to maintenance of facilities outside the city limits, the maintenance of these ponds becomes problematic. We have required that developers who utilize detention/retention ponds in the development of their property to also form homeowners' associations that are to collect fees from all homeowners in order to perform needed maintenance. This is a current policy and we do not foresee any change. Drainage easements, also, are considered private property, and the homeowners' associations, or individual homeowners, are charged with the requirement to maintain such features.

Goal & Date: There is no goal on this BMP. It is current and on-going, and the use of these types of facilities in the development of the storm water runoff plans is required by the County's Subdivision Regulations.

c. Maintenance of Other Drainage Improvements

Bell County's current Subdivision Regulations require the developer to comply with all Federal, State and Local laws regarding the environment. Subdivision plans include erosion control measures and details that must be completed prior to acceptance of the improvements by the County. Additionally, the developer, or his contractor, is required to furnish the County with a "Maintenance" bond, letter of credit, or other acceptable surety which guarantees the maintenance of the road and all drainage facilities for up to one year. The Subdivision Regulations also require that all ditches and the right of way have at least 70% grass coverage established before the County will assume maintenance responsibilities. These Regulations are in effect for the entire County, not just the urbanized areas.

Goal & Date: There is no goal on this BMP. It is current and on-going, and an established part of the County's Subdivision Regulations.

6. POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL

OPERATIONS: All Bell County buildings and facilities, other than the MS-4, are located within the incorporated boundaries of the Cities of Killeen, Belton or Temple. Each of these cities is subject to the provisions of the Phase II Storm Water Permit and is in the process of developing their plans. The only County-owned facilities within the unincorporated urbanized areas are the various drains and ditches within the County's road network. This MCM and its BMP's will reflect this fact.

a. New Construction and Land Disturbances

As stated, all present County facilities, other than the MS-4, are located within various cities. There are currently no other County-owned facilities planned for in the unincorporated urbanized areas. However, should the County consider construction of any such facility during

the period of this permit all construction will include appropriate storm water controls and erosion prevention measures.

b. Waste Removed From The MS-4

The urbanized areas of unincorporated Bell County are primarily single-family residential in nature. Consequently, it is left up to the individual land/home owners to remove trash/floatables and accumulated debris from the bar ditches in front of their homes or properties. Periodically, it is necessary for the County to perform maintenance on the MS-4. Activities such as the removal of accumulated dirt and grass that may build up in the ditches and at culverts to insure the proper operation of the MS-4 is included. The materials that are removed, or dredged, are usually removed by County vehicles/equipment and utilized in the repair of erosion damage to other bar ditches in the County's road system. In some cases, the adjacent landowner wants the material for filling in a low area or ditch on their property. To insure that no trash or objectionable materials are improperly disposed of, equipment operators will be instructed to inspect the site they are to work in, and remove any such materials prior to excavation. Any objectionable materials will be bagged and properly disposed of.

Goal:

Year 1: Develop program and train all operators and foremen who are engaged in the maintenance of the MS-4 facilities to inspect and remove any objectionable materials prior to commencing any excavation. Training is to be conducted annually. Maintain record of those who attend training/briefing.

Year 2-5: Insure that the operators and foremen noted above, and any new hires, are reminded of the need to inspect for and remove debris prior to digging. Maintain records of attendees.

c. Employee Training

All Bell County Road and Bridge Department employees will, at some time, perform some work activities within the unincorporated urbanized areas. A training program will be developed to insure that all employees are reminded on at least a quarterly basis, that they are responsible for the removal, and proper disposal, of all trash and debris that they may bring to a work site. The General Superintendent and Foremen will be responsible for the inspection of all job sites. This BMP will be employed on a County-wide basis, not just in the urbanized areas.

Goals:

Year 1: Develop training program and conduct training of all Road & Bridge employees. Maintain file and log of participants.

Year 2-5: Continue to conduct training on a quarterly basis and maintain log of all participants.

d. County Operations and Maintenance Activities

All equipment and vehicle maintenance activities by the County take place at either the Bell County Road and Bridge Yard (located at 702 W. Avenue O, Belton, TX.) or at selected repair shops in and outside the County. This facility has on file a spill prevention plan for the

above-ground asphalt storage tanks which includes a concrete holding tank adequate to contain the total volume of the tanks. All refueling operations are conducted at this site out of underground storage tanks which are currently registered with the TCEQ and operating in compliance with all applicable rules and regulations.

Used Oil and Filters: Used filters and oil are stored on site either inside a metal building or in an above ground storage tank located outside and within a concrete containment facility. Oil and filters are collected for recycling by a licensed contractor.

Construction Materials: The Department has stockpiles of sand, gravel, rock and concrete rubble located at this site that are exposed to the elements. Corrugated metal pipe, metal beam guard fence, reinforcing steel, steel beams, etc. are also stored outside.

Chemicals: All chemicals used in the construction and maintenance of County roads and vehicles/equipment are stored in metal buildings or sheds, as are batteries (both new and used).

Vehicle/Equipment Storage: Most trucks are currently parked or stored in a covered metal building. An additional building to house all seasonal equipment and equipment not in use is expected to be completed by January, 2009.

Vehicle/Equipment Wash: Currently, vehicles and equipment are washed in an exposed wash rack (hot water-high pressure washer). Bell County has budgeted for an automated vehicle/equipment wash facility which will be totally enclosed and will employ the use of water recycling (up to 90%). This facility should be completed within the second year of this permit. The facility will be connected to City of Belton sanitary sewer facilities.

Waste Tires: Waste tires generated by the County as well as tires picked up along all County roads are stored on site. Tires are collected and disposed of, periodically, by licensed haulers and recyclers. While stored outside, the tires are checked periodically to insure that water is not collected and mosquitoes allowed to breed.

Trash: All trash generated on site or picked up along County roads is disposed of in covered containers that are collected weekly for disposal at a licensed landfill by a licensed commercial collection service.

On-Site Storm Water: The physical layout of facilities as well as the natural topography of the site does not allow us to collect or monitor all storm water that leaves the site. Storm water over most of the site is allowed to sheet flow off site on to land that is currently agricultural in nature or into the bordering TXDOT right of way of W. Avenue O. There are existing storm water detention facilities that collect storm water from the eastern quarter of the property and these facilities are monitored regularly to insure that floatables are removed.

Goals:

Years 1-2: Continue to operate the site as is and construct the vehicle/equipment wash facility and storage building. Observe and monitor all operations and make changes as necessary to insure compliance with all appropriate rules and regulations.

Years 3-5: Continue to monitor all operations and schedule improvements as determined necessary.

Other Industrial Activities: Bell County does not operate any industrial activities that are subject to TPDES Industrial Storm Water Regulations.

SECTION D

RECORD KEEPING AND REPORTING

Section D - Record Keeping and Reporting

1. Record Keeping

Bell County will maintain all records, a copy of the TPDES General Permit and all data used to complete the application (NOI) for this permit, for the term of this permit. A current/updated copy of the SWMP, NOI and a copy of the permit language/requirements will be maintained at the Bell County Engineer's Office located at 206 N. Main, Belton, Texas.

