

# STORMWATER MANAGEMENT PLAN

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## CITY OF CARL JUNCTION, MISSOURI



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WATER PROTECTION PROGRAM

FOR JULY 2013-JUNE 2018  
MS4 PERMITTING CYCLE

PREPARED BY:  
ALLGEIER, MARTIN AND ASSOCIATES, INC.  
MAY 1, 2013

**Stormwater Management Plan**  
City of Carl Junction, Missouri  
May 1, 2013

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Figure 1: Sinkhole Map

Figure 2: Outfall Map

Stormwater Management Code - Articles I, II, and III

Stormwater Management Code - Article IV

Construction Inspection Forms

## Part I - Facility Information

### A. GENERAL INFORMATION:

NPDES #: MOR040028  
Facility Name: Carl Junction Small MS4  
Facility Mailing Address: P.O. Box 447, Carl Junction, MO 64834

Owner's Name: City of Carl Junction, Missouri  
Owner's Physical Address: 303 N. Main Street, Carl Junction, MO 64834  
Owner's Mailing Address: P.O. Box 447, Carl Junction, MO 64834

Primary Contact: Michael Moss, Mayor, person primarily responsible  
Phone Number: (417) 649-7237 for SWMP  
Secondary Contact: Steve Lawver, City Administrator  
Phone Number: (417) 649-7237

Facility Region: Southwest Region  
(Main Office in Springfield, Satellite Office in Neosho)  
Facility County: Jasper County, MO

Facility Type: Small MS4  
Facility SIC Code: 9511  
Facility NAICS Code: 924110  
Facility Description: Discharges from Regulated Small MS4  
Total MS4 Area (acres): 5.5 sq. miles (3527 acres)

### B. ADJACENT WATERWAYS:

The City of Carl Junction has received certification that their original SWMP complies with the requirements of Part 3.1 of the permit. *? from whom?*

There are no major receiving waters within the permitted area.

The permittee is not within 100 feet of waters classified as major reservoirs.

The permittee is within 100 feet of Center Creek. This section of Center Creek, Section MO\_3203, is listed as Impaired on the 303(d) List. Pollutants include Zinc, Cadmium and Lead. There are no Approved TMDLs and the MS4 has not been assigned to Wasteload Allocation (WLA). The source of the pollutants has been determined to be the Tristate Abandoned Mine Lands.

The permittee does not discharge to any Wild and Scenic Riverways or Outstanding State Resource Waters, therefore the permittee is implementing no additional specific provisions for their continued integrity.

Some of the Permittee's areas, adjacent Center Creek, are defined as wetlands in the National Wetlands Inventory.

Stormwater from Carl Junction discharges to 3 sinkholes. See attached Sinkhole Map.

C. CRITICAL AREAS:

There are threatened or endangered species in the area. (See table below.) The Permittee has met eligibility criteria for protection of threatened or endangered species.

There are critical habitats in the area. (See table below.) The Permittee has met eligibility criteria for protection of critical habitats.

There are no historic properties in the area.

*How so? who says?*

Table 1. Endangered Species/Critical Habitats

County	Species	Status	Habitat
Jasper	Gray Bat ( <i>Myotis grisescens</i> )	Endangered	Caves
Jasper	Arkansas Darter ( <i>Eteostoma cragini</i> )	Candidate	Rivers
Jasper	Neosho Madtom ( <i>Noturus placidus</i> )	Threatened	Rivers
Jasper	Ozark Cavefish	Threatened	Caves in the Boone & Burlington limestone formations of the Ozark Mountains

## Part II – Outfalls

### A. OUTFALL MAPPING

A map of representative outfalls is attached to this document.

### B. LIST OF OUTFALLS

#### Outfall #001

Legal Description: NW ¼, NW ¼, Sec. 6, T28N, R33W

UTM Coordinates: X=359852.28, Y=4116890.65 (Easting, Northing, respectively)

Receiving Stream: Tributary to Spring River, Unclassified

First Classified Stream and ID: Spring River, Class P

HUC-8 Watershed\_Sub-watershed: 11070207\_0508

#### Outfall #002

Legal Description: SE ¼, SW ¼, Sec. 6, T28N, R33W

UTM Coordinates: X=360209.41, Y=4115290.46

Receiving Stream: Center Creek, Class P

HUC-8 Watershed\_Sub-watershed: 11070207\_0608

#### Outfall #003

Legal Description: SW ¼, NE ¼, Sec. 7, T28N, R33W

UTM Coordinates: X=360613.17, Y=4114881.47

Receiving Stream: Center Creek, Class P

HUC-8 Watershed\_Sub-watershed: 11070207\_0608

#### Outfall #004

Legal Description: NW ¼, SW ¼, Sec. 8, T28N, R33W

UTM Coordinates: X=361460.90, Y=4114436.55

Receiving Stream: Center Creek, Class P

HUC-8 Watershed\_Sub-watershed: 11070207\_0608

#### Outfall #005

Legal Description: SW ¼, NE ¼, Sec. 8, T28N, R33W

UTM Coordinates: X=361961.00, Y=4114431.00

Receiving Stream: Center Creek, Class P

HUC-8 Watershed\_Sub-watershed: 11070207\_0608

#### Outfall #006

Legal Description: NE ¼, NE ¼, Sec. 8, T28N, R33W

UTM Coordinates: X=362508.02, Y=4114834.43  
Receiving Stream: Center Creek, Class P  
HUC-8 Watershed\_Sub-watershed: 11070207\_0608

