STORM WATER MANAGEMENT PROGRAM

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CITY OF LAVON, TEXAS

STORM WATER MANAGEMENT PROGRAM

(January 2019 – December 2023)

EXECUTIVE SUMMARY

The City of Lavon has developed this Storm Water Management Program (SWMP) in accordance with the Texas Pollutant Discharge Elimination System (TPDES) General Permit No. TXR040000, from the Texas Commission of Environmental Quality (TCEQ). A SWMP is required by the TPDES General Permit for all MS4s. The General Permit sets the requirements for activities which reduce pollutant concentrations in stormwater discharges from the small Municipal Separate Storm Sewer System (MS4) to surface water in the State of Texas.

This document serves as the City's Stormwater Management Program (SWMP); a comprehensive program to manage the quality of stormwater discharges from the MS4 by reduction of pollutant concentrations in the runoff from the City. This SWMP serves as the City's documentation of the methods and measurable goals for intended compliance with the current TPDES small MS4 general permit, and it is a 'living document' that is meant to be added-to over the five-year permit period.

This SWMP outlines eighteen (18) Best Management Practices (BMPs) that the City elects to implement over the five-year permit term to meet requirements of the small MS4 general permit. Some of the BMPs are designed to evolve over the years of the authorization term. The City has identified these BMPs as being assertive and reasonable approaches to protect water quality.

The Storm Water Management Program (SWMP) focuses on the following topics:

I. Minimum Control Measures (MCM) - *Requirements of the General Permit*
II. City-Elected Best Management Practices (BMPs) - *to satisfy MCM Requirements*
III. Water Quality - *of Receiving Water Bodies*
IV. Legal Authority - *or Ordinances to Enforce SWMP*

I. Small MS4 General Permit Overview

Stormwater affects the quality of water in urban lakes, rivers, neighborhood creeks, and storm drains. Pollutants (e.g., pesticides, oil, detergents, and bacteria) present on urban land and impermeable surfaces (e.g., streets and parking lots) can be transported by stormwater runoff into stormwater drainage systems. These drainage systems, both natural and man-made, convey the stormwater runoff away from urban areas and into nearby water bodies.

In order to protect water quality, it is necessary to identify the types and sources of pollution and to implement plans to protect water resources. Historically, waters have been protected through state and federal regulation of "point-sources" or end-of-pipe sources of pollution. Over time, it has become more evident that overland runoff sources of pollution, such as urban stormwater runoff, can create serious problems in waterways and impact the community's quality of life. Therefore, the General Permit, and this SWMP, propose a multitude of Best Management Practices (BMP) which aim to reduce stormwater pollution from overland sources of surface water contamination.

A. Regulation Background

Under the requirements of the Clean Water Act, the U.S. Environmental Protection Agency (EPA) is required to protect the water quality for natural waters throughout the country. The EPA established the National Pollutant Discharge Elimination System (NPDES) program to identify sources of water pollution and work to reduce or eliminate the pollutants from waters of the United States. The EPA has delegated responsibility for the NPDES program in Texas to the TCEQ, who administers the Texas Pollutant Discharge Elimination System (TPDES). In addition to issuing discharge permits to traditional "point sources," such as municipal wastewater treatment plants and industrial wastewater discharges, the TCEQ is also responsible for minimizing pollution from other sources, such as stormwater runoff from municipal stormwater drainage systems.

B. TPDES Discharge Authorizations

1) Small Municipal Separate Storm Sewer System (MS4) General Permit

In most areas of the country, storm drainage systems are separate from sanitary sewer systems and are thereby classified as "separate storm sewer systems." Separate storm sewer

systems include ditches, curbs, gutters, storm sewers, and similar means of collecting or conveying runoff that do not connect with a wastewater collection system or treatment facility before discharging into water bodies. A "municipal separate storm sewer system" (MS4) is a system owned or operated by a public agency such as a city, flood control district, county, or state agency.

In 1999, the EPA issued NPDES regulations to protect stormwater quality in small MS4s (known as "Phase II" MS4s) within urbanized areas. The TCEQ, who was delegated the responsibility of implementing the stormwater quality regulations, finalized the initial small MS4 General Permit (officially named Texas Pollutant Discharge Elimination System General Permit No. TXR040000) on August 13, 2007. This TPDES permit, commonly called the "small MS4 general permit," originally had a five-year term but was extended administratively for more than a year while TCEQ negotiated with EPA over the renewed permit conditions. The second small MS4 General Permit became effective on December 13, 2013 and had a five-year permit term. The third small MS4 General Permit became effective January 24, 2019 and has a five-year term. The City is one of several hundred cities, counties, and other public entities subject to TCEQ's small MS4 general permit.

2) General Permit for Construction Activity

The TCEQ regulates stormwater discharges from most construction activity through TPDES Construction General Permit No. TXR150000. For construction sites generally disturbing one acre or more, a stormwater pollution prevention plan (SWPPP) must be developed and site controls must be installed, such as silt fence, inlet protection, and a stabilized construction site entrance, to minimize the discharge of sediment and other pollutants from the construction site. Within 14-days of halting or termination of site construction disturbances, the disturbed area must be re-vegetated or otherwise stabilized. The control measures may be removed after site stabilization.

Small MS4s (that do not elect MCM-7) do not have direct responsibility to design, install and maintain erosion and sediment control BMPs for construction sites operated by others, nor is the small MS4 required to stabilize the site. The small MS4 is, however, required to ensure that site disturbances are authorized to discharge under TXR150000 Construction General Permit. The Small MS4 must perform construction site plan review, including the

SWPPP, and must perform construction site inspections to verify appropriate use of BMPs for sediment and erosion control. Construction site inspections must be documented.

Many small MS4 cities reference the TCEQ construction General Permit in the city ordinance for compliance consistency, and the 2019 small MS4 General Permit provides a specific allowance for regulated MS4s to reference the TCEQ construction General Permit to demonstrate their own compliance with construction site related oversight requirements.

3) Multi-Sector General Permit for Industrial Activity (& City Facilities)

TCEQ requires certain types of industrial facilities to apply for coverage under TPDES Multi-Sector General Permit No. TXR050000. These industrial sectors have been identified by EPA and TCEQ as high potential sources of significant stormwater pollutants. Examples of facilities subject to these permit requirements include automobile salvage yards, chemical production plants, paper and pulp mills, and many other industrial facilities. Discharges eligible for authorization under TXR050000 are listed under Part II.A of the Multi-Sector General Permit. Site-specific stormwater pollution prevention plans (SWP3) are required to be developed, implemented, and maintained for facilities that conduct activities with the potential to contaminate stormwater. Common BMPs for industrial facilities include covered storage for materials, staff training and runoff monitoring.

Cities that are small MS4s often have their own facilities subject to the Multi-Sector General Permit. Municipal landfills, wastewater treatment plants, vehicle maintenance facilities and municipal airports are common city facilities that must comply with the industrial stormwater permit. Level 4 MS4s (population of 100,000 or greater) are also required to develop and implement a program to inspect and enforce stormwater quality runoff protection from industrial facilities that discharge to the MS4. This would be expected to include facilities subject to the industrial stormwater permit, although it also may include additional facilities determined by the MS4 to have high potential for stormwater pollution.

The City is required to document in this program each City-owned or operated facility that is required to have a TPDES multi-sector General Permit for stormwater runoff. If the City does own or operate such a facility, a copy of each facility's permit authorization will be located in **Appendix H** of this document for reference.

C. Permit Applicability & Coverage

The City has developed this stormwater management program (SWMP) to comply with the requirements of the renewed small MS4 general permit. The General Permit applies to operators of publicly-owned storm sewer systems in Urbanized Areas (UA) in Texas and authorizes the City to discharge stormwater runoff from their stormwater drainage system. The U.S. Census Bureau defines the Urbanized Areas based on a population density of 1,000 people per square mile and a total population of at least 50,000, irrespective of political boundaries. Urbanized Areas represent densely developed areas and encompass residential, commercial, and other non-residential urban land uses.

This SWMP encompasses the City's MS4 area, being the area within the City limit boundaries *and* within the UA. This SWMP presents best management practices (BMPs) that will be implemented by the City to reduce stormwater pollution to the maximum extent practicable (MEP), as regulations require, within the MS4 area.

D. Small MS4 General Permit Levels

The City is required to develop this SWMP to describe specific actions, BMPs, that will be completed over the next five-year period to reduce pollutants collected by the City's stormwater system. This SWMP also sets measurable goals for each BMP and includes an implementation schedule for the five-year permit period. The BMPs, defined by the City, are based on the Minimum Control Measures (MCM) in the General Permit. The MCMs have varying requirements, based on the Level of the MS4, as defined by the General Permit.

The small MS4 General Permit defines MS4 operators into one of four categories, or "levels", based on the population served within the 2010 Urbanized Area (UA). The level of a small MS4 may change during the permit term based on the MS4 operator acquiring or giving up regulated area, such as by annexing or de-annexing land. However, the level of a small MS4 will not change during the permit term based on population fluctuation. The four levels are described below:

Level 1
Operators of traditional small MS4s, serving a population of less than 10,000 within a UA.