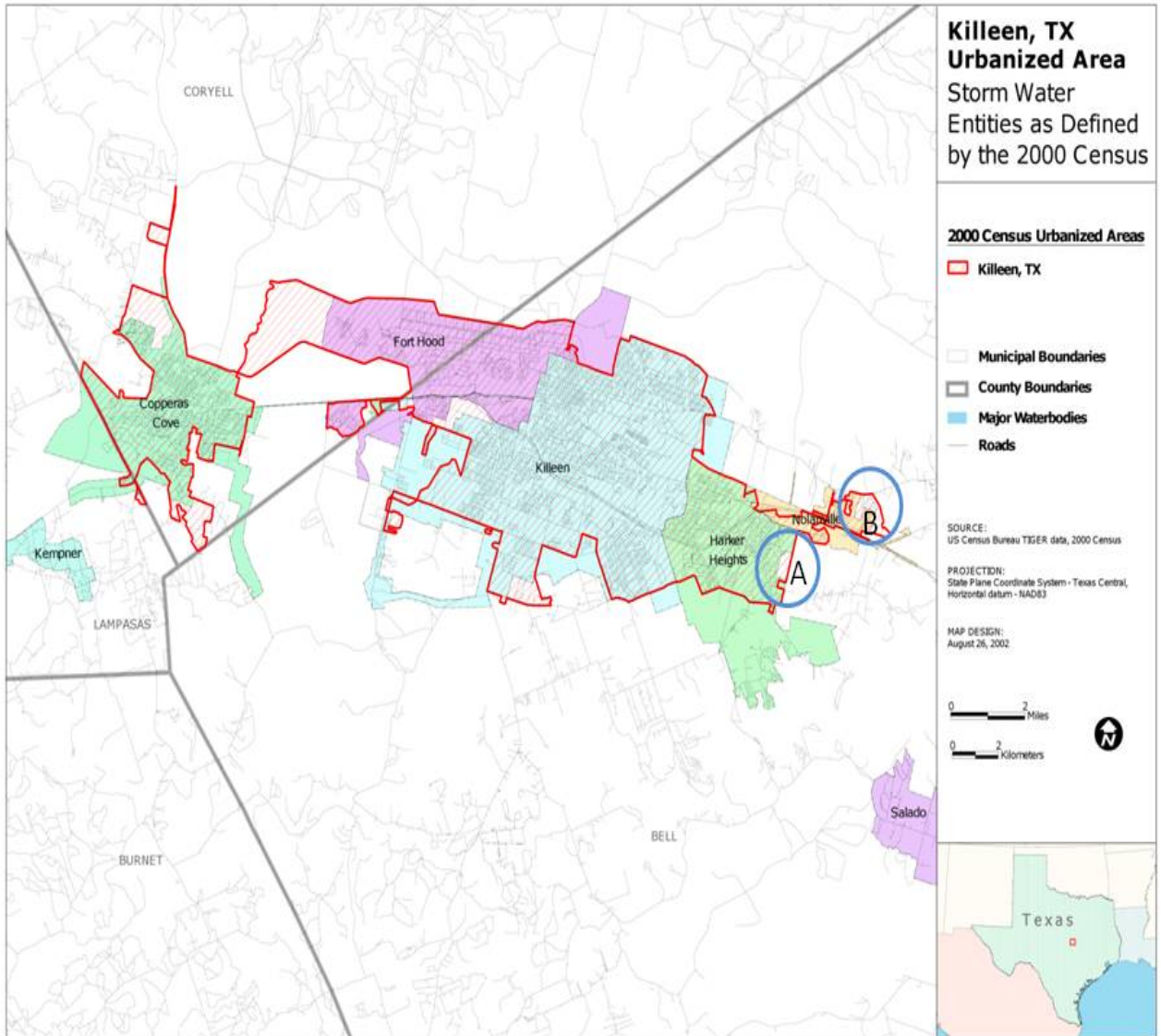
Bell County will make the records, including the NOI and SWMP available to the public, if requested to do so, in writing. The SWMP will be available within two working days of the request. Other records will be provided within ten (10) working days, unless the request requires an unusual amount of time or effort to assemble. In which case, Texas law regarding the Public Information Act will be followed. Reasonable charges, in accordance with the Texas law, may be levied by the County for researching and preparing any requested materials.

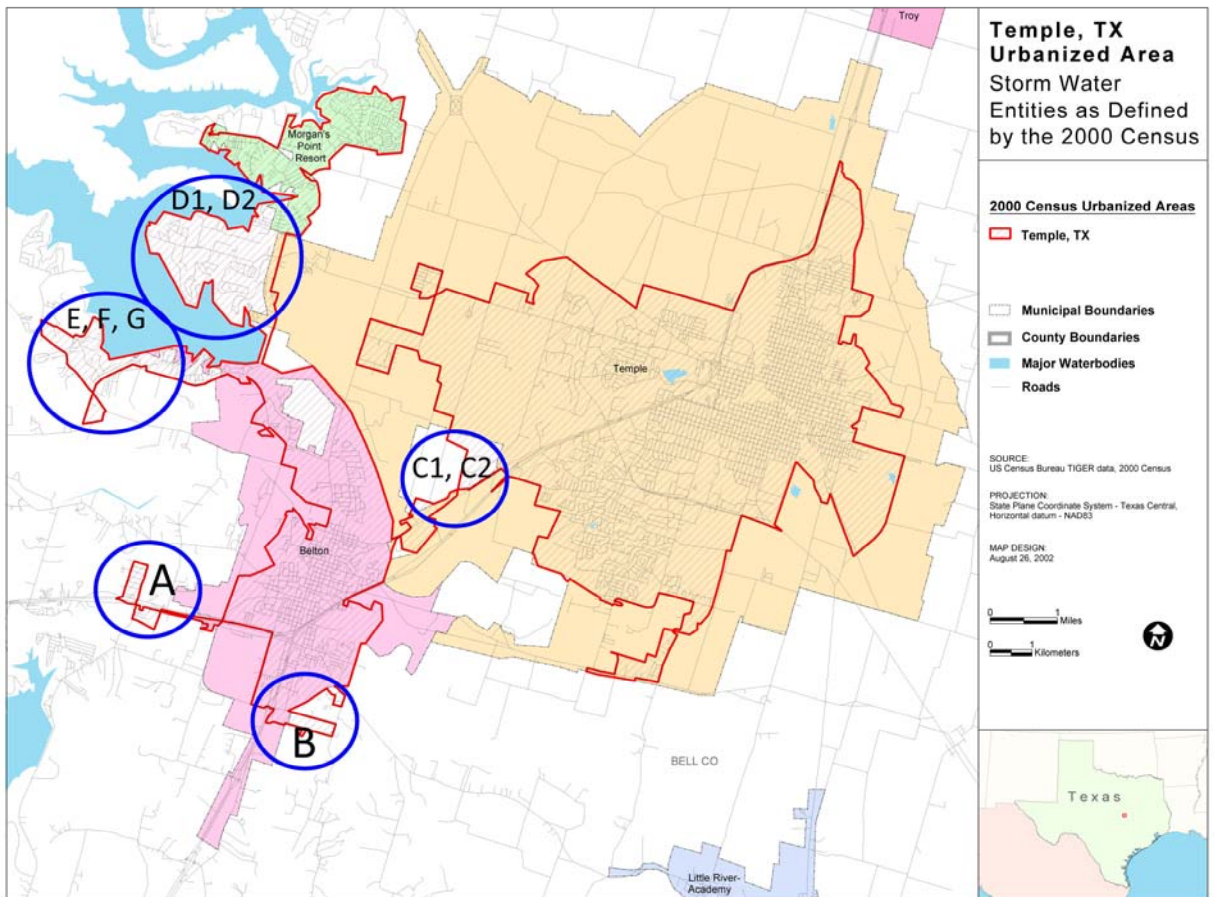
2. Annual Report

Bell County will submit a concise annual report to the Executive Director of the TCEQ within 90 days of the end of each permit year. The annual report will address the requirements listed in the TPDES Phase 2 MS-4 General Permit rules. The County will also maintain copies of annual reports at the County Engineer's Office.