Outfall #007

Legal Description: NW ¼, NW ¼, Sec. 9, T28N, R33W  
UTM Coordinates: X=362781.30, Y=4114918.88  
Receiving Stream: Center Creek, Class P  
HUC-8 Watershed\_Sub-watershed: 11070207\_0608

Outfall #008

Legal Description: NW ¼, SE ¼, Sec. 8, T28N, R33W  
UTM Coordinates: X=361949.66, Y=4114090.00  
Receiving Stream: Center Creek, Class P  
HUC-8 Watershed\_Sub-watershed: 11070207\_0608

Outfall #009

Legal Description: NW ¼, SW ¼, Sec. 9, T28N, R33W  
UTM Coordinates: X=362955.19, Y=4114129.69  
Receiving Stream: Center Creek, Class P  
HUC-8 Watershed\_Sub-watershed: 11070207\_0608

Outfall #010

Legal Description: SE ¼, NW ¼, Sec. 9, T28N, R33W  
UTM Coordinates: X=363320.38, Y=4114409.30  
Receiving Stream: Center Creek, Class P  
HUC-8 Watershed\_Sub-watershed: 11070207\_0608

Outfall #011

Legal Description: SE ¼, SE ¼, Sec. 9, T28N, R33W  
UTM Coordinates: X=364031.26, Y=4113745.86  
Receiving Stream: Center Creek, Class P  
HUC-8 Watershed\_Sub-watershed: 11070207\_0608

Outfall #012

Legal Description: SE ¼, SE ¼, Sec. 9, T28N, R33W  
UTM Coordinates: X=364230.80, Y=4113714.44  
Receiving Stream: Center Creek, Class P  
HUC-8 Watershed\_Sub-watershed: 11070207\_0608

Outfall #013

Legal Description: NW ¼, SE ¼, Sec. 10, T28N, R33W

UTM Coordinates: X=365123.15, Y=4114079.59

Receiving Stream: Oscie Ora Acres Lake, Class L3

HUC-8 Watershed\_Sub-watershed: 11070207\_0608

Outfall #014

Legal Description: SE ¼, NE ¼, Sec. 10, T28N, R33W

UTM Coordinates: X=365737.00, Y=4114177.00

Receiving Stream: Center Creek, Class P

HUC-8 Watershed\_Sub-watershed: 11070207\_0608

Outfall #015

Legal Description: NE ¼, NE ¼, Sec. 16, T28N, R33W

UTM Coordinates: X=364208.00, Y=4113197.00

Receiving Stream: Center Creek, Class P

HUC-8 Watershed\_Sub-watershed: 11070207\_0608

Outfall #016

Legal Description: SE ¼, NW ¼, Sec. 15, T28N, R33W

UTM Coordinates: X=364701.95, Y=4112876.49

Receiving Stream: Center Creek, Class P

HUC-8 Watershed\_Sub-watershed: 11070207\_0608

Outfall #017

Legal Description: NW ¼, SW ¼, Sec. 15, T28N, R33W

UTM Coordinates: X=364392.00, Y=4112563.00

Receiving Stream: Center Creek, Class P

HUC-8 Watershed\_Sub-watershed: 11070207\_0608

Outfall #018

Legal Description: SW ¼, SW ¼, Sec. 15, T28N, R33W

UTM Coordinates: X=364567.00, Y=4111992.00

Receiving Stream: Center Creek, Class P

HUC-8 Watershed\_Sub-watershed: 11070207\_0608

## **Part III – Minimum Control Measures**

Part III contains the 6 Minimum Control Measures (MCM) listed below:

MCM#1: Public Education and Outreach on Stormwater Impacts

MCM#2: Public Involvement and Participation

MCM#3: Illicit Discharge Detection and Elimination

MCM#4: Construction Site Stormwater Runoff Control

MCM#5: Post-Construction Stormwater Management in New Development & Redevelopment

MCM#6: Pollution Prevention/Good Housekeeping for Municipal Operations

## **MCM#1: Public Education and Outreach (PEO) Program**

### A. REGULATORY REQUIREMENT

**40 CFR 122.34 (b)(1) – Implement a public education program to distribute educational materials to the community of contact, equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps the public can take to reduce pollutants in storm water runoff.**