Level 2
Operators of traditional small MS4s that serve a population of at least 10,000 but less than 40,000 within a UA. This category also includes all non-traditional small MS4s such as counties, drainage districts, transportation entities, military bases, universities, colleges, correctional institutions, municipal utility districts and other special districts regardless of population served within the UA, unless the non- traditional MS4 can demonstrate that it meets the criteria for a waiver from permit coverage based on the population served.

Level 3
Operators of traditional small MS4s that serve a population of at least 40,000 but less than 100,000 within a UA.

Level 4
Operators of traditional small MS4s, serving a population of 100,000 or more within a UA.

E. Minimum Control Measures

Various BMPs must be developed for the "minimum control measures" (MCMs) that are expected to minimize or eliminate stormwater pollutants discharged into the storm sewer system and provide water quality protection for receiving water bodies. Five MCMs are required for all cities and a sixth MCM is required only for cities with a population over 100,000. An optional seventh MCM to address municipal construction activities through their SWMP is available for use by the City but has not been selected for inclusion in this SWMP. Specific requirements according to small MS4 level have been developed by the TCEQ for each MCM. Requirements of the General Permit for each Minimum Control Measure are summarized below.

1) Public Education, Outreach, and Involvement – Develop a public education and outreach program about stormwater quality issues and involve the public with implementation of the program. In summary, this MCM requires the following:

   a) Levels 1 - 4
      i) Define Goals for public outreach based on community-priority water quality issues
      ii) Identify target audiences: public employees, businesses & general public
      iii) Develop & distribute educational materials at least annually
      iv) Make SWMP & Annual Reports available to general public (within 30-days of approval/due)
      v) Provide opportunity for public input and participation

2) Illicit Discharge Detection and Elimination (IDDE) – Develop a program to detect, investigate, and eliminate illicit discharges. In summary, this MCM requires the following:

   a) Levels 1 - 4
      i) Map the storm system including all outfalls, surface waters & priority areas
      ii) Educate and train field staff
      iii) Procedures to Trace & Remove the source of an illicit discharge
      iv) Solicit public reporting of observed illicit discharges
      v) Procedures for Responding to an illicit discharge and spills
      vi) Prioritize, investigate, track & document illicit discharge
      vii) Procedures to notify, correct action & follow-up inspections

   b) Levels 2 - 4
      i) Procedures to prevent and correct leaking on-site sewage disposal systems (septic systems)

c) Levels 3 - 4
   i) Conduct follow-up investigation or field screening after an illicit discharge

d) Level 4 only
   i) Identify priority areas & List
   ii) Conduct dry-weather field screening observations of outfalls in priority areas list
   iii) Reduce Floatables: Install two (2) Floatables capturing locations/ facilities

3) Construction Site Stormwater Runoff Control – Develop a program to control runoff quality from construction activities. In summary, this MCM requires the following:

a) Levels 1 - 4
   i) Develop/ implement Ordinance & enforce with Sanctions (Alternative~MCM-7 *Self-operated*)
   ii) Ensure site operators obtain Construction General Permit [TXR150000] authorization
   iii) Review Construction Plans & SWP3
   iv) Inspect and enforce construction site erosion and sediment control BMPs
   v) Inspect and enforce appropriate soil stabilization within 14-days of halting
   vi) Prohibit contaminated discharges
   vii) Receive, respond, and track information from the public
   viii) Train field staff and reviewers

b) Levels 3 - 4
   i) Inventory all construction sites over an acre

4) Post Construction Stormwater Management in New Development and Redevelopment – Develop a program to control stormwater discharges from new development and redeveloped sites to reduce discharge of pollutants. In summary, this MCM requires the following:

a) Levels 1 - 4
   i) Implement and enforce requirements for structural or non-structural BMPs for newly developed and redeveloped sites, generally over an acre, to control stormwater quality
   ii) Maintain records of enforcement actions
   iii) Ensure long-term operation and maintenance of structural stormwater controls (by MS4 Operator or by Agreement)

b) Level 4 only
   i) Inspect structural stormwater controls

5) Pollution Prevention and Good Housekeeping for Municipal Operations – Develop an operation and maintenance (O&M) program to reduce the discharge of pollutants from the MS4 due to municipal operations. In summary, this MCM requires the following:

a) Levels 1 - 4
   i) Inventory municipally owned facilities and stormwater controls owned or operated by MS4
   ii) Train O&M staff on Good Housekeeping BMPs
   iii) Properly Dispose of Waste materials
   iv) Develop Contractor Oversight Procedures & Oversee City-Contracted activities
   v) Perform Self-Assessment for O&M activities for potential to contaminate
   vi) Identify Pollutants of Concern used in municipal operations
   vii) Develop, implement, and inspect Pollution Prevention Measures & log inspections
   viii) Develop written procedures & Maintain structural controls

b) Levels 3 - 4
   i) Maintain storm sewer systems & Identify and Inspect problem areas
   ii) Conduct street sweeping/cleaning or Inlet protection program
   iii) Map MS4 facilities and stormwater controls owned and operated by the MS4
   iv) Assess MS4 facilities for potential to discharge pollutants
   v) Create standard operating procedures for MS4 facilities
   vi) Implement stormwater controls for MS4 facilities
   vii) Inspect facilities

c) Level 4 only
   i) Develop pesticide, herbicide, and fertilizer application and management procedures
   ii) Assess impacts of Flood Control Projects for erosion prevention and pollutant removal

6) Industrial Stormwater Sources (only for MS4s with a population over 100,000) – Develop a program to identify and control pollutants from industrial or commercial facilities. In summary, this MCM requires the following only Level 4:

   a) Level 4 only: Implement a pollution prevention program for industrial facilities that are contributing a substantial pollutant load to the MS4.

7) Authorization for Construction Activities where the Small MS4 is the Site Operator (Optional) – Develop program for construction activities as an alternative to TPDES Construction General Permit TXR150000 where the City meets the definition of construction site operator. This optional MCM requires development of a detailed plan addressing how the City's construction activities will meet construction stormwater permit requirements.

II. Water Quality Assessment in Texas

The TCEQ is charged through federal mandate with protecting the quality of waters within Texas. The TCEQ's approach to this mandate includes of measuring water quality at locations across the state to determine if the quality of streams, lakes, and creeks is acceptable, based on the water bodies' designated use *classification* parameters or on general water quality standards which apply to all surface waters in the state. The TCEQ requires MS4s to implement plans for reduction of specific pollutants for those MS4s which discharge to a surface water system that is identified as *impaired*, based on approved pollutant concentration parameters.

A. Water Body Classification

The Texas Surface Water Quality Standards are rules designed to establish goals for water quality throughout the state and provide a basis for regulatory programs to attain those goals. Water quality standards are sets of allowable/ maximum concentrations for various contaminants. These maximum pollutant concentration parameters serve to signal situations where water quality may be inadequate to meet the use or uses of a particular water body. Five general categories for water use, known as "designated uses", are defined in Texas:

- general
- aquatic life use
- recreation
- public water supply
- fish consumption

Many major surface water bodies in the State have been classified with site-specific designated uses in Title 30, Chapter 307 of the Texas Administrative Code (TAC), but many smaller water bodies have not been classified and do not have site-specific designated uses. All unclassified surface water bodies without site-specific designated uses are protected by the "general criteria" defined in 30 TAC §307.4.

The TCEQ divided water bodies into "segments" to provide the basic unit for assigning site-specific standards and for applying water quality management programs. Segments can be further divided into "assessment units." All classified water bodies and some smaller

unclassified water bodies have been assigned a unique segment identification code (TCEQ Segment ID). However, many water bodies in the state have not been assigned a TCEQ Segment ID.

Because it would be impractical to test every water body for all possible pollutants, assessments of water quality in Texas are performed by evaluating indicators of water quality. Chemical indicator concentrations are indirect measures of the health or quality of a particular part of the aquatic system. Some indicators, such as the health of fish communities, are tied to specific designated uses, while others, such as nutrients, are not. Some of the most common indicators used by TCEQ to determine the quality of water bodies include bacteria, dissolved oxygen, dissolved solids, metals, and organic substances.

If the indicator data published in the Texas Integrated Report of Surface Water Quality (Integrated Report) reveal that water quality is inadequate to meet the goals of the water body's designated use, the TCEQ identifies the water body as an impaired water in a section of the Integrated Report called the 303(d) list. The 303(d) list is required by the federal Clean Water Act and is submitted to EPA for approval. Water bodies in the list are subject to a Total Maximum Daily Load (TMDL) assessment, which is an assessment of the root cause of poor water quality. An Implementation Plan (or "I-Plan") developed by local stakeholders to remediate pollution sources usually accompanies the TMDL.