APPENDIX I

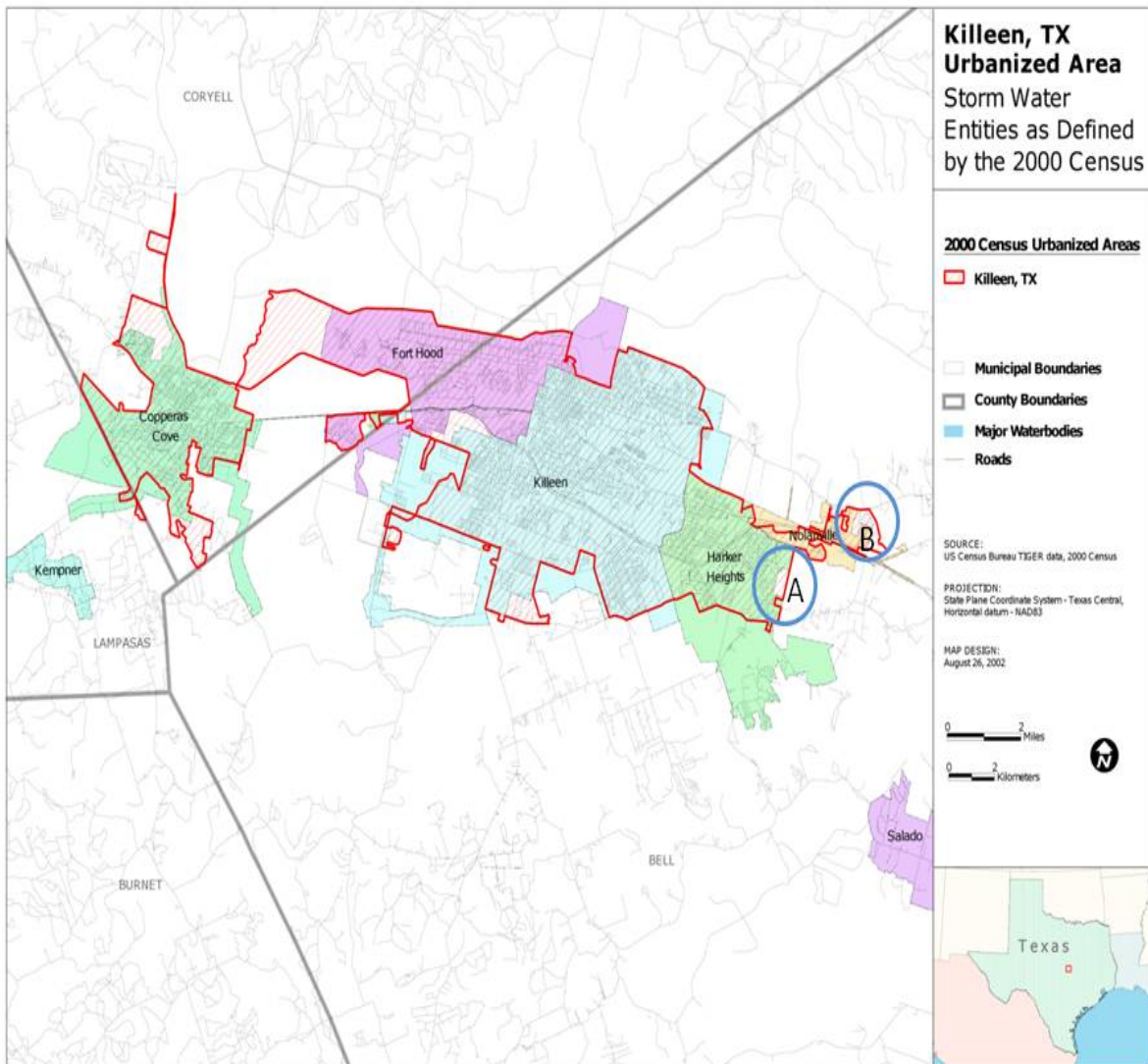
KILLEEN AND TEMPLE URBANIZED AREA MAPS



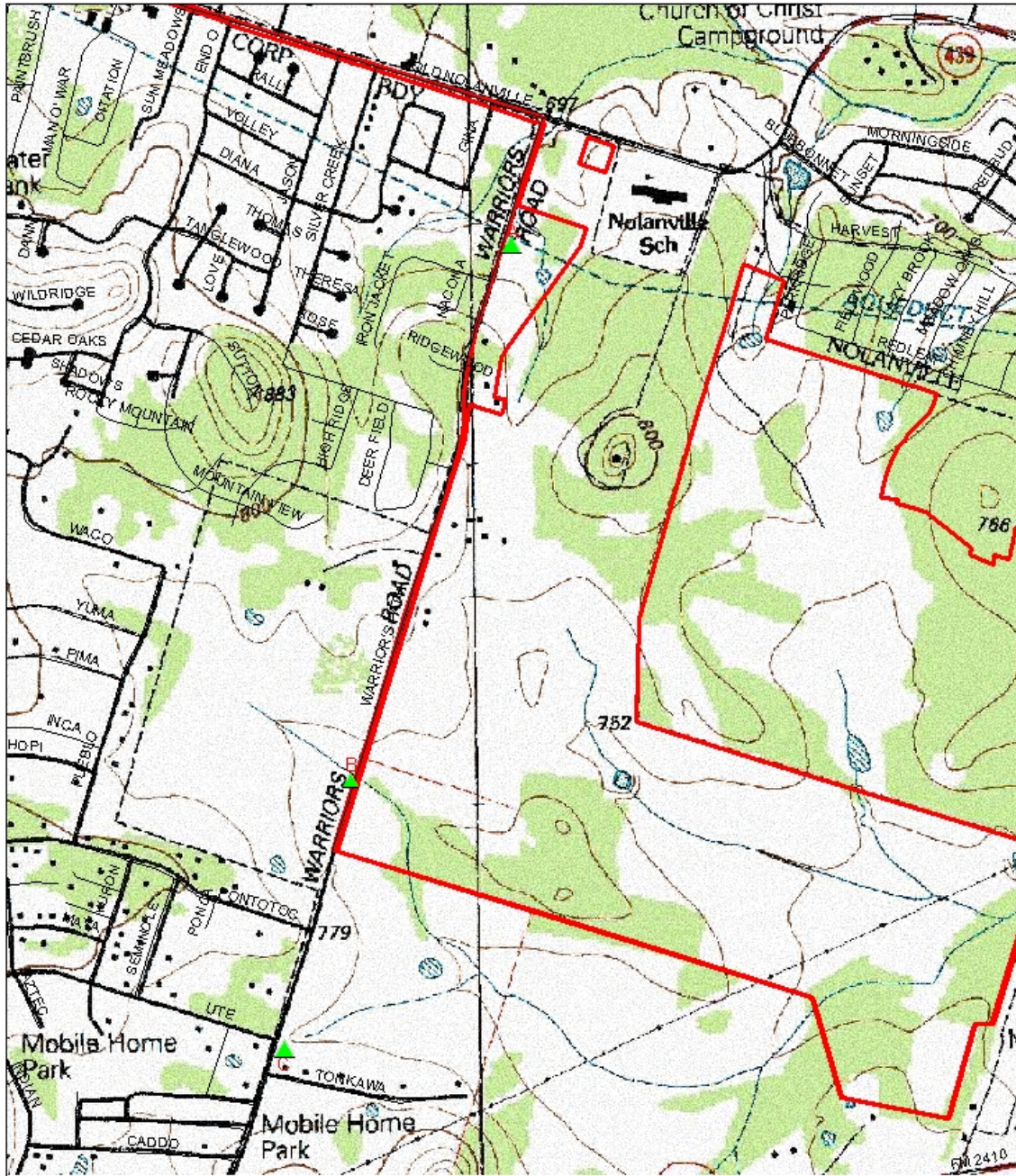


APPENDIX II

URBANIZED AREA OUTFALL MAPS



Map A



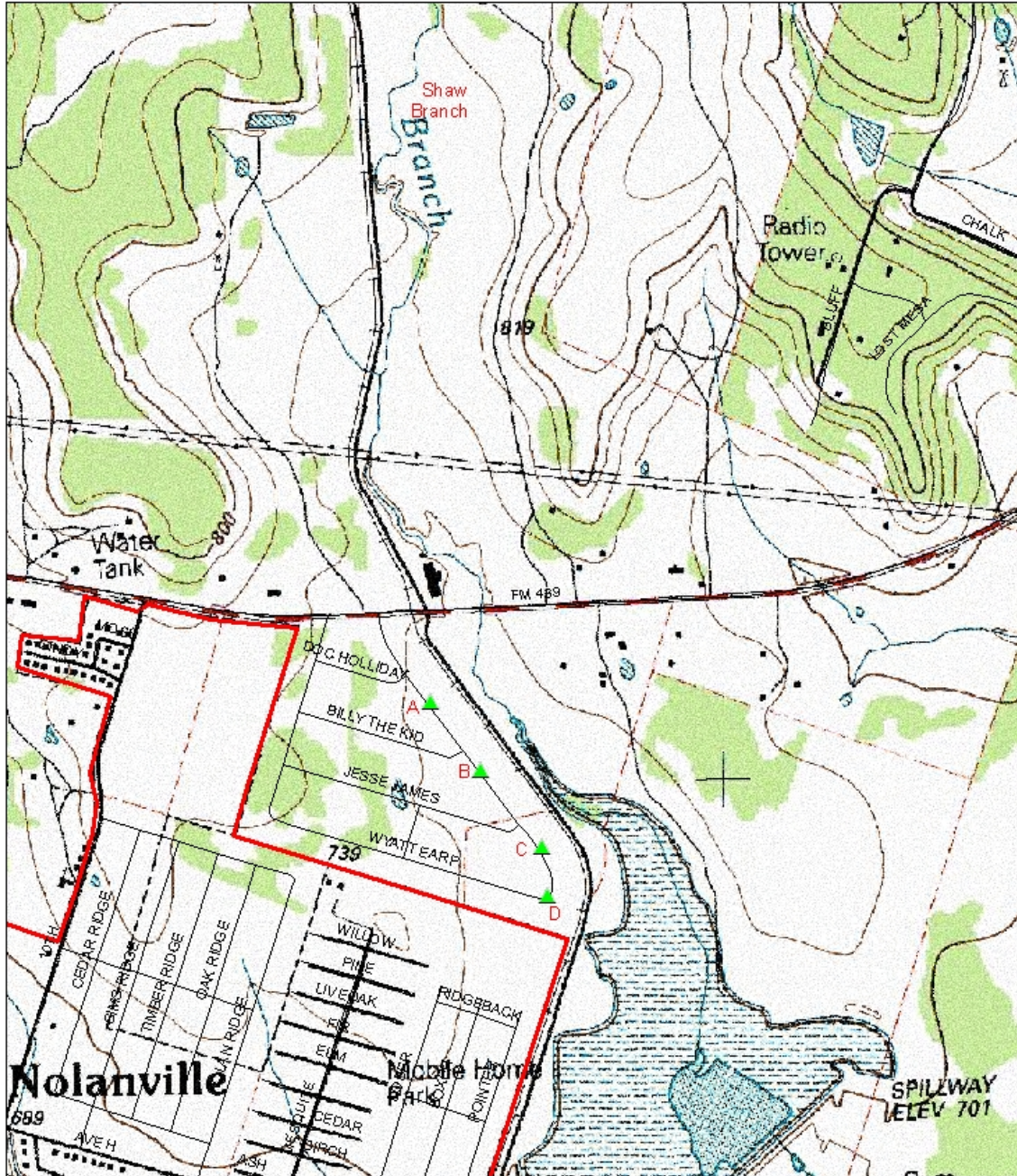
A=24"x40'
B=2-36"x40', 24"x40'
C=2-36"x40'