Section 4.2.1.2 of the general MS4 permit requires the following elements in this program:

**Plans to inform individuals and households about the steps they can take to reduce stormwater pollution;**

**Plans to inform individuals and groups on how to become involved in the stormwater program;**

**Identification of target audiences who are likely to have significant stormwater impacts (including commercial, industrial and institutional entities);**

**Identification of the target pollutant sources the program is designed to address; and**

**An outreach strategy, including the mechanisms (e.g. printed brochures, newspapers, media, workshops, etc.) that will be used to reach target audiences and the number of people this strategy is expected to reach.**

Carl Junction plans to continue its Public Education and Outreach program by distributing educational materials to the community and conducting other outreach activities. The focus of these efforts will be to educate the public with activities discussing the impact of stormwater discharges on water bodies and the steps the public can take to reduce pollutants in stormwater runoff.

### B. TARGET POLLUTANTS

Carl Junction developed their stormwater Public Education and Outreach program in cooperation with other jurisdictions in the region. The target pollutants were identified and prioritized. The following is a list of the possible leading pollutants, experienced in the permitted area, that are carried by stormwater runoff into water bodies. Carl Junction has designed the PEO program to encompass all the major pollutants, and will revise the program as needed.

1. Suspended Solids
2. Nutrients
3. Pesticides
4. Oil and Grease
5. Priority Toxic Organic Chemicals (Household Hazardous Waste Pesticides/Herbicides)
6. Habitat Alterations
7. Floatables

*Thermal?  
PAHs?*

### C. TARGET POLLUTANT SOURCES

Carl Junction developed their stormwater Public Education and Outreach program in cooperation with other jurisdictions in the region. Once the target pollutants were identified and prioritized, the actions that impact the target pollutants were identified. The PEO program was designed to impact the actions identified. The following is a list of potential sources of pollutants that are experienced in the permitted area, in order of priority:

- Active-*
1. Construction activities (sediment, construction chemicals and debris, solid and sanitary wastes);
  2. Overapplication of fertilizer, herbicides, pesticides;
  3. Improper disposal of paint and household hazardous chemicals;
  4. Pet waste contamination;
  5. Improper disposal of waste oil, grease, and gasoline disposal;
  6. Trash, debris, and illegal dumping;
  7. Detergents washed into drains;
  8. Snow removal (salt, sand and snow disposal);
  9. Sanitary sewer overflows;
  10. Infiltration from cracked sanitary sewers;
  11. Failing septic tanks;
  12. Sewer service connections to storm drainage systems;
  13. Foundation drains connected to storm drainage system;
  14. Downspouts connected to storm drainage systems;
  15. Lake or water body used for motor boating;
  16. Spills from roadway accidents or fires;
  17. Connected impervious areas covering large acreages (such as malls, institutions with large parking areas);
  18. Stream bank erosion;
  19. Waste transfer station.

*Post-construction site design, up front project planning, LID & CIL controls on-site?*

### D. TARGET AUDIENCES

The following target audiences were selected as corresponding to the target pollution sources and because changing their behavior would have a significant stormwater quality impact on the target pollutants. The target audiences for the PEO program are:

1. Developers and Home Builders
2. Citizens (Homeowners)
3. Restaurant Owners and Operators
4. Car Wash owners and Operators
5. Service Station and oil/Lube Business Owners and Operators
6. Other Local Businesses and Industries
7. Elected Officials
8. City Staff (will be the focus of the Good Housekeeping program)

#### E. SELECTED BMPS FOR PUBLIC EDUCATION AND OUTREACH

The goal of Carl Junction's Public Education and Outreach program is to accomplish the following:

Inform individuals and households in the community about the steps they can take to reduce stormwater pollution; and

Inform individuals and groups on how to become involved in the stormwater program.

The outreach strategy is to implement a variety of methods to reach a number of different target audiences multiple times. To change behavior, repetition is important. The City plans to use the following Best Management Practices to accomplish these goals (see also Table MSM1):

- ❖ KEEP RECORDS OF EVERY PUBLIC EDUCATION AND OUTREACH ACTIVITY, every article, brochures handed out or mailed, etc.;
- ❖ Post this SWMP document on the Public Notice page of the City website;
- ❖ Post Pet Waste Disposal signs in public parks and along trails, referencing ordinance (also provide bags and dispensers, see MCM #2);
- ❖ Create a stand-alone Stormwater Information page on the City website, focusing on certain pollution sources, as listed in Table MCM1, with links to other websites (e.g. MDNR webpage) for further information, as well as links to SWMP document, Stormwater Management Criteria manual and Construction BMP Guide;
- ❖ Give presentation to local schools showing simple things kids can do to help water quality and also referencing new stormwater information website;
- ❖ Distribute Stormwater Jeopardy game, or other material (e.g. an activity book), to schools after presentation, for use as follow-up activity by teachers (free game found at [http://www.nctcog.org/envir/SEEClean/stormwater/program-areas/public\\_education/stormwatergame.asp](http://www.nctcog.org/envir/SEEClean/stormwater/program-areas/public_education/stormwatergame.asp));
- ❖ Post Stormwater Jeopardy game on Stormwater Information Website;
- ❖ Create a Native Plants section of the City's stormwater website and post links to the Grow Native! site ([grownative.org](http://grownative.org)) that contain simple plans for native landscaping.