Water bodies with non-attainment or screening levels for a particular contaminant are identified in the Integrated Report. The listed contaminants are used to evaluate potential sources of the impairments. Water bodies with impairments not suitable for inclusion on the 303(d) list are identified in a section of the Integrated Report called the Index of Water Quality Impairments.

B. Impaired Waters with Total Maximum Daily Load

If a MS4 discharges directly to a water body that is determined to be impaired by the 303(d) list, the SWMP must additionally address reduction of the specific pollutant which is the downstream water quality impairment. Not all regulated MS4s discharge directly into an impaired water body, and thus these requirements do not apply to all regulated entities. If an impaired water body has an established total maximum daily load (TMDL), pollutant

concentration, the regulated MS4 must be consistent with the approved TMDL in order to be eligible for coverage by the small MS4 general permit. The TMDL process includes an assessment of the root cause of poor water quality, a determination of the maximum pollutant loading allowable to meet water quality use standards and the development of a plan by local stakeholders to remediate pollution sources.

For MS4s discharging a known pollutant of concern into impaired water bodies, the SWMP must include information on the implementation of "targeted controls", which are activities, practices, or structural controls that focus on reducing the water quality impact of the specific pollutant. For each targeted control, a measurable goal, implementation schedule, and "benchmark" must be established. A benchmark is a quantifiable goal designed to assist in determining if the targeted controls are effective in addressing the pollutant. The exceedance of a benchmark does not indicate a permit violation; it does, however, help in the evaluation of the progress towards reducing pollutant discharges.

III. The City of Lavon MS4

The City of Lavon, Texas is located in south Collin County, in North Central Texas. It is near the southern shoreline of Lake Lavon, east of the Lake Lavon spillway to Lake Ray Hubbard. The City of Lavon is north of the City of Rockwall and bordered by the City of Wylie to the west and the City of Nevada to the East. Based on the 2010 U.S. Census, the City has a population of 2,219. The City limits encompass 2.3 square miles, with an overall population density of 960 people per square mile. Lavon is only partially located within the Dallas-Ft Worth-Arlington urbanized area. Approximately 1.6 square miles, or 70 percent, of the City limit area is within the urbanized area, requiring MS4 oversight. As a result, the City is classified as a Level 1 small MS4 under the TCEQ MS4 General Permit.

The City is within the Texas Blackland Prairies ecoregion, specifically the Northern Blackland Prairie. This ecoregion is characterized by fine textured, clayey soils, and predominately prairie natural vegetation. The area is characterized by a humid, subtropical, continental climate with hot summers and mild winters. The average maximum temperature in the Northern Blackland Prairie occurs in July (96.3°F); the average minimum temperature occurs in January (34.2°F) with an annual average temperature of 65.7°F. Rainfall is the predominant type of precipitation, and approximately 41-inches of total precipitation falls on the City yearly. It is distributed throughout the year and reaches a slight peak in spring. Prevailing winds in the area are from the south.

The City is partially located within the Dallas-Fort Worth-Arlington U.S. Census Urbanized Area as shown in **Figure 1**. Only the urbanized area within the City limit is included in the MS4 regulated area.