Scale 1"=1,000'

City Limits

 City Limits

Map B



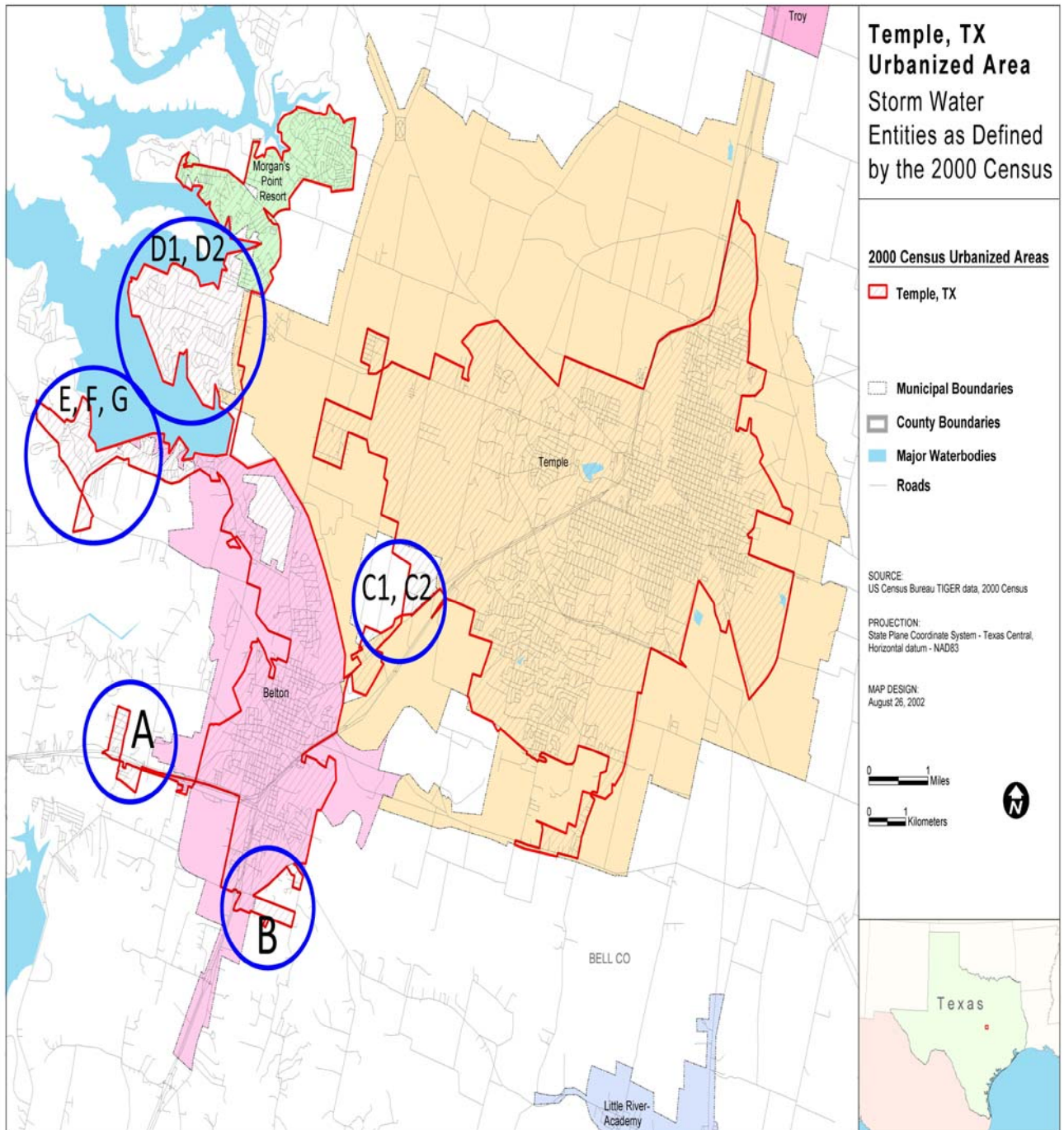
A=6'Hx1'H Flume C=10"Wx1'H Flume
B=12"Wx1'H Flume D=10"Wx1'H Flume

Scale 1"=1,000'