- ❖ Distribute brochures and/or flyers containing stormwater pollution prevention information by mail and/or bill insert;
- ❖ Maintain the City's stormwater information library at the Community Center, containing brochures/flyers pertaining to stormwater pollution prevention;
- ❖ Post stormwater quality signs/posters in Community Center and Police Department/Municipal Courthouse building;
- ❖ Mail stormwater information brochures to new business licensees;
- ❖ Distribute erosion/sediment control BMP literature to bidders for development projects requiring a Site Development Permit;
- ❖ Mail Waste/Recycling Guide brochure to all of the City's postal customers;
- ❖ Issue press releases regarding local stormwater issues;
- ❖ Show stormwater information on local TV station;
- ❖ Publish stormwater-related articles in local newspaper; and
- ❖ Show Public Services announcement on local TV station.

## F. OUTREACH PARTNERS

Carl Junction partners with other governmental and non-governmental entities to execute the public education and outreach strategy. The idea is to share information and resources so duplication does not occur. The following entities will be assisting with the effort:

1. City of Joplin
2. Other Communities in the Region
3. Community Organizations (e.g. Stream Team)
4. County Extension
5. MDNR
6. EPA
7. Other: Missouri Southern State University and Local Schools

## G. MEASURABLE GOALS

The measurable goals for each BMP are shown in Table MCM1. The BMPs selected were chosen because of the evidence that they will have a positive impact on the target pollutants identified as a concern for Carl Junction. The public education and outreach BMPs were also selected because many have been effective methods of communicating with the public for our community. Success of the Public Education and Outreach program and its effect on water quality will be determined by the listed measurable goals.

## H. RESPONSIBLE PARTIES

The person ultimately responsible for the overall management and implementation of the permittee's stormwater Public Education and Outreach program is the **Mayor**. The persons responsible for the individual PEO program activities are listed in Table MCM1.

Table MCM1. Public Education and Outreach Program BMPS

Stormwater Goal (BMP)	Target* Audience	Target Pollutant Source**	Implementation Date	Update Frequency	Responsible Party	Measurable Goal	Target Number
<u>KEEP RECORDS OF ALL BMPS</u>	8	All	Ongoing	EVERY activity	City Administrator	% of activities recorded	100%
<b>Website</b>							
Post SWMP document on Public Notice page of City website	2-8	Various	7/1/2013	As needed	City Administrator	Completion	1
Create standalone Stormwater information page on City website, see above for details. (must have hit counter)	All	1-2,4,6-7	10/1/1014	Annually, and as needed	City Administrator	Completion, annual updates & # of hits	Completion, 1 update/year & 1000 hits/year
		1, 3, 5	Fall 2015				
		1, 13, 14	Fall 2016				
		1, TBD	Fall 2017				
Post Stormwater Jeopardy game on SW webpage	2	2-6,14	3/31/2015	As needed	City Administrator	Completion	1
Create Native Plant section of SW webpage, posting links to Grow Native!	1-6	Various	3/31/2015	As needed	City Administrator	Completion	1
<b>Schools</b>							
Presentation at Local Schools on Easy Things Kids Can Do to Help SW Quality	2	2-6,14	3/31/2015	Yearly	City Administrator	# of kids reached	500/year (2 grade-levels)
Distribute Stormwater Jeopardy game, or other follow-up activity, to schools	2	2-6,14	3/31/2015	Yearly	City Administrator	Completion each year	1/year
Kids' Stormwater Poster Contest	2	2-6,14	3/31/2015	Yearly	City Administrator	# Submittals	50/year
<b>Public Signage</b>							
Post Pet Waste Disposal Signs in Public Parks and along trails, referencing ordinance	2	4	10/1/2013	n/a	Public Works Superintendent	# Signs Posted/ % of parks with signs	Min. 1 sign per park & 1 sign along trail/ 100%
Post Stormwater Quality signs/posters in Community Center and Police Department/Municipal Courthouse Building	2-6	4, 6	Fall 2013	Annually	Public Works Superintendent	# signs posted	2 signs/year per location
		2, 7	Fall 2014				
		3, 5	Fall 2015				
		13, 14	Fall 2016				
		TBD	Fall 2017				