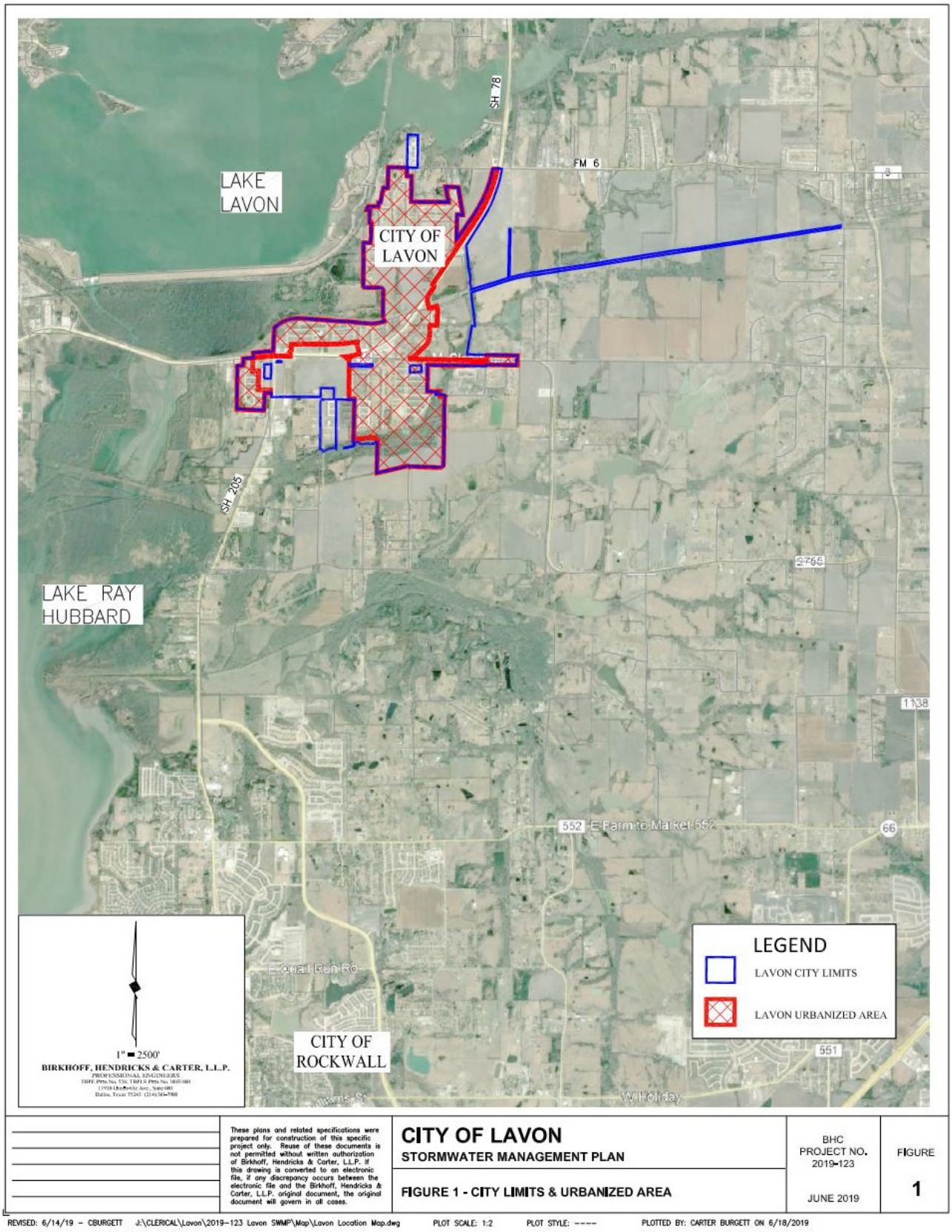

Figure 1 – Urbanized Area Map

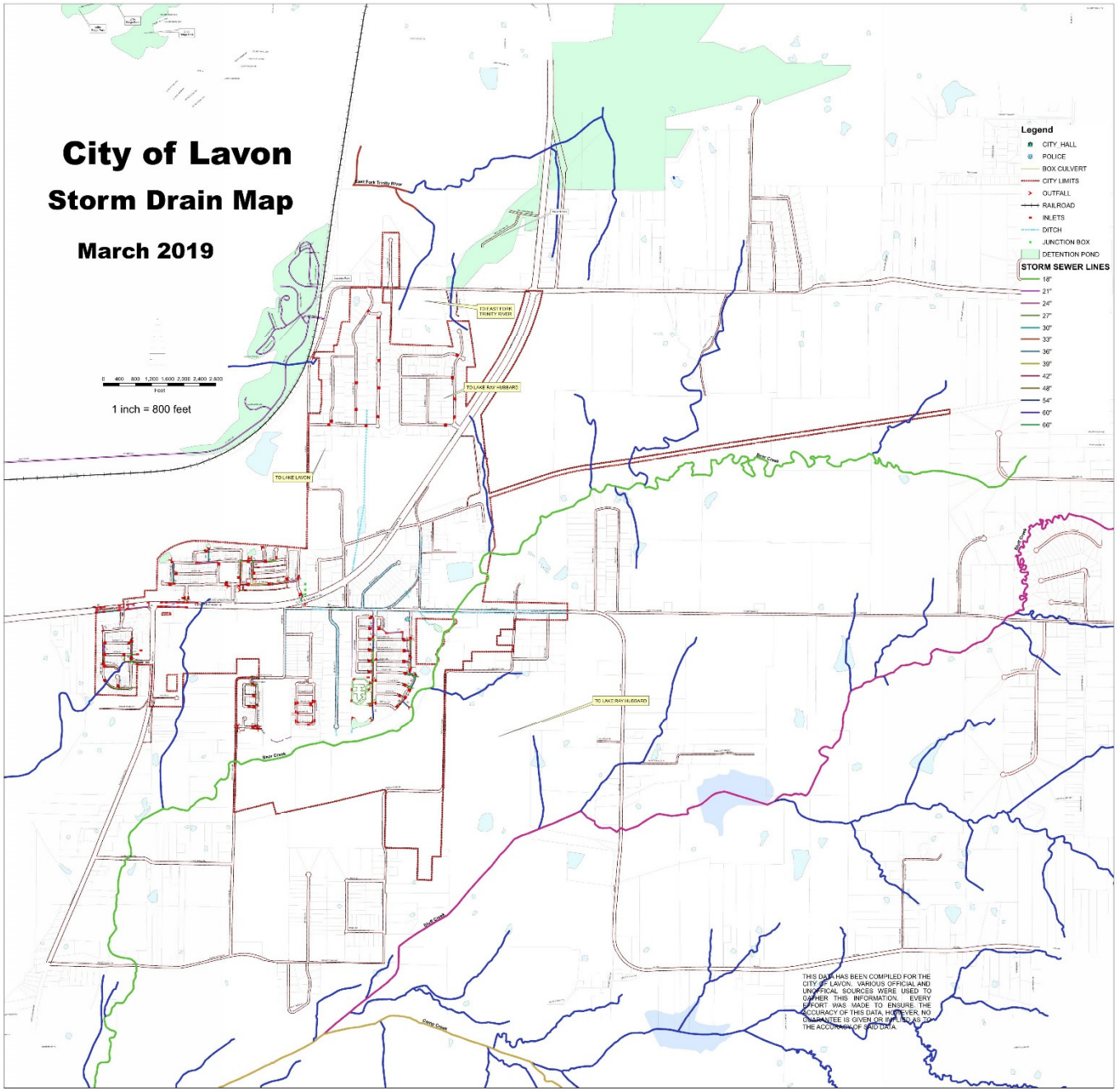

Figure 1B – Lavon MS4 Stormwater System Map

A. Program Development Process

This SMWP modifies the City's current array of Best Management Practices that were elected for the previous 5-year Stormwater Management Program term. The BMPs selected for this permit term cycle were determined by review of the requirements of the latest TCEQ General Permit which became effective on January 24, 2019, and they were selected based on the projected effectiveness in protecting stormwater quality.

Existing City stormwater quality programs and activities were identified and are included in the SWMP as applicable. These existing programs and activities will be supplemented with several new BMPs to provide additional protection of stormwater quality as required by the small MS4 general permit. Several BMPs of the previous SWMP were substituted or revised for various reasons, based on input from City staff.

This SWMP outlines eighteen (18) Best Management Practices (BMPs) that the City elects to implement over the five-year permit term to meet requirements of the small MS4 general permit. Each BMP is listed with activity descriptions, reference to the General Permit requirement, measurable goals, implementation schedules, and required documentation over the five-year permit period. The City-elected BMPs for this 5-year permit term are listed in table format, provided in **Appendix A**.

B. Program Implementation & Resources

Multiple City departments will be responsible for implementing portions of the SWMP and for tracking and evaluating the City's activities to meet the program's measurable goals. Participating City departments shall coordinate documentation showing progress towards meeting the annual measurable goals for each BMP.

City personnel will be trained and provided adequate resources to perform required duties of the SWMP. City funds and resources will be provided for fulfillment of the elected BMPs.

Measurable goals are provided with an implementation schedule to track progress for each BMP. The implementation schedule phases several of the BMP activities over the permit term. The City will review the implementation progress each year and modify the SWMP as necessary. Annual Reports will be provided to the TCEQ via form TCEQ-20561.

C. Program Updates

This SWMP program may be updated by the City at any time. When considering eliminating a BMP, the General Permit shall be referenced to determine if the removal of the BMP will result in non-compliance for any of the minimum control measures. This would occur if the BMP is the only BMP that provides compliance for a specific permit provision. In such a case, the BMP would need to be replaced with a new BMP that continues to meet the relevant permit requirement.

According to the small MS4 general permit, "adding components, controls, or requirements to the SWMP, or replacing a BMP with an equivalent BMP" and "nonsubstantive changes" like clarifications, personal changes, and corrections of typographical errors, only require notification of TCEQ within the annual report. Other changes require submittal of a notice of change (NOC) and TCEQ approval.

IV. The City of Lavon Water Quality

The small MS4 General Permit requires that the classified segment that first receive the City's stormwater discharges, either directly or indirectly, be identified. Stormwater discharges from the City eventually reach the following classified segments:

- Lake Lavon (Segment 0821)
- Lake Ray Hubbard (Segment 0820)

The classified segments listed above are shown by **Figure 2** and summarized in **Table 1**.

Table 1 - Water Quality Summary for Receiving Waters

Water Body	Segment ID	Discharge (Direct/ Indirect)	Classified	Water Quality Impairment [*303(d) List*]
Lake Lavon	(0821)	Indirectly	Yes	None
Lake Ray Hubbard	(0820)	Indirectly	Yes	None

Source: TCEQ 2014 Texas Integrated Report of Surface Water Quality

Most Stormwater Runoff from the City of Lavon MS4 is collected by Bear Creek, a smaller drainage tributary which flows southwesterly to Lake Ray Hubbard. Only a smaller, northern portion of the City drains to the shoreline of Lake Lavon. Neither lake water body is within the City limit, so the discharges are 'indirect', although via short routes.

Both Lake Lavon and Lake Ray Hubbard are *classified* waterbodies, by the TCEQ, and they are both *non-impaired*.

The City is within the East Fork Trinity River watershed basin which drains a large area of the eastern metropolitan region. South of Lake Ray Hubbard, the East Fork Trinity River is impaired with sulfate and total dissolved solids.

The stormwater drainage system for City of Lavon generally uses a combination of curb & gutter and sewer to convey runoff to open swales and ditches.

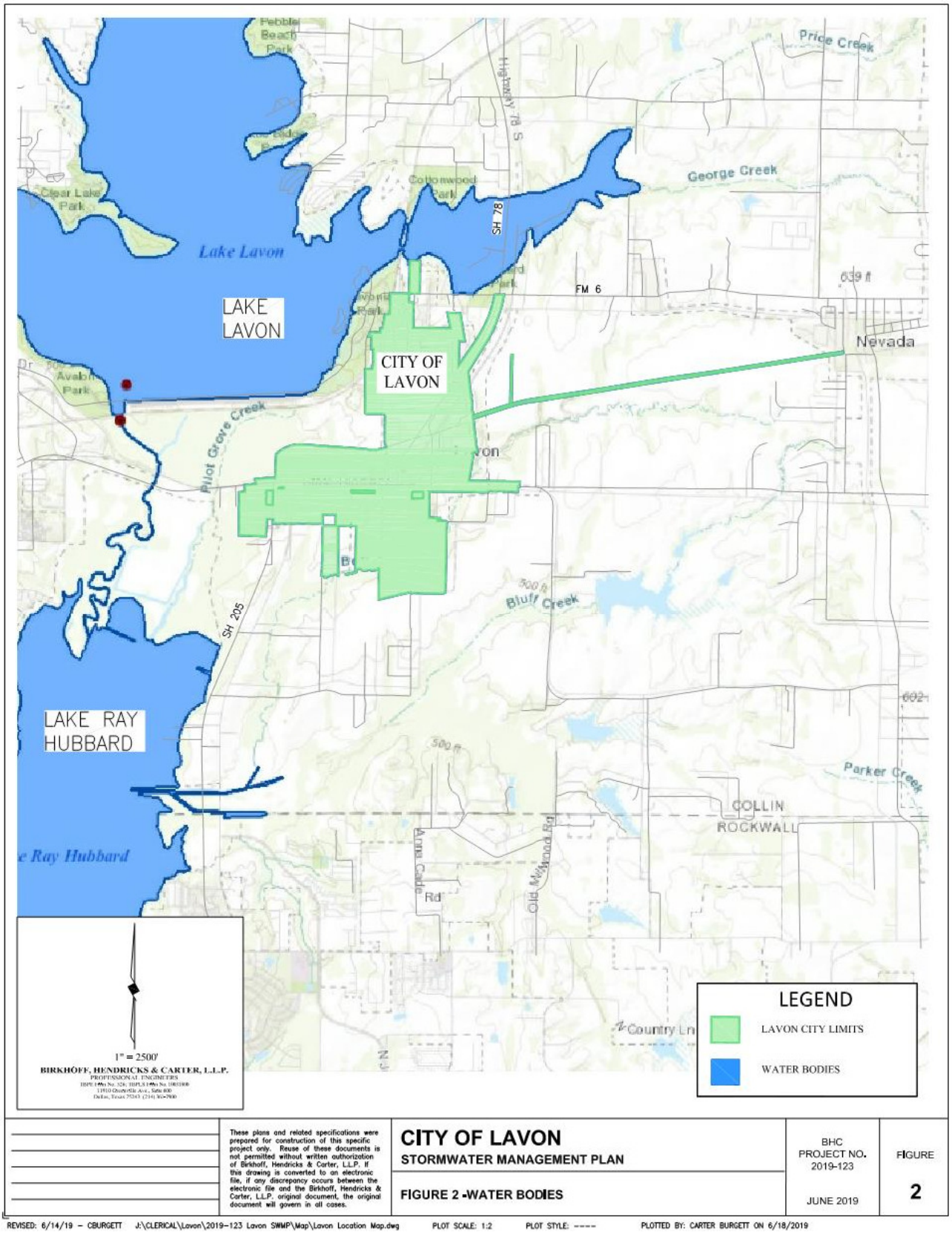

Figure 2 – Receiving Waters Map

V. LEGAL AUTHORITY

Within two years from the permit effective date, the City of Lavon shall revise the existing ordinance(s) or other regulatory mechanism(s) that provide the City with adequate legal authority to control pollutant discharges into and from the small MS4. The legal authority must, at a minimum, address the following:

A. Authority to prohibit illicit discharges and illicit connections;

B. Authority to respond to and contain other releases – Control the discharge of spills, and prohibit dumping or disposal of materials other than stormwater into the small MS4;

C. Authority to require compliance with conditions in the permittee's ordinances, permits, contracts, or orders;

D. Authority to require installation, implementation, and maintenance of control measures;

E. Authority to receive and collect information, such as stormwater plans, inspection reports, and other information deemed necessary to assess compliance with this permit, from operators of construction sites, new or redeveloped land, and industrial and commercial facilities

F. Authority, as needed, to enter and inspect private property including facilities, equipment, practices, or operations related to stormwater discharges to the small MS4

G. Authority to respond to non-compliance with BMPs required by the small MS4 consistent with ordinance(s) or other regulatory mechanism(s);

H. Authority to assess penalties, including monetary, civil, or criminal penalties; and

I. Ability to enter into interagency or interlocal agreements or other maintenance agreements, as necessary.

Existing Limitations to City of Lavon Legal Authority

The City of Lavon adopted the IDDE & Post-Construction Stormwater ordinances in 2019, following TCEQ's audit. The City now has adequate legal authority to enforce the proposed BMPs of the General Permit.

VI. Acronyms, Definitions & References

ACRONYMS

Best Management Practice (BMP)

Construction General Permit (CGP)

Illicit Discharge Detection and Elimination (IDDE)

Maximum Extent Practicable (MEP)

Minimum Control Measure (MCM)

Multi Sector General Permit (MSGP)

Municipal Separate Storm Sewer System (MS4)

National Pollutant Discharge Elimination System (NPDES)

Operation and Maintenance (O&M)

Storm Water Management Program (SWMP)

Storm Water Pollution Prevention Plan (SW3P)

Texas Commission on Environmental Quality (TCEQ)

Texas Pollutant Discharge Elimination System (TPDES)

Total Maximum Daily Load (TMDL)

DEFINITIONS *From the General Permit*

Arid Areas - Areas with an average annual rainfall of less than ten (10) inches.

Benchmarks- A benchmark pollutant value is a guidance level indicator that helps determine the effectiveness of chose best management practices (BMPs). This type of monitoring differs from "compliance monitoring" in that exceedances of the indicator or benchmark level are not permit violations, but rather indicators that can help identify problems at the MS4 with exposed or unidentified pollutant sources; or control measures that are either not working correctly, whose effectiveness need to be re-considered, or that need to be supplemented with additional BMP(s).

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 or leaks, waste disposal, or drainage from raw material storage areas.

Catch basins - Storm drain inlets and curb inlets to the storm drain system. Catch basins typically include a grate or curb inlet that may accumulate sediment, debris, and other pollutants.

Classified Segment - A water body that is listed and described in Appendix A or Appendix C of the Texas Surface Water Quality Standards, at 30 Texas Administrative Code (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. 95-217, Pub. L. 95-576, Pub. L. 96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et. seq.

Common Plan of Development or Sale - A construction activity that is completed in separate stages, separate phases, or in combination with other construction activities. A common plan of development or sale is identified by the documentation for the construction project that identifies the scope of the project, and may include plats, blueprints, marketing plans, contracts, building permits, a public notice or hearing, zoning requests, or other similar documentation and activities.

Construction Activity - Soil disturbance, including clearing, grading, excavating, and other construction related activies (e.g., stockpiling of fill material and demolition); and not including routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site (e.g., the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities). Regulated construction activity is defined in terms of small and large construction activity.

> **Small Construction Activity** is construction activity that results in land disturbance of equal to or greater than one (1) acre and less than five (5) acres of land. Small construction activity also includes the disturbance of less than one (1) acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one (1) and less than five (5) acres of land.
>
> **Large Construction Activity** is construction activity that results in land disturbance of equal to or greater than five (5) acres of land. Large construction activity also includes the disturbance of less than five (5) acres of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than five (5) acres of land.

Construction Site Operator - The entity or entities associated with a small or large construction project that meet(s) either of the following two criteria:

a) The entity or entities that have operational control over construction plans and specifications (including approval of revisions) to the extent necessary to meet the requirements and conditions of this general permit; or

b) The entity or entities that have day-to-day operational control of those activities at a construction site that are necessary to ensure compliance with a stormwater pollution prevention plan (SWP3) for the site or other permit conditions (for example they are authorized to direct workers at a site to carry out activities required by the SWP3 or comply with other permit conditions).

Control Measure - Any BMP or other method used to prevent or reduce the discharge of pollutants to water in the state.

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

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

Edwards Aquifer - As defined in 30 TAC §213.3 (relating to the Edwards Aquifer), that portion of an arcuate belt of porous, water-bearing, predominantly carbonate rocks known as the Edwards and Associated Limestones in the Balcones Fault Zone trending from west to east to northeast in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, and Williamson Counties; and composed of the Salmon Peak Limestone, McKnight Formation, West Nueces Formation, Devil's River Limestone, Person Formation, Kainer Formation, Edwards Formation, and Georgetown Formation. The permeable aquifer units generally overlie the less-permeable Glen Rose Formation to the south, overlie the less-permeable Comanche Peak and Walnut Formations north of the Colorado River, and underlie the less-permeable Del Rio Clay regionally.

Edwards Aquifer Recharge Zone - Generally, that area where the stratigraphic units constituting the Edwards Aquifer crop out, including the outcrops of other geologic formations in proximity to the Edwards Aquifer, where caves, sinkholes, faults, fractures, or other permeable features would create a potential for recharge of surface waters into the Edwards Aquifer. The recharge zone is identified as that area designated as such on official maps located in the offices of the TCEQ or the TCEQ website.

Final Stabilization - A construction site where any of the following conditions are met:

a) All soil disturbing activities at the site have been completed and a uniform (for example, evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

8) For individual lots in a residential construction site by either:

(1) The homebuilder completing final stabilization as specified in condition (a) above; or

(2) The homebuilder establishing temporary stabilization for an individual lot prior to the time of transfer of the ownership of the home to the buyer and after informing the homeowner of the need for, and benefits of, final stabilization.

9) For construction activities on land used for agricultural purposes (for example pipelines across

crop or range land), final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to a surface water and areas which are not being returned to their preconstruction agricultural use must meet the final stabilization conditions of condition (a) above.

10) In arid, semi-arid, and drought-stricken areas only, all soil disturbing activities at the site have been completed and both of the following criteria have been met:

    (1) Temporary erosion control measures (e.g., degradable rolled erosion control product) are selected, designed, and installed along with an appropriate seed base to provide erosion control for at least three years without active maintenance by the operator, and

    (2) The temporary erosion control measures are selected, designed, and installed to achieve 70 percent vegetative coverage within three years.

General Permit - A permit issued to authorize the discharge of waste into or adjacent to water in the state for one or more categories of waste discharge within a geographical area of the state or the entire state as provided by Texas Water Code (TWC) §26.040.

Groundwater Infiltration - For the purposes of this permit, groundwater that enters a municipal separate storm sewer system (including sewer service connections and foundation drains) through such means as defective pipes, pipe joints, connections, or manholes.

High Priority Facilities - High priority facilities are facilities with a high potential to generate stormwater pollutants. These facilities must include, at a minimum, the MS4 operator's maintenance yards, hazardous waste facilities, fuel storage locations, and other facilities where chemicals or other materials have a high potential to be discharged in stormwater. Among the factors that must be considered when giving a facility a high priority ranking are: the amount of urban pollutants stored at the site, the identification of improperly stored materials, activities that must not be performed outside (for example, changing automotive fluids, vehicle washing), proximity to water bodies, proximity to sensitive aquifer recharge features, poor housekeeping practices, and discharge of pollutant(s) of concern to impaired water(s).

Hyperchlorinated Water – Water resulting from hyperchlorination of waterlines or vessels, with a chlorine concentration greater than 10 milligrams per liter (mg/L).

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

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

Impaired Water - A surface water body that is identified on the latest approved CWA §303(d) List or waters with an EPA approved or established total maximum daily load (TMDL) that are found on the latest EPA approved *Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(d)* which lists the category 4 and 5 water bodies.