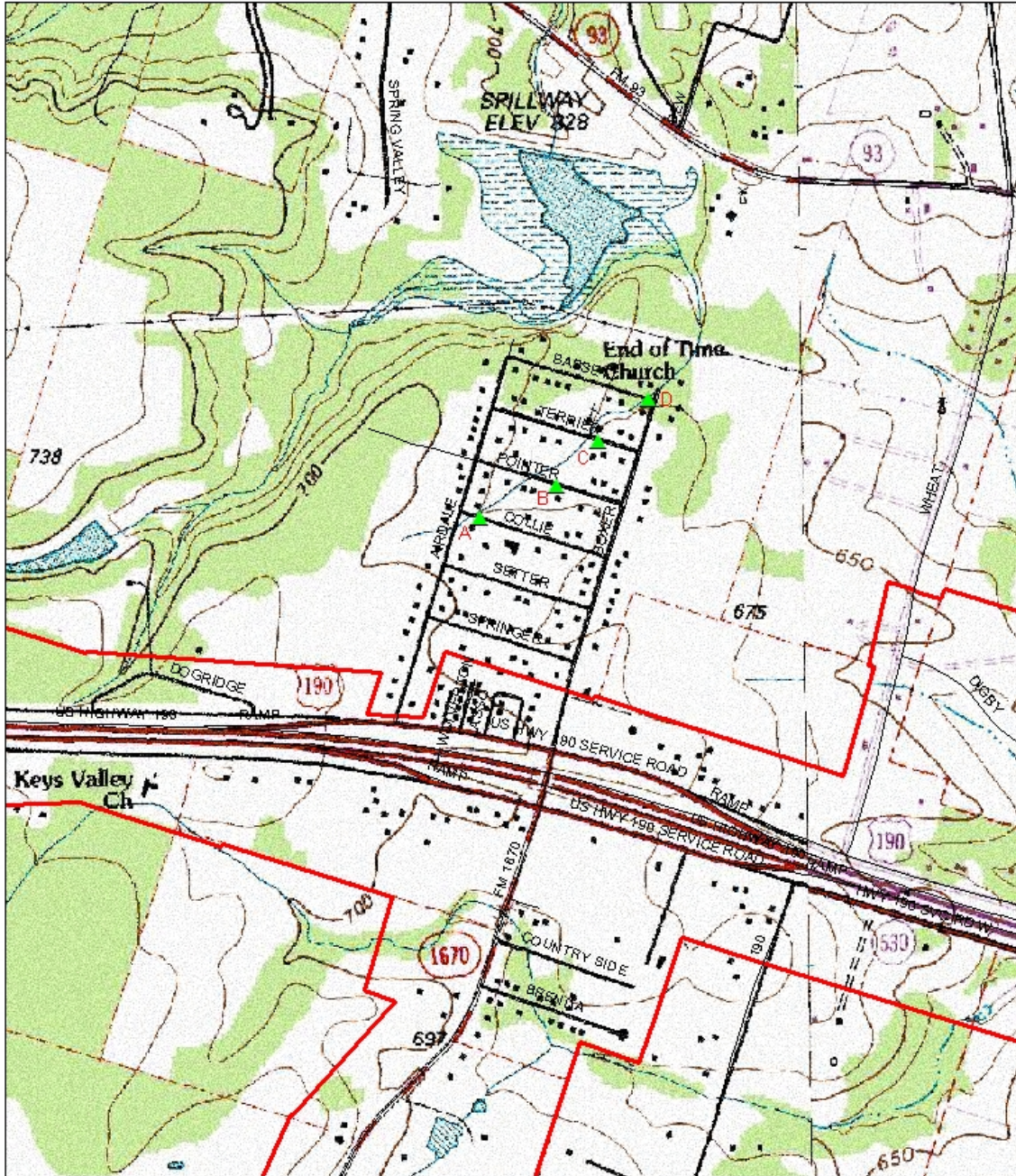
City Limits



CITY



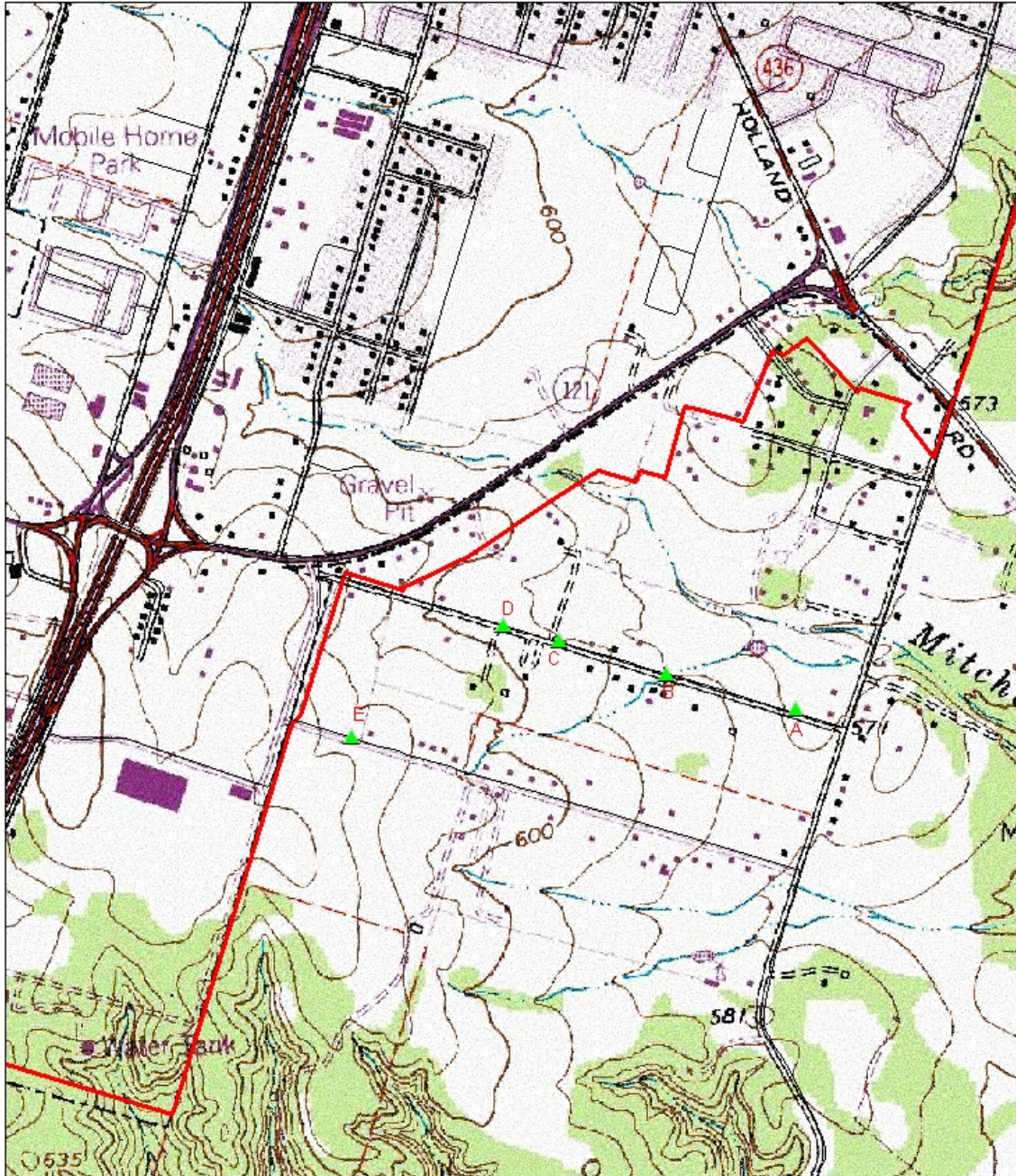
Map A



A=18"x40' C=2-24"x40'
B=24"x40' D=2-24"x40'

Scale 1"=1,000'

Map B



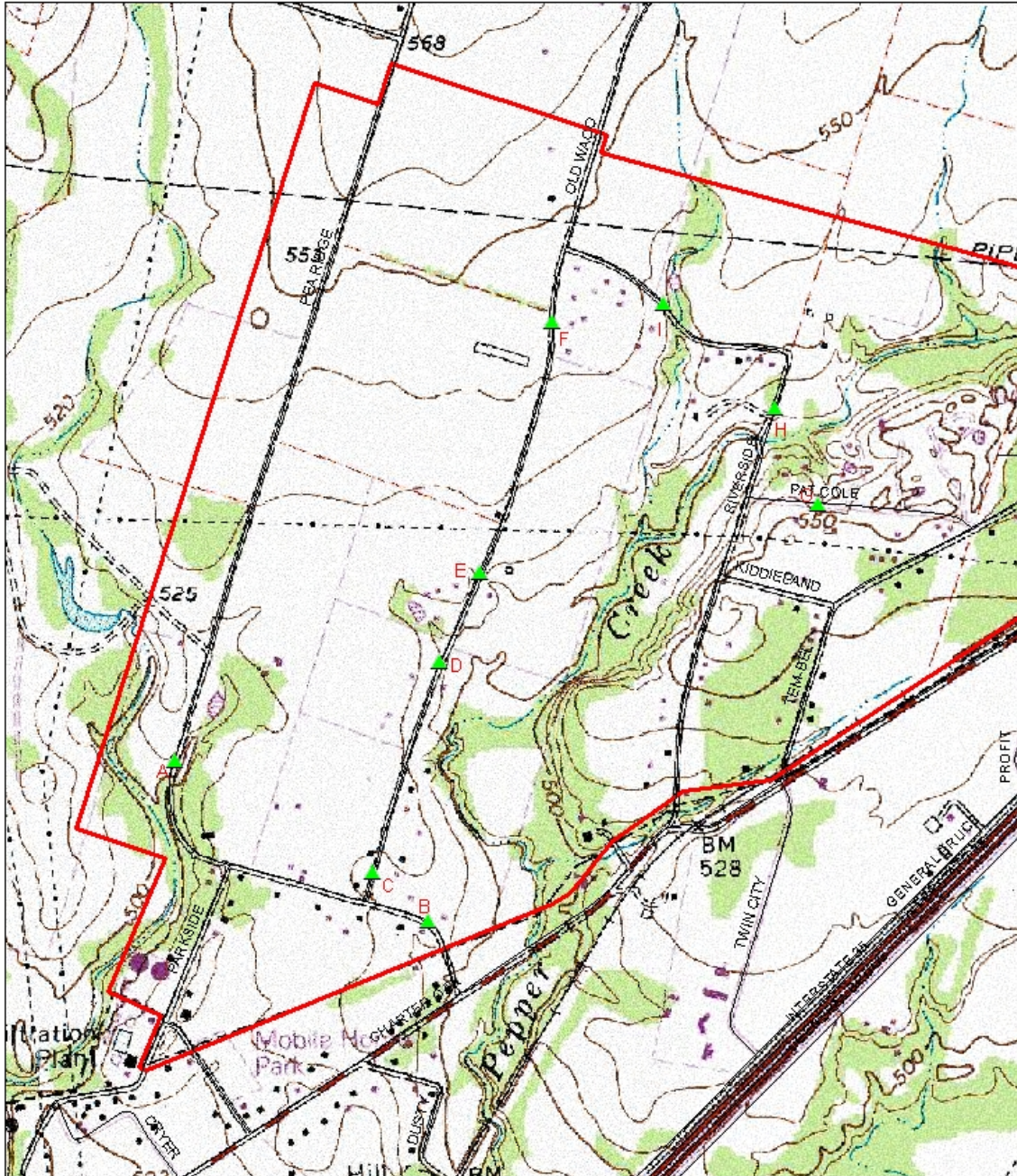
A=2-18"x30' D=24"x30'
B=5-18"x30' E=18"x40'
C=2-18"x30'