Table MCM1. Public Education and Outreach Program BMPs (continued)

Stormwater Goal (BMP)	Target* Audience	Target Pollutant Source**	Implementation Date	Update Frequency	Responsible Party	Measurable Goal	Target Number
<u>KEEP RECORDS OF ALL BMPS</u>	8	All	Ongoing	EVERY activity	City Administrator	% of activities recorded	100%
<b>Other Literature Distribution</b>							
Distribute brochures/flyers by mail or bill insert	2-6	4, 6	2013	As needed	Public Works Superintendent	# Brochures and/or flyers	500/year
		2, 7	2014				
		3, 5	2015				
		13, 14	2016				
		TBD	2017				
Mail SW brochure to new business licensees	Various	Various	Ongoing	Quarterly	City Clerk	% sent brochures	100%
Distribute Erosion/Sediment Control BMP Literature to Bidders for Development Projects	1	1	Ongoing	As needed	Public Works Superintendent	% of bidders receiving literature	100%
Waste/Recycling Guide Mailed to All Postal Customers	2-6	3, 5-7	Each Fall	Yearly	City Clerk	# per year	1000/year
Maintain SW Info Library at Community Center	Various	Various	Ongoing	Quarterly	City Clerk	# Brochures/ flyers taken	100/year
<b>Other Activities</b>							
Issue Press Releases Regarding Local SW Issues	Various	Various	As needed	As needed	City Administrator	# Press Releases	As needed
Show SW information on local TV station	Various	Various	(fulfilled by City of Joplin)	n/a	(fulfilled by City of Joplin)	(fulfilled by City of Joplin)	(fulfilled by City of Joplin)
Publish SW-related Articles in Local Newspaper	Various	Various	(fulfilled by City of Joplin)	n/a	(fulfilled by City of Joplin)	(fulfilled by City of Joplin)	(fulfilled by City of Joplin)
Show Public Services Announcement on Local TV	Various	Various	(fulfilled by City of Joplin)	n/a	(fulfilled by City of Joplin)	(fulfilled by City of Joplin)	(fulfilled by City of Joplin)

\* Target Audience Codes listed in Section D. \*\* Target Pollutant Source Codes listed in Section C. TBD = To Be Determined by City.

## **MCM#2: Public Involvement and Participation (PIP) Program**

### A. REGULATORY REQUIREMENT

**40 CFR 122.34 (b)(2) – At a minimum, comply with state, tribal, and local public notice requirements when implementing a public involvement/participation program. *EPA recommends that the public be included in developing, implementing, and reviewing your stormwater management program and that the public participation process should make efforts to reach out and engage all economic and ethnic groups.***

Section 4.2.2.2 of the general MS4 permit requires the following elements in this program:

**Involvement of the public in the development and submittal of the permit application and stormwater management program;**

**Plans to actively involve the public in the development and implementation of the public involvement/participation program;**

**Identification of target audiences; and**

**Identification of the types of public involvement activities.**

Carl Junction will comply with State and Local public notice requirements when implementing the Public Involvement and Participation program.

### B. PUBLIC INVOLVEMENT IN DEVELOPING SWMP SUBMITTAL

Carl Junction has put this document on public notice at the City Hall portion of the Community Center and on the Public Notice page of the City website. Any comments from the public were received at the next City Council meeting or at City Hall. Comments have been addressed and changes to the SWMP made accordingly.

### C. TARGET AUDIENCES

The target audiences for the permittee's Public Involvement and Participation program are:

1. Citizens (Homeowners)
2. Mass Media
3. Local Elected Officials
4. Business Leaders
5. Contractors, Home Builders, and Developers

The City of Carl Junction, having small population and limited ethnic diversity, will not focus the PIP program on any particular ethnic or economic groups.

#### D. SELECTED BMPS FOR PUBLIC INVOLVEMENT AND PARTICIPATION

The goal of Carl Junction's Public Involvement and Participation program is to accomplish the following:

Involve the public in the development and submittal of the permit application and stormwater management program;

Actively involve the public in the development and implementation of the Public Involvement and Participation program.

The strategy is to implement a variety of different methods that were selected because they are existing effective methods used by Carl Junction or because of EPA guidance documents that list these BMP's as effective public involvement methods. The City plans to use the following Best Management Practices to accomplish these goals (see also Table MSM2):

- ❖ KEEP RECORDS OF EVERY PUBLIC INVOLVEMENT AND PARTICIPATION ACTIVITY;
- ❖ Post this SWMP document on the Public Notice page of the City website;
- ❖ Receive public comments on the SWMP at City Council meetings and at City Hall;
- ❖ Maintain Community Hotline;
- ❖ Hold annual public meetings/stakeholder meeting on stormwater issues;
- ❖ Hold annual volunteer stream clean-up activities, partnering with Stream Team and/or other community groups, and getting business sponsorships for clean-up supplies, drinks, and snacks;
- ❖ Provide dispensers and biodegradable bags in public parks for pet waste disposal;
- ❖ Send out Stormwater Surveys to homeowners, and possibly businesses, to assess attitudes and public education needs; and
- ❖ Create a Native Plants section of the City's stormwater website that will feature, on a quarterly or monthly basis, community and residential gardens on that use native plants.