Indian Country - Defined in 18 USC § 1151 as: (a) All land within the limits of any Indian reservation under the jurisdiction of the United States (U.S.) Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation; (b) All dependent Indian communities within the borders of the U.S. whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a state; and (c) All Indian allotments, the Indian titles to which have not been extinguished, including rights- of-way running through the same. This definition includes all land held in trust for an Indian tribe.

Indicator Pollutant - An easily measured pollutant, that may or may not impact water quality that indicates the presence of other stormwater pollutants.

Industrial Activity - Any of the ten (10) categories of industrial activities included in the definition of "stormwater discharges associated with industrial activity" as defined in 40 Code of Federal Regulations (CFR) §122.26(b)(14)(i)-(ix) and (xi).

Infeasible – For the purpose of this permit, infeasible means not technologically possible, or not economically practicable and achievable in light of best industry practices. The TCEQ notes that it does not intend for any small MS4 permit requirement to conflict with state water right laws.

Maximum Extent Practicable (MEP) - The technology-based discharge standard for municipal separate storm sewer systems (MS4s) to reduce pollutants in stormwater discharges that was established by the CWA § 402(p). A discussion of MEP as it applies to small MS4s is found in 40 CFR § 122.34.

MS4 Operator - For the purpose of this permit, the public entity or the entity contracted by the public entity, responsible for management and operation of the small municipal separate storm sewer system that is subject to the terms of this general permit.

Municipal Separate Storm Sewer System (MS4) - A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

b) Owned or operated by the U.S., a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over the disposal of sewage, industrial wastes, stormwater, 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 the CWA §208 that discharges to surface water in the state;

11) That is designed or used for collecting or conveying stormwater;

12) That is not a combined sewer; and

13) That is not part of a publicly owned treatment works (POTW) as defined in 40 CFR §122.2.

Non-traditional Small MS4 - A small MS4 that often cannot pass ordinances and may not have the enforcement authority like a traditional small MS4 would have to enforce the stormwater management program. Examples of non-traditional small MS4s include counties, transportation authorities (including the Texas Department of Transportation), municipal utility districts, drainage districts, military bases, prisons and universities.

Notice of Change (NOC) - A written notification from the permittee to the executive director providing changes to information that was previously provided to the agency in a notice of intent.

Notice of Intent (NOI) - A written submission to the executive director from an applicant requesting coverage under this general permit.

Notice of Termination (NOT) - A written submission to the executive director from a permittee authorized under a general permit requesting termination of coverage under this general permit.

Outfall - A point source at the point where a small MS4 discharges to waters of the U.S. and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances that connect segments of the same stream or other waters of the U.S. are used to convey waters of the U.S. For the purpose of this permit, sheet flow leaving a linear transportation system without channelization is not considered an outfall. Point sources such as curb cuts; traffic or right-or-way barriers with drainage slots that drain into open culverts, open swales or an adjacent property, or otherwise not actually discharging into waters of the U.S. are not considered an outfall.

Permittee - The MS4 operator authorized under this general permit.

Point Source - (from 40 CFR § 122.22) any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

Pollutant(s) of Concern – For the purpose of this permit, includes biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment (such as total suspended solids (TSS), turbidity or siltation), pathogens, oil and grease, and any pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from an MS4. (Definition from 40 CFR § 122.32(e)(3)).

Redevelopment - Alterations of a property that changed the ”footprint” of a site or building in such a way that there is a disturbance of equal to or greater than one (1) acre of land. This term does not

include such activities as exterior remodeling, routine maintenance activities, and linear utility installation.

Semiarid Areas - Areas with an average annual rainfall of at least ten (10) inches, but less than 20 inches.

Small Municipal Separate Storm Sewer System (MS4) – A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

c) Owned or operated by the U.S., a state, city, town, borough, county, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, 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 CWA § 208;

14) Designed or used for collecting or conveying stormwater;

15) Which is not a combined sewer;

16) Which is not part of a publicly owned treatment works (POTW) as defined in 40 CFR § 122.2; and

17) Which was not previously regulated under a National Pollutant Discharge Elimination System (NPDES) or a Texas Pollutant Discharge Elimination System (TPDES) individual permit as a medium or large municipal separate storm sewer system, as defined in 40 CFR §§122.26(b)(4) and (b)(7).

This term includes systems similar to separate storm sewer systems at military bases, large hospitals or prison complexes, and highways and other thoroughfares. This term does not include separate storm sewers in very discrete areas, such as individual buildings. For the purpose of this permit, a very discrete 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 a small MS4 that is also operated by that public entity.

Stormwater and Stormwater Runoff - Rainfall runoff, snow melt runoff, and surface runoff and drainage.

Stormwater Associated with Construction Activity - Stormwater runoff from an area where there is either a large construction or a small construction activity.

Stormwater Management Program (SWMP) - A comprehensive program to manage the quality of discharges from the municipal separate storm sewer system.

Structural Control (or Practice) - A pollution prevention practice that requires the construction of a device, or the use of a device, to capture or prevent pollution in stormwater runoff. Structural controls and practices may include but are not limited to: wet ponds, bioretention, infiltration basins, stormwater wetlands, silt fences, earthen dikes, drainage swales, vegetative lined ditches, vegetative filter strips, sediment traps, check dams, subsurface drains, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins.

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 (from the mean high water mark (MHWM) out 10.36 miles into the Gulf), 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 systems 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.

Total Maximum Daily Load (TMDL) - The total amount of a substance that a water body can assimilate and still meet the Texas Surface Water Quality Standards.

Traditional Small MS4 - A small MS4 that can pass ordinances and have the enforcement authority to enforce the stormwater management program. An example of traditional MS4s includes cities.

Urbanized Area (UA) - An area of high population density that may include multiple small MS4s as defined and used by the U.S. Census Bureau in the 2000 and the 2010 Decennial Census.

Waters of the United States - (According to 40 CFR § 122.2) Waters of the United States or waters of the U.S. means:

d) 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;

18) All interstate waters, including interstate wetlands;

19) 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;

20) All impoundments of waters otherwise defined as waters of the United States under this definition;

21) Tributaries of waters identified in paragraphs (a) through (d) of this definition;

22) The territorial sea; and

23) 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 the CWA are not waters of the U.S. This exclusion applies only to manmade bodies of water 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 the CWA jurisdiction remains with the EPA.