Scale 1"=1,000'

City Limits

 City Limits

Map C1



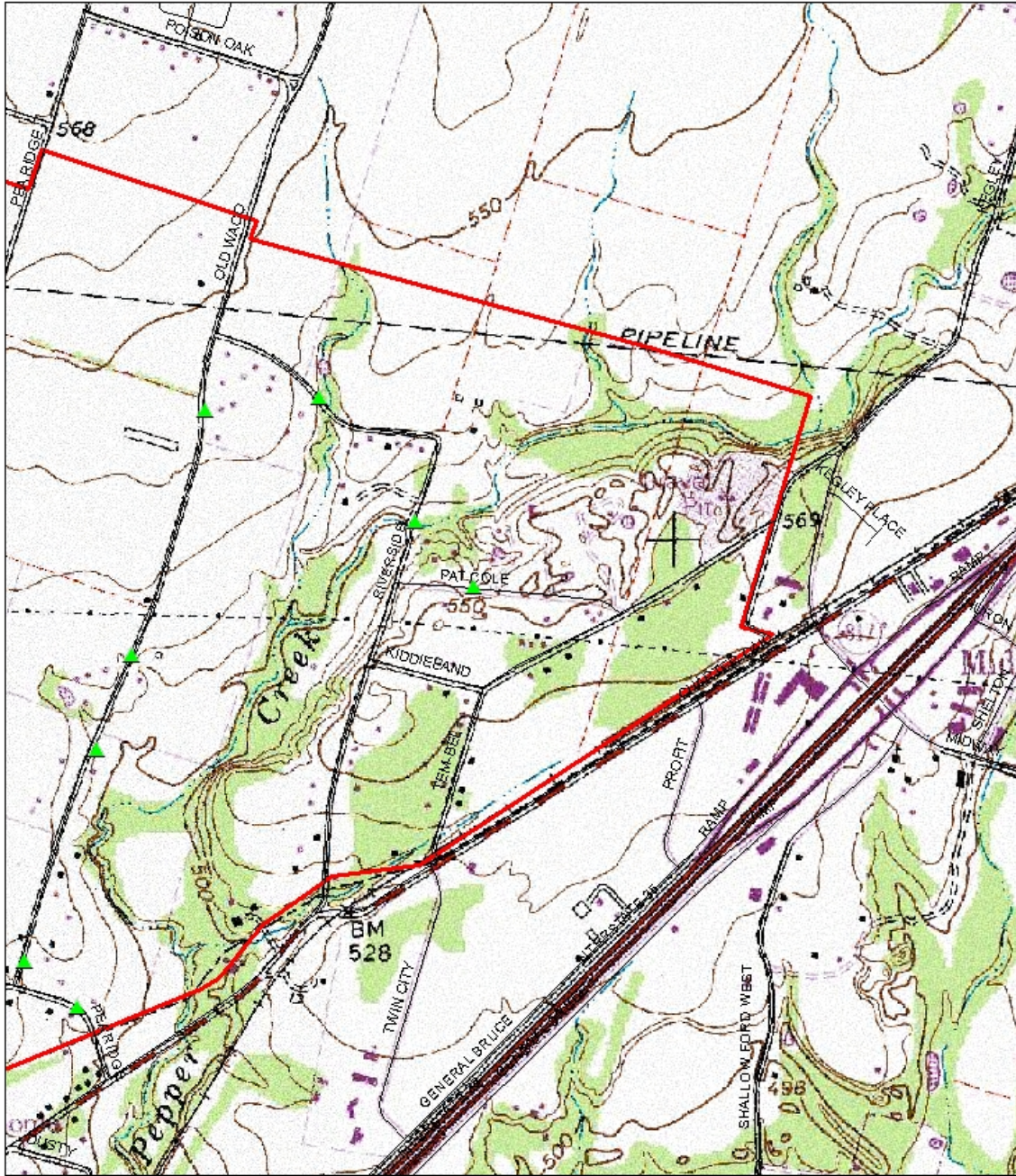
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B=36"x40' F=2-24"x40'
C=15"x40' G=24"x40'
D=36"x40' H=4-24"x40'

Scale 1"=1,000'

City Limits



Map C2

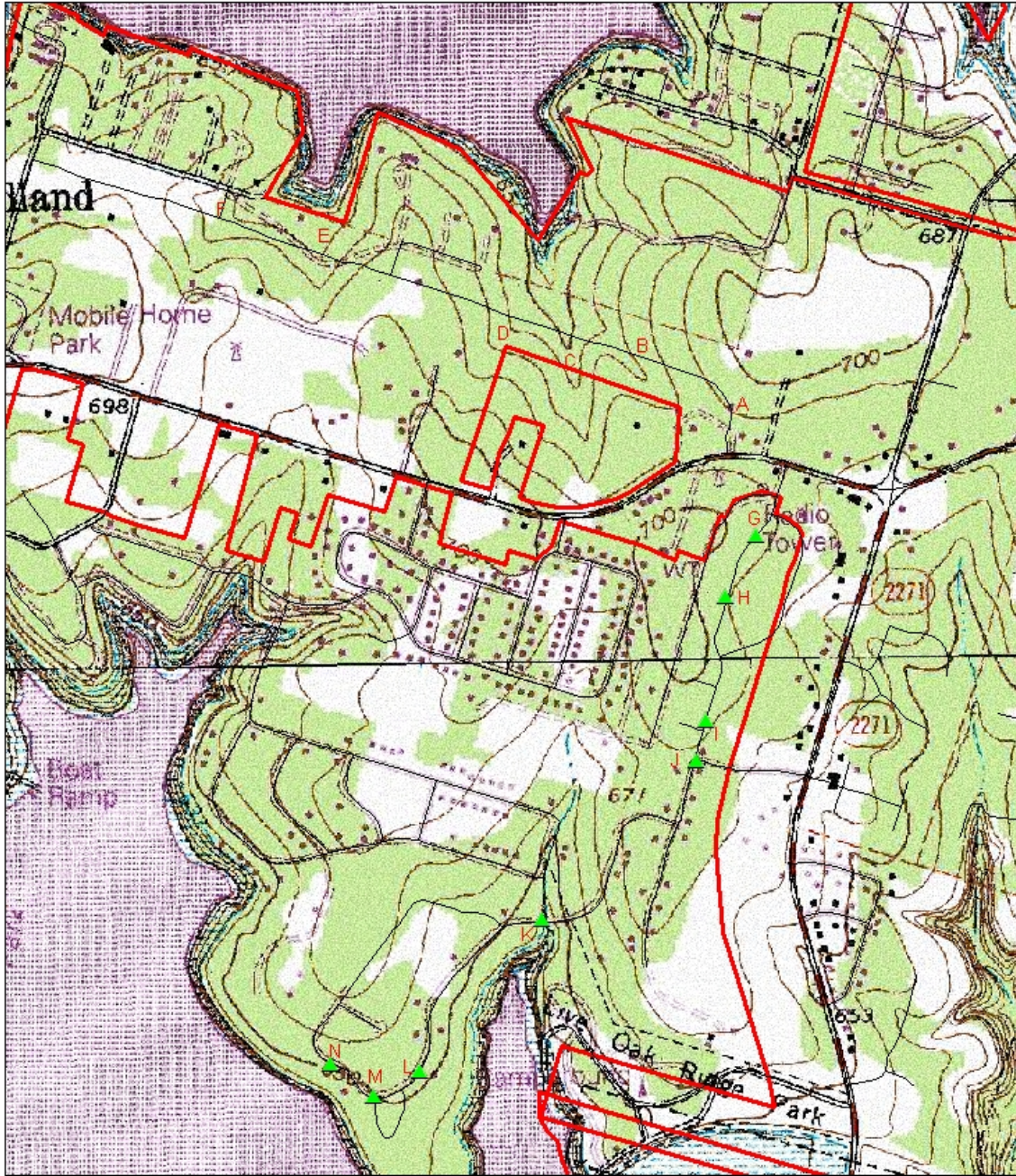


City Limits



Scale 1"=1,000'