#### E. MEASURABLE GOALS

The measurable goals for each BMP are shown in Table MCM2. The BMPs selected were chosen because of the evidence that they will have a positive impact on the target pollutants identified as a concern for Carl Junction. The Public Involvement and Participation BMPs were also selected because many have been effective methods of involving the public in our

community. Success of the Public Involvement and Participation program and its effect on water quality will be determined by the listed measurable goals.

#### F. RESPONSIBLE PARTIES

The person ultimately responsible for the overall management and implementation of the permittee's Public Involvement and Participation program is the **Mayor**. The persons responsible for the individual PIP program activities are listed in Table MCM2.

Table MCM2. Public Involvement and Participation Program BMPs

Stormwater Goal (BMP)	Target* Audience	Target Pollutant Source**	Implementation Date	Update Frequency	Responsible Party	Measurable Goal	Target Number
<u>KEEP RECORDS OF ALL BMPs</u>	n/a	All	Ongoing	EVERY activity	City Administrator	% of activities recorded	100%
Post SWMP document on Public Notice page of City website	1-5	Various	7/1/2013	As needed	City Administrator	Completion	1
Receive Public Comments at City Council Meeting & City Hall	1-5	Various	7/1/2013	n/a	City Administrator	% of Received comments addressed	100%
Maintain Community Hotline	1-5	Various	Ongoing	n/a	City Clerk	% of Received concerns addressed	100%
Hold Annual Public Mtg./ Stakeholder Mtg. on SW issues	1-5	Various	Fall each year	Yearly	City Administrator	Attendance #	100/year
Hold Annual Volunteer Stream Clean-up Activity, partnering with businesses (sponsorships) and Stream Team or other community organizations	1-5	6 mostly	by August 31 of each year	Yearly		# Volunteers & Amount of trash collected	30 people/year & 10 bags of trash
Provide dispensers and biodegradable bags in public parks for pet waste disposal	1	4	10/1/2013	Yearly	Public Works Superintendent	# of bags used	1000/year
Send Out Stormwater Survey to Homeowners and Process Results	1	4	4/1/2015	n/a	City Administrator	# Surveys Distributed/ % Response	2500 surveys/ 20% response
On SW Website, Feature Community & Residential Gardens/Plantings that Use Native Plants	1, 4, 5	Various	4/1/2015	Quarterly	City Administrator	# of gardens or plantings featured	4/year min.

*Good Not Plastic*

\* Target Audience Codes listed in Section C. \*\* Target Pollutant Source Codes listed in MCM#1 Section C.

## **MCM#3: Illicit Discharge Detection and Elimination (IDDE) Program**

### A. REGULATORY REQUIREMENT

**40 CFR 122.34 (b)(3) – Develop, implement, and enforce a program to detect and eliminate illicit discharges into your small MS4. Develop a storm sewer system map, showing the location of all outfalls and the names and locations of all water of the U.S. that receive discharges from those outfalls. To the extent allowable under state, tribal or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-stormwater discharges into your storm sewer system and implement appropriate enforcement procedures and actions. Develop and implement a plan to detect and address non-stormwater discharges including illegal dumping to your system. Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste. Address categories listed in 122.34(b)(3)(D)(iii) if you determine they are significant contributors of pollutants to MS4.**

Section 4.2.3.1 of the general MS4 permit requires the following elements in this program:

**A storm sewer system map showing the locations of all outlets and the names and location of all waters of the State that receive discharges from those outlets;**

**An ordinance or other regulatory mechanism to effectively prohibit non-stormwater discharges into the permittee's storm sewer system, with appropriate enforcement procedures and actions;**

**A plan to detect and address non-stormwater discharges, including illegal dumping, to the permittee's system;**

**Methods to inform public employees, business and the general public of hazards associated with illegal discharges and improper disposal of waste;**

**Plans to address the thirteen categories of non-stormwater discharges or flows, identified in Section 4.2.3.1.6 of the permit, only if the permittee identifies any of them as significant contributors of pollutants to the permittee's small MS4; and**

**A list, subject to the conditions in Section 4.2.3.1.7 of the permit, of other similar occasional incidental non-stormwater discharges that the permittee has determined will not be addressed as illicit discharges.**

## B. MAPPING

Carl Junction has developed an outfall map, showing the location of outfalls and the names and location of all waters of the State that receive discharges from those outfalls. The map was developed using storm sewer mapping and piping schematics. Updates to the map will be made on an as-needed basis.