REFERENCES

Texas Commission on Environmental Quality

www.tceq.texas.gov

North Central Texas Council of Governments

www.nctcog.org

United States Environmental Protection Agency

www.epa.gov

Appendix A

Best Management Practices
Activities and Documentation List

				Documentation & Measurable Goals		Best Management Practices: 5-Year Implementation Timeline				
MCM	**MCM Reference**	**BMP No.**	**BMP**	**Goals & Description**	**Documentation**	**Year-1 (2019)**	**Year-2 (2020)**	**Year-3 (2021)**	**Year-4 (2022)**	**Year-5 (2023)**
1	III.B.1. Public Education, Outreach, and Involvement (a)Public Education and Outreach (b)Public Involvement III.B.2. Illicit Discharge and Elimination (c)(2)Education & Training	**1**	**Public Education & Outreach**	**• Provide One (1) Stormwater Educational Flyer Each Year to City Account Holders (Target Audience: Public Employees, Businesses & General Public) (Include Instructions for Public-Reporting of Illicit Discharges & Promote Stormwater Educational page on Website & Inform of SWMP on Website and at City Hall & Offer Public Input for the SWMP via Hotline & Request Public Reporting of Construction Activities)**	**(Met/Not Met) - Stormwater Pollution Prevention & SWMP Informational Flyers Distributed Annually with Utility Bills to Target Audience (Public Employees, Businesses & General Public)**	Distribute Stormwater Pollution-Reduction Educational Flyers in Utility Bills Once Annually	Distribute Stormwater Pollution-Reduction Educational Flyers in Utility Bills Once Annually	Distribute Stormwater Pollution-Reduction Educational Flyers in Utility Bills Once Annually	Distribute Stormwater Pollution-Reduction Educational Flyers in Utility Bills Once Annually	Distribute Stormwater Pollution-Reduction Educational Flyers in Utility Bills Once Annually
1	III.B.1. Public Education, Outreach, and Involvement (a)Public Education and Outreach (b)Public Involvement	**2**	**City-Employee Training**	**• Provide City Employee Training via One (1) Stormwater BMP video Emailed to All City Employees Each Year**	**(Met/Not Met) - City Employees Trained on Stormwater BMPs via One Video Emailed to All City Employees Each Year**	Email one Stormwater BMP Training Video to All City Employees	Email one Stormwater BMP Training Video to All City Employees	Email one Stormwater BMP Training Video to All City Employees	Email one Stormwater BMP Training Video to All City Employees	Email one Stormwater BMP Training Video to All City Employees
2,3	III.B.2. Illicit Discharge and Elimination (c)(2)Education & Training III.B.3. Construction Site Stormwater Runoff Control (b)(7)MS4 Staff Training	**3**	**MS4 Staff Training**	**• Provide MS4 Staff Training for the IDDE Program & Spill Response Each Year & Include Construction Site Erosion Control and Disturbed-Site Soil Stabilization Requirements**	**(Met/Not Met) - MS4 Staff Employees Trained on IDDE Program, Spill Response & Construction Site Erosion Control and Disturbed-Site Soil Stabilization Requirements Each Year (Document Attendance Record)**	Train MS4 Staff of IDDE Program, Spill Response, Construction Site Erosion Control and Soil Stabilization Requirements	Train New MS4 Staff of IDDE Program, Spill Response, Construction Site Erosion Control and Soil Stabilization Requirements	Train New MS4 Staff of IDDE Program, Spill Response, Construction Site Erosion Control and Soil Stabilization Requirements	Train New MS4 Staff of IDDE Program, Spill Response, Construction Site Erosion Control and Soil Stabilization Requirements	Train New MS4 Staff of IDDE Program, Spill Response, Construction Site Erosion Control and Soil Stabilization Requirements
5	III.B.5. Pollution Prevention and Good Housekeeping for Municipal Operations (b)(2)Training and Education	**4**	**O&M Personnel Training**	**• Provide O&M Personnel Training on Stormwater BMPs & Good Housekeeping**	**(Met/Not Met) - City Operation & Maintenance Employees Trained on BMPs & Good Housekeeping for Stormwater Pollution Control Each Year (Document Attendance Record)**	Train City's O&M Employees of Stormwater BMPs & Good Housekeeping for Hazardous Materials & Gather input on O&M Self-Assessment	Train City's New O&M Employees of Stormwater BMPs & Good Housekeeping for Hazardous Materials	Train City's New O&M Employees of Stormwater BMPs & Good Housekeeping for Hazardous Materials	Train City's New O&M Employees of Stormwater BMPs & Good Housekeeping for Hazardous Materials	Train City's New O&M Employees of Stormwater BMPs & Good Housekeeping for Hazardous Materials
1	III.B.1. Public Education, Outreach, and Involvement (b)Public Involvement	**5**	**Waste Cleanup**	**• Organize & Conduct Public-Involvement Trash Cleanup Event Each Year**	**(#) - Pounds of Trash Collected (Document Locations of Trash Cleanup)**	Organize & Conduct Public-Involvement Trash Cleanup	Organize & Conduct Public-Involvement Trash Cleanup	Organize & Conduct Public-Involvement Trash Cleanup	Organize & Conduct Public-Involvement Trash Cleanup	Organize & Conduct Public-Involvement Trash Cleanup
1	III.B.1. Public Education, Outreach, and Involvement (a)Public Education and Outreach (b)Public Involvement	**6**	**Web Site SWMP & Public Notice**	**• Post Approved SWMP within 30-days of Approval (& Post Annual Reports Each Year within 30-days of Due Date) on Website www.cityoflavon.com**	**(Met/Not Met) - Post SWMP (or) Annual Reports on Website (& Post Notice of Change (NOC), if any) (Document Date of Posting)**	Post SWMP within 30-days of Approval on Website & Publish Notice to Public of Executive Director's Preliminary Decision Per Section II.E.16. Public Notice Process for NOI Submittal (pg. 29) of the General Permit.	Post Annual Report within 30-days of Due Date on Website & Post NOC, if any	Post Annual Report within 30-days of Due Date on Website & Post NOC, if any	Post Annual Report within 30-days of Due Date on Website & Post NOC, if any	Post Annual Report within 30-days of Due Date on Website & Post NOC, if any
1	III.B.1. Public Education, Outreach, and Involvement (a)Public Education and Outreach (b)Public Involvement	**7**	**Web Site Education**	**• Post Links for Additional Stormwater Pollution Control Educational Resources on Website cityoflavon.com/services/stormwater-management/**	**(Met/Not Met) -Post Educational Stormwater Videos or Informational Links Each Year on website (One New video added or substituted Annually)**	Post Educational Stormwater Videos or Informational Links on Website	Post Educational Stormwater Videos or Informational Links on Website	Post Educational Stormwater Videos or Informational Links on Website	Post Educational Stormwater Videos or Informational Links on Website	Post Educational Stormwater Videos or Informational Links on Website
1, 2	III.B.1. Public Education, Outreach, and Involvement (b)Public Involvement III.B.2. Illicit Discharge and Elimination (c)(3)Public Reporting III.B.3. Construction Site Stormwater Runoff Control (b)(6)Information Submitted by Public	**8**	**Public Stormwater Reporting**	**• Provide Stormwater Reporting Tool on Website & Promote via Flyers www.cityoflavon.com/services/stormwater-management**	**(#) - Reports Made to City Regarding Stormwater or Pollution (Log Reports and City Responses)**	Document Reports and City Responses to Public Stormwater or Pollution-Related Concerns	Document Reports and City Responses to Public Stormwater or Pollution-Related Concerns	Document Reports and City Responses to Public Stormwater or Pollution-Related Concerns	Document Reports and City Responses to Public Stormwater or Pollution-Related Concerns	Document Reports and City Responses to Public Stormwater or Pollution-Related Concerns
2	III.B.2. Illicit Discharge and Elimination (a)(1)Program Development (c)(2)Education & Training (c)(4)Spill Response Procedures (c)(5)Source Investigation & Elimination (c)(6)Inspections	**9**	**Illicit Discharge Detection & Elimination (IDDE) Program Summary**	**• Create & Distribute to MS4 Staff a Written Summary of IDDE Program & Spill Response Plan, including Procedures describing the basis for conducting Inspections in response to Complaints or Findings & for conducting Follow-Up Investigations. Detail Procedures for Tracing the Source of Illicit Discharge & Method for Training MS4 Staff**	**(Met/Not Met) - Create IDDE Program Summary & Distribute to MS4 Staff**	Create & Distribute IDDE Program Summary, & Provide Document to MS4 Staff	Continue Development of IDDE Program Summary & Provide Document to MS4 Staff	Provide IDDE Program Document to New MS4 Staff (IDDE Training is BMP #3)	Provide IDDE Program Document to New MS4 Staff (IDDE Training is BMP #3)	Provide IDDE Program Document to New MS4 Staff (IDDE Training is BMP #3)
2	III.B.2. Illicit Discharge and Elimination (a)(1)Program Development (c)(2)Education & Training (c)(4)Spill Response Procedures (c)(5)Source Investigation & Elimination (c)(6)Inspections	**10**	**Illicit Discharge Detection & Elimination (IDDE) Enforcement**	**• Conduct Inspections, as required, for Each Reported Stormwater Complaint or Finding to identify Presence/Sources of Illicit Connections, Illegal Dumping and Pollution Point Sources & Remediate Pollution Source to the MEP**	**(#) - IDDE Inspections Performed (Document Complaint, Inspection, Follow-up Inspections & Remediation Actions)**	Inspect Illicit Discharges & Assert Authorities as required to Remediate any Pollution Source & Document	Inspect Illicit Discharges & Assert Authorities as required to Remediate any Pollution Source & Document	Inspect Illicit Discharges & Assert Authorities as required to Remediate any Pollution Source & Document	Inspect Illicit Discharges & Assert Authorities as required to Remediate any Pollution Source & Document	Inspect Illicit Discharges & Assert Authorities as required to Remediate any Pollution Source & Document
2	III.B.2. Illicit Discharge and Elimination (c)(1)MS4 mapping	**11**	**Storm Sewer System Map**	**• Maintain/ Update MS4 Storm Sewer System Map, showing Outfall Locations and Receiving Water Bodies**	**(Met/Not Met) - Annually Update the MS4 Map**	Update Stormwater Map as Required	Update Stormwater Map as Required	Update Stormwater Map as Required	Update Stormwater Map as Required	Update Stormwater Map as Required