Map D1



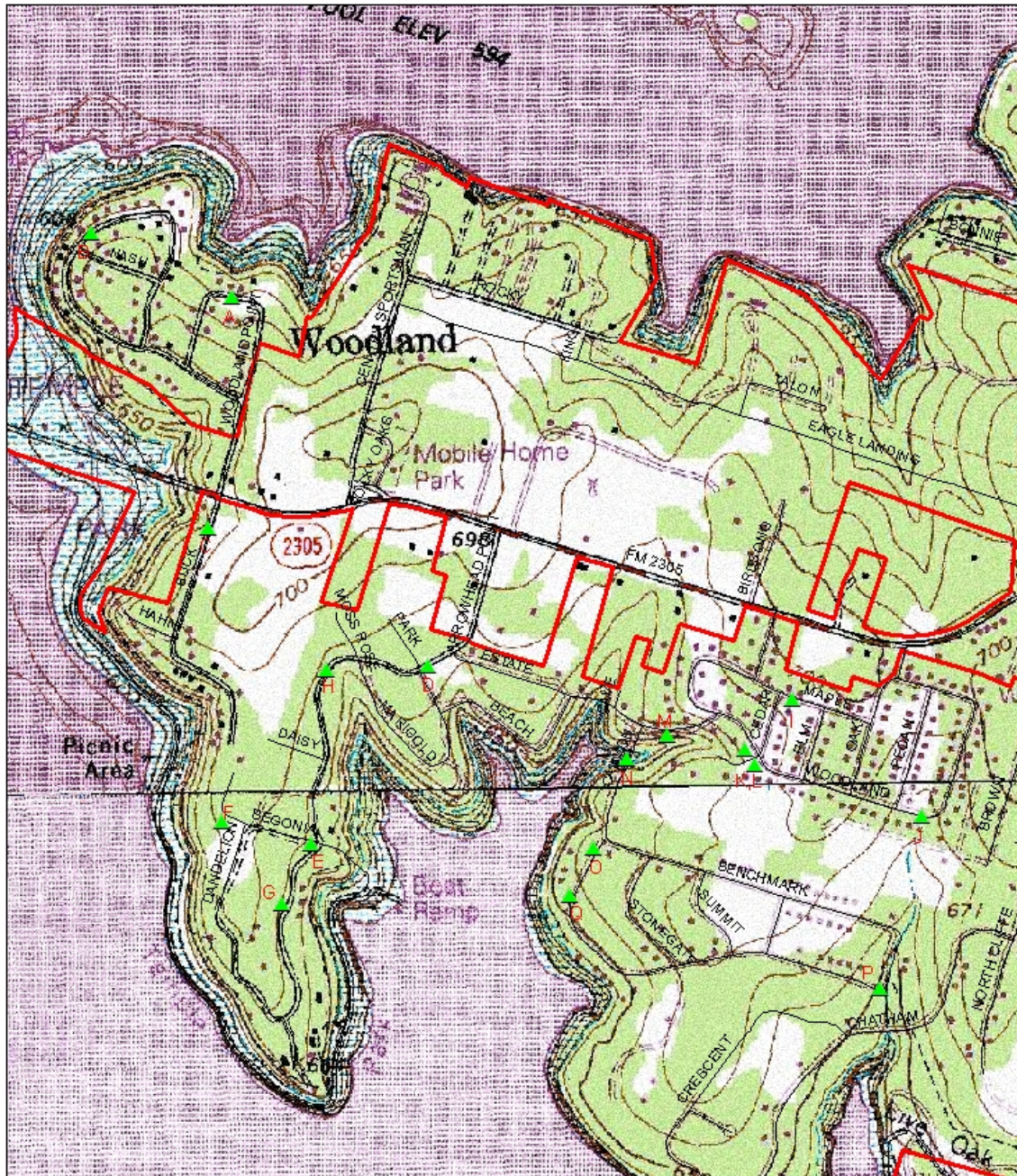
- | | | | |
|--------------|-----------------|-----------------|-----------------|
| A=6" W Flume | E=2-18"x40' | I=Valley Gutter | M=Valley Gutter |
| B=6" W Flume | F=15"x40' | J=12"x40' | N=Valley Gutter |
| C=3-24"x40' | G=15"x30' | K=60"x40' | |
| D=2-24"x40' | H=Valley Gutter | L=Valley Gutter | |

Scale 1"=1,000'

City Limits

 City Limits

Map D2



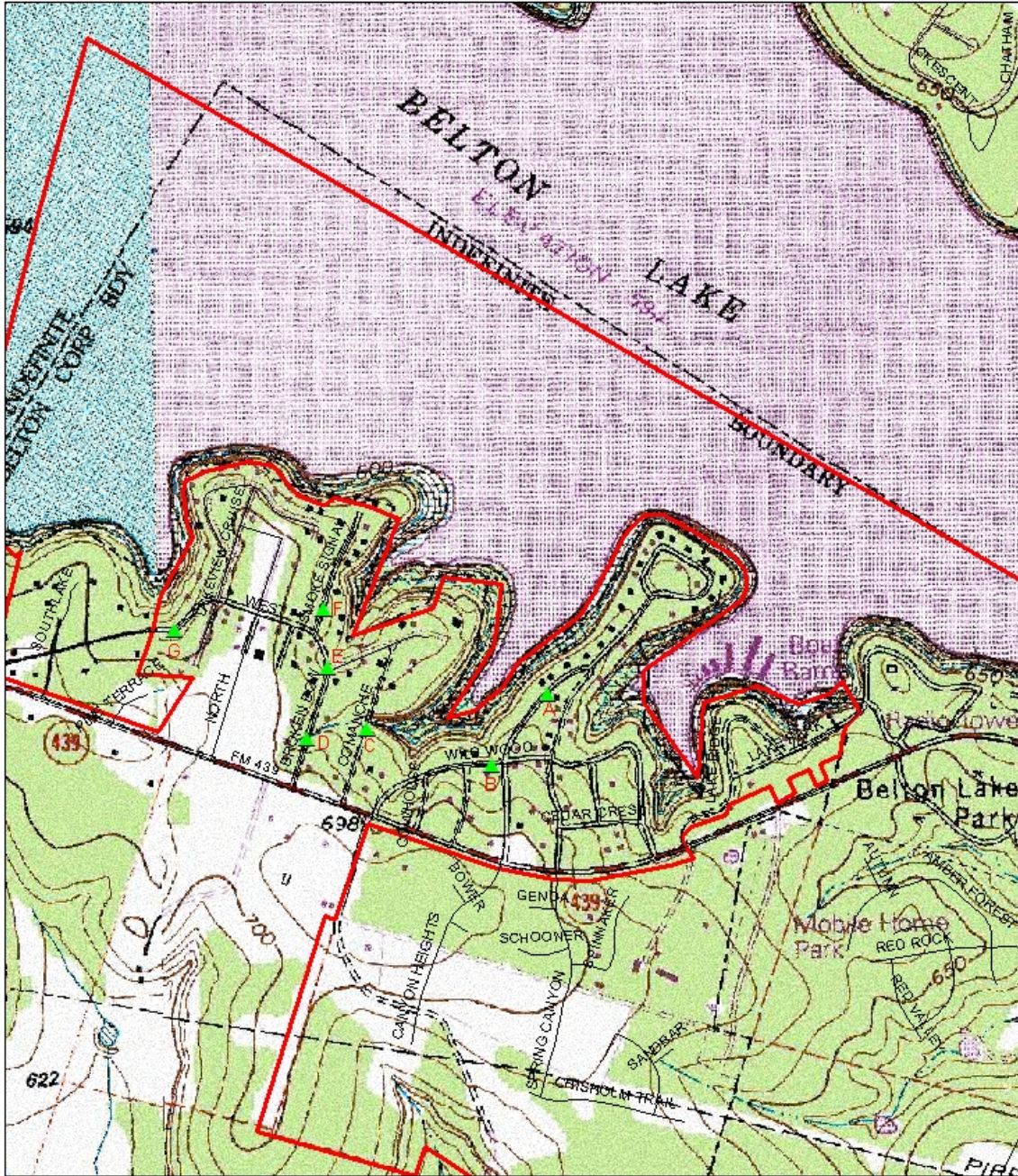
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 B=15"x100' F=15"x40' J=24"x40' N=36"x60'
 C=18"x30' G=15"x30' K=15"x30' O=18"x40'
 D=2-18"x40' H=15"x30' L=24"x40' P=18"x40'