## C. REGULATORY MECHANISM

Carl Junction currently uses an ordinance (Ordinance No. 10-41, adding CH 425 Article III to City Code, adopted 2010, copy included) to effectively prohibit illicit discharges to the MS4. This regulatory mechanism was selected because ordinances are commonly used by Carl Junction to establish laws and set forth enforcement mechanisms. The ordinance establishes legal authority for the City to do the following:

- Regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) of stormwater discharges by any use;
- Prohibit illicit connections and discharges to the MS4, including illegal dumping; and
- Carry out all inspections, surveillance monitoring, and enforcement procedures necessary to ensure compliance.

## D. INSPECTION PROGRAM

Carl Junction has implemented an IDDE Inspection program that utilizes dry-weather and wet-weather field screening to detect and address non-stormwater discharges, including discharges from illegal dumping and spills. Each outfall is inspected a minimum of twice per year, once during dry weather and once during wet weather, and also upon complaint. Procedures for inspection are contained within the City's "Illicit Discharge Detection & Elimination Field Investigation Guide," dated 2013. A copy of the Guide is available upon request. The following are some of the items contained in the guide:

- Procedures for dry- and wet-weather field screening;
- Procedures for evaluating land use to determine priority areas and activities with higher likelihood of illicit connections (e.g. areas with older sanitary sewer lines or where on-site sewage disposal is more prevalent);
- Procedures for field tests/observations of physical parameters (e.g. flowrate, color, odor, turbidity, surface scum, outfall damage);
- Procedures for evaluating biological indicators (e.g. vegetation, algae, bacteria, fish kills, presence or absence of aquatic life);
- Procedures for field tests of selected chemical parameters (e.g. temperature, pH, detergent, etc.);
- Field investigation examples (with photos);

Procedures for tracing the source of an illicit discharge, including stormwater network investigation methods, methods to use with intermittent discharges, as well as on-site investigation methods;  
Important contact numbers; and  
Plants and snakes to avoid (with photos).

## E. TRACING THE SOURCE, REMOVAL, AND ENFORCEMENT

Carl Junction will trace the source of any suspected illicit discharge following procedures outlined in the IDDE Field Guide. Upon determination of the source of the illicit discharge, the City's IDDE ordinance allows the City to suspend access to the MS4 until the discharge is abated. The City may order compliance by written notice of violation. For removal and enforcement, the IDDE ordinance states the following:

### SECTION 425.320 A. Notification of Violation.

Whenever the City of Carl Junction finds that a person has violated a prohibition or failed to meet a requirement of this Article, the City of Carl Junction may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

1. The performance of monitoring, analysis, and reporting;
2. The elimination of illicit connections or discharges;
3. The violating discharges, practices, or operations shall cease and desist;
4. The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property; and
5. Payment of a fine to cover administrative and remediation costs; and
6. The implementation of source control or treatment BMP's.

If abatement of a violation and/or restoration of affected property are required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore with the established deadline, the work will be done by a designated agency or a contractor and the expense thereof shall be charged to the violator.

Any notice of violation may be appealed as laid out in the ordinance. Also, according to the ordinance, if the violation continues, the violator will be liable to criminal prosecution and will be subject to criminal penalty of fines and/or imprisonment.

## F. INFORMING THE PUBLIC

Carl Junction will inform businesses and the general public of hazards associated with illegal discharges and improper disposal of waste using the BMPs listed under MCM #1 of this

document. Public employees will be informed during training provided by the City or another organization, such as MDNR or City of Joplin.

#### G. NOT SIGNIFICANT CONTRIBUTORS

The City of Carl Junction has exempted the following in the IDDE ordinance because the City has not identified any of the following categories of non-stormwater discharges or flows (i.e. illicit discharges) as significant contributors of pollutants to their small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined in 10 CSR 20-6.200), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, springs, water from crawl space pumps, footing drains, lawn watering, flows from riparian habitats and wetlands, and street wash water (discharges or flows from firefighting activities are excluded from the effective prohibition against non-stormwater and will only be addressed where they are identified as significant sources of pollutants to waters of the State).

Carl Junction's IDDE ordinance also specifically lists non-commercial washing of vehicles, discharge from swimming pools (if dechlorinated – typically less than one (1) PPM chlorine), and firefighting activities and other similar occasional incidental non-stormwater discharges that will not be addressed as illicit discharges because they are not reasonably significant sources of pollutants to the MS4. Should these occasional or incidental non-stormwater discharges be identified in the future as significant contributors, those entities responsible for discharging will be prohibited or conditions placed on them so as to minimize their discharge of pollutants.