				Documentation & Measurable Goals		Best Management Practices: 5-Year Implementation Timeline				
MCM	**MCM Reference**	**BMP No.**	**BMP**	**Goals & Description**	**Documentation**	**Year-1 (2019)**	**Year-2 (2020)**	**Year-3 (2021)**	**Year-4 (2022)**	**Year-5 (2023)**
3 4	III.B.3. Construction Site Stormwater Runoff Control (b)(2)d Stabilization & Erosion Control SWP3 (b)(4)Construction Plan Review Procedures III.B.4. Post-Construction Stormwater Management in New Development and Redevelopment (a)(1)Program	**12**	**Construction Site Erosion Control & Site Plan Review**	**• Ensure All Construction Sites are Authorized to Discharge under Construction General Permit TXR150000 (Required Site Stabilization within 14-days of Halting Disturbance Activities) • Develop/ Employ Site Plan Review Procedures for All Construction Projects disturbing One Acre or more (or part of larger common plan) (Include description of Which Plans will be reviewed as well as When the operator may begin construction)**	**(#) - Construction Activities Verified for Discharge Authorization Each Year Under TXR150000 (Document any Site Stabilization Violations) (Met/Not Met) - Develop Construction Site Plan Review Procedures Document (#) - of Construction Plan/ SWP3 Reviews Conducted Each Year**	Require All Construction Site Operators within MS4 to provide copy of TCEQ Site Notice & Report Site Stabilization Violations to TCEQ (14-Day Delinquencies) Develop Site Plan Review Procedures for Construction Sites & Review SWP3 for all Construction Sites	Require All Construction Site Operators within MS4 to provide copy of TCEQ Site Notice & Report Site Stabilization Violations (14-Day Delinquencies) to TCEQ Review SWP3 for all Construction Sites	Require All Construction Site Operators within MS4 to provide copy of TCEQ Site Notice & Report Site Stabilization Violations (14-Day Delinquencies) to TCEQ Review SWP3 for all Construction Sites	Require All Construction Site Operators within MS4 to provide copy of TCEQ Site Notice & Report Site Stabilization Violations (14-Day Delinquencies) to TCEQ Review SWP3 for all Construction Sites	Require All Construction Site Operators within MS4 to provide copy of TCEQ Site Notice & Report Site Stabilization Violations (14-Day Delinquencies) to TCEQ Review SWP3 for all Construction Sites
3	III.B.3. Construction Site Stormwater Runoff Control (b)(5)Construction Site Inspections	**13**	**Construction Site Inspection and Enforcement**	**• Develop/ Employ Construction Site Inspection Procedure Document for Inspection, Follow-up Inspection and Enforcement of Construction sites in the MS4, Including an Inspection Reporting Form. (Ensure Conformance to the BMPs required to reduce Stormwater Pollution to the MEP & for conformance with Local Codes and Ordinances) (Document Inspections & Follow-up Inspections with written report)**	**(#) - Inspections Performed and Documented (Document with Reporting Form & Record Construction Site Enforcement Actions)**	Develop Inspection Procedure Document & Inspection Reporting Form Perform Construction Site Inspections of Disturbed Sites & Follow-up Inspections (Document with Inspection Report Form)	Perform Construction Site Inspections of Disturbed Sites & Follow-up Inspections (Document with Inspection Report Form)	Perform Construction Site Inspections of Disturbed Sites & Follow-up Inspections (Document with Inspection Report Form)	Perform Construction Site Inspections of Disturbed Sites & Follow-up Inspections (Document with Inspection Report Form)	Perform Construction Site Inspections of Disturbed Sites & Follow-up Inspections (Document with Inspection Report Form)
4	III.B.4. Post-Construction Stormwater Management in New Development and Redevelopment (b)(3)Enforcement	**14**	**Post-Construction Stormwater Management**	**• Employ Long-Term Maintenance Plan or Agreement for Ongoing Operation & Maintenance of Stormwater Control Measures (Document Post Construction Drainage O&M Activities & Enforcement Actions)**	**(Met/Not Met) - Require Maintenance Plan for ongoing maintenance of Privately-Owned, Permanent Stormwater Controls, as Required.**	Require Maintenance Plan for Permanent, Privately-Owned, Stormwater Controls (Document Post Construction Drainage O&M Activities & Enforcement Actions)	Require Maintenance Plan for Permanent, Privately-Owned, Stormwater Controls (Document Post Construction Drainage O&M Activities & Enforcement Actions)	Require Maintenance Plan for Permanent, Privately-Owned, Stormwater Controls (Document Post Construction Drainage O&M Activities & Enforcement Actions)	Require Maintenance Plan for Permanent, Privately-Owned, Stormwater Controls (Document Post Construction Drainage O&M Activities & Enforcement Actions)	Require Maintenance Plan for Permanent, Privately-Owned, Stormwater Controls (Document Post Construction Drainage O&M Activities & Enforcement Actions)
5	III.B.5. Pollution Prevention and Good Housekeeping for Municipal Operations (b)(1)Permittee-Owned Facilities and Control Inventory	**15**	**Inventory of Facilities and Stormwater Controls**	**• Develop & Maintain an Inventory of Permittee-Owned & Operated Facilities & Stormwater Controls within the MS4, including Permit Nos., Registration Nos. & Authorizations for each Facility or Control, if any**	**(Met/Not Met) - Develop/ Update Annually Permittee-Owned Facilities & Stormwater Controls Inventory List**	Create Inventory List of Stormwater Controls & Facilities of Concern for Pollutant Handling that are Owned or Operated by the City	Update Inventory List of Stormwater Controls & Facilities of Concern for Pollutant Handling that are Owned or Operated by the City	Update Inventory List of Stormwater Controls & Facilities of Concern for Pollutant Handling that are Owned or Operated by the City	Update Inventory List of Stormwater Controls & Facilities of Concern for Pollutant Handling that are Owned or Operated by the City	Update Inventory List of Stormwater Controls & Facilities of Concern for Pollutant Handling that are Owned or Operated by the City
5	III.B.5. Pollution Prevention and Good Housekeeping for Municipal Operations (b)(4)Contractor Requirements and Oversight	**16**	**Contractor Requirements & Oversight**	**• Develop/ Employ Oversight Procedures Document which outlines City's monitoring of work by City-Hired Contractors for work on City-Owned Facilities for Inspecting Compliance with Stormwater BMPs within the MS4 • Require Contractual Agreement with City-Hired Contractors for work on City-Owned Facilities to be Performed in Compliance with Stormwater Control Measures & Good Housekeeping Practices**	**(Met/Not Met) - Develop/ Employ Oversight Procedures Document (Including Requirement of Contractual Agreement with City-Hired Contractors for Stormwater Control Measures & Good Housekeeping Practices)**	Develop Oversight Procedures Document for Inspecting Compliance with Stormwater BMPs within the MS4 for City-Projects & Require Contractor Agreements for Stormwater Control Measures & Good Housekeeping Practices for City-Projects	Assert Contractor Oversight for City-Projects & Require Contractor Agreements for Stormwater Control Measures & Good Housekeeping Practices for City-Projects	Assert Contractor Oversight for City-Projects & Require Contractor Agreements for Stormwater Control Measures & Good Housekeeping Practices for City-Projects	Assert Contractor Oversight for City-Projects & Require Contractor Agreements for Stormwater Control Measures & Good Housekeeping Practices for City-Projects	Assert Contractor Oversight for City-Projects & Require Contractor Agreements for Stormwater Control Measures & Good Housekeeping Practices for City-Projects
5	III.B.5. Pollution Prevention and Good Housekeeping for Municipal Operations (b)(5)Municipal Operation and Maintenance Activities (b)(6)Structural Control Maintenance	**17**	**Municipal Operations and Maintenance (O&M) Activity**	**• Perform Self-Assessment of Municipal O&M Practices, including Operation Evaluation for Potential to Pollute Stormwater and Identification of O&M Materials which are Pollutants of Concern • Employ/ Inspect Pollution-Prevention Measures for O&M**	**(Met/Not Met) - Perform O&M Self-Assessment for Good Housekeeping BMPs & Employ Pollution Prevention Measures & Inspect O&M BMPs (Log BMP Inspections)**	Develop List of O&M Activities which have Potential to Pollute Stormwater	Evaluate use of Materials or Chemicals which have Potential to Pollute Stormwater & Employ Pollution Prevention Measures, as required	Update/ Reconsider O&M Practices Self-Assessment & Continue Employment of BMPs for O&M Activities & (Inspect O&M-BMPs & Log Inspections)	Update/ Reconsider O&M Practices Self-Assessment & Continue Employment of BMPs for O&M Activities & (Inspect O&M-BMPs & Log Inspections)	Update/ Reconsider O&M Practices Self-Assessment & Continue Employment of BMPs for O&M Activities & (Inspect O&M-BMPs & Log Inspections)
2, 3, 4	III.A.3. Legal Authority (Not MCM) (a)Traditional small MS4s III.B.2. Illicit Discharge and Elimination (c)(5)cCorrective Action III.B.3. Construction Site Stormwater Runoff Control (a)(1)Stabilization & Erosion Control Measures III.B.4. Post-Construction Stormwater Management in New Development and Redevelopment (a)(2)Post-Construction Stormwater Ordinance (b)(2)Enforcement Records	**18**	**Legal Authority (Ordinance)**	**• Incorporate/ Employ Legal Authority with Various SWMP Programs, informing MS4 Staff about the Powers to Enforce pollution prevention measures & Consider revising the ordinance to add requirements for a construction discharge permit under TXR150000**	**(#) - Instances of Enforcement Actions**	Document Enforcement Actions	Document Enforcement Actions	Document Enforcement Actions	Document Enforcement Actions	Document Enforcement Actions

Lavon SWMP Notes:

1 IMPLEMENTATION SCHEDULE: All BMP Items shall be addressed by December 31, each year

2 Municipal Waste shall be disposed of in accordance with 30 TAC Chapter 330; Municipal Solid Waste

STORM WATER MANAGEMENT PROGRAM

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TBPE Firm No. 526

JULY 2019