Scale 1"=1,000'

City Limits



Map E



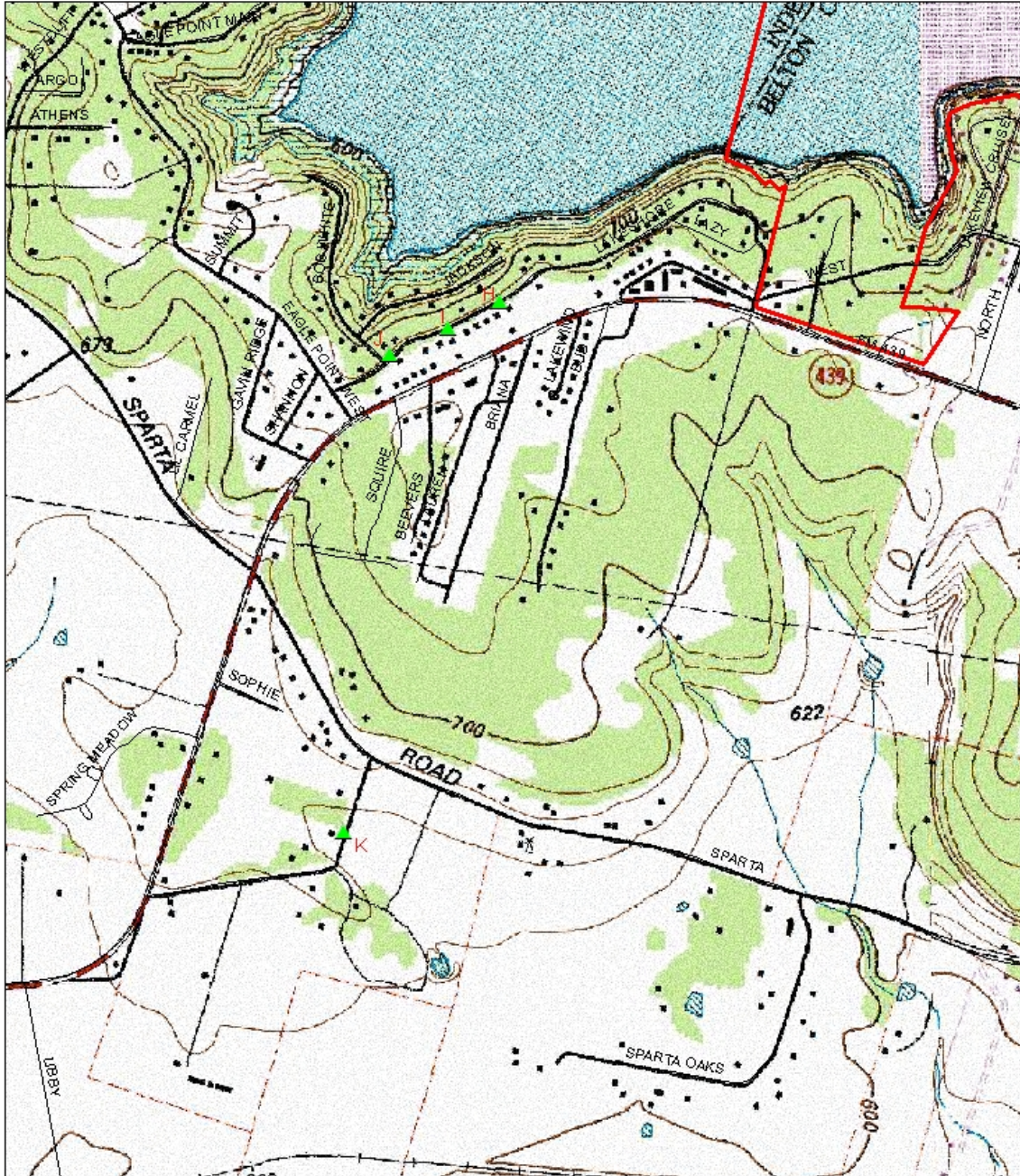
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B=18"x30' F=18"x30'
C=18"x30' G=24"x30'
D=24"x30'

Scale 1"=1,000'

City Limits



Map F



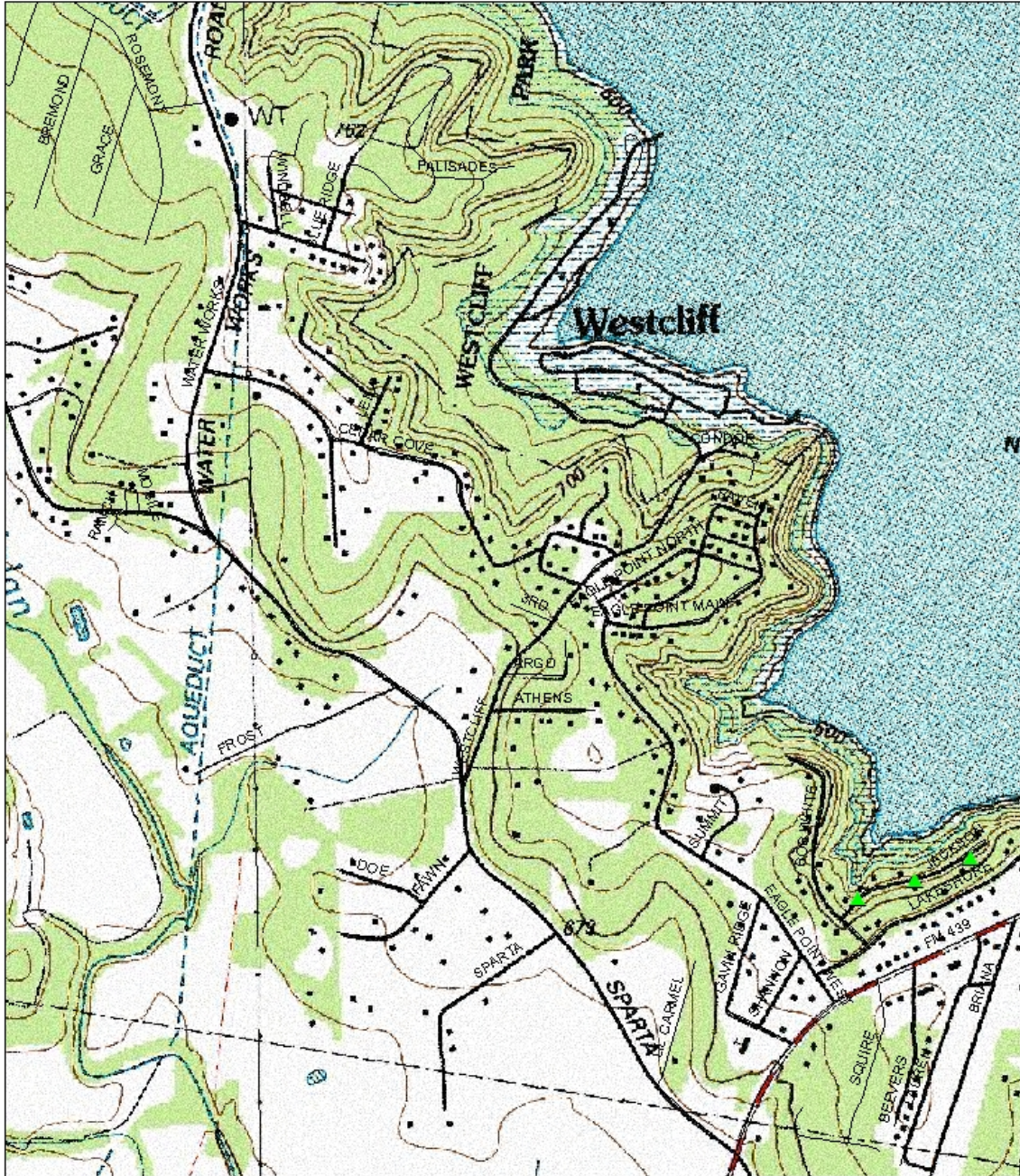
H=18"x30' J=36"x40'
I=24"x30' K=36"x30'

Scale 1"=1,000'

City Limits



Map G



City Limits

Scale 1"=1,000'

 CITY