#### H. SELECTED BMPS FOR ILLICIT DISCHARGE DETECTION AND ELIMINATION

The goal of Carl Junction's Illicit Discharge Detection and Elimination program is to accomplish the following:

Effectively prohibit non-stormwater discharges into the permittee's storm sewer system through regulation and inspection, as well as enforcement when necessary;

Inform public employees, business and the general public of hazards associated with illegal discharges and improper disposal of waste;

The strategy is to implement methods that were selected because they are existing effective methods used by Carl junction or because of EPA guidance documents that list these BMP's as effective IDDE methods. The City plans to use the following Best Management Practices to accomplish these goals (see also Table MSM3):

- ❖ KEEP RECORDS OF EVERY ILLICIT DISCHARGE DETECTION AND ELIMINATION ACTIVITY;
- ❖ Enforce existing IDDE ordinance;

- ❖ Inspect each outfall at least four times a year, twice in dry weather and twice in wet weather;
- ❖ Maintain community hotline for public to report suspected illicit discharges and dumping;
- ❖ Inspect as necessary upon complaint to community hotline;
- ❖ Inform businesses and the general public of hazards associated with illegal discharges and improper disposal of waste using the BMPs listed under MCM #1 of this document;
- ❖ Provide IDDE training to public employees involved in the IDDE program (training may be provided in cooperation with City of Joplin or other entity, such as MDNR); and <sup>?</sup>
- ❖ Provide IDDE training to all public employees, including police and firefighters, as part of the general Good Housekeeping training so our public employees can be our eyes and ears on the ground (training may be provided in cooperation with City of Joplin or other entity, such as MDNR).

*each outfall  
Rep. or  
ALL outfalls?*

I. MEASURABLE GOALS

The measurable goals for each BMP are shown in Table MCM3. The BMPs selected were chosen because of the evidence that they will have a positive impact on the target pollutants identified as a concern for Carl Junction. Success of the Illicit Discharge Detection and Elimination program and its effect on water quality will be determined by the listed measurable goals.

J. RESPONSIBLE PARTIES

The person ultimately responsible for the overall management and implementation of the permittee's Illicit Discharge Detection and Elimination program is the **Mayor**. The persons responsible for the individual IDDE program activities are listed in Table MCM3.

Table MCM3. Illicit Discharge Detection and Elimination Program BMPs

Stormwater Goal (BMP)	Implementation Date	Update Frequency	Responsible Party	Measurable Goal	Target Number
<u>KEEP RECORDS OF ALL BMPs</u>	Ongoing	EVERY activity	City Administrator	% of activities recorded	100%
Enforce existing IDDE ordinance	Ongoing	As needed	Public Works Superintendent	Completion	1
Dry-weather Inspection of Each Outfall	Twice Yearly	As needed	Public Works Superintendent	# Outfalls inspected	18 outfalls twice per year
Wet-weather Inspection of Each Outfall	Twice Yearly	As needed	Public Works Superintendent	# Outfalls inspected	18 outfalls twice per year
Fill Out Inspection Field Sheet for each Outfall Inspected	On day of inspection	As needed	Public Works Superintendent	# Field Sheets Filled Out	18 outfalls four times per year
Maintain Community Hotline	Ongoing	As needed	City Clerk	% of complaints received that are recorded	100%
Inspect Upon Complaint	Ongoing	As needed	Public Works Superintendent	% of Complaints addressed	100%
IDDE Information to Businesses and General Public	See MCM#1	See MCM#1	See MCM#1	See MCM#1	See MCM#1
IDDE Training for IDDE Inspectors	Fall 2013	Yearly or as needed	Public Works Superintendent	# Employees Trained	2/year
Basic IDDE Awareness Training for All Municipal Employees as part of Good Housekeeping Training	Fall 2014	Yearly or as needed	City Administrator	# Employees Trained	All

*Handwritten notes:*  
 on 5/20/14  
 on 5/20/14  
 on 5/20/14  
 on 5/20/14  
 on 5/20/14

## **MCM#4: Construction Site Stormwater Runoff Control (CSSRC) Program**

### A. REGULATORY REQUIREMENT

**40 CFR 122.34 (b)(4) – Develop, implement and enforce a program to reduce pollutants in any stormwater runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Program must include: the development and implementation of (at a minimum) an ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, requirements for construction site operators to implement appropriated erosion and sediment control BMPs, requirements for construction site operators to control waste at the construction site, procedures for site plan review which incorporate consideration of potential water quality impacts, procedures for receipt and consideration of information submitted by the public.**

Section 4.2.4.1 of the general MS4 permit requires the following elements in this program:

**An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State or local law;**

**Requirements for construction site operators to implement appropriate erosion and sediment control best management practices;**

**Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemical, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;**

**Procedures for site plan review which incorporate consideration of potential water quality impacts;**

**Procedures for receipt and consideration of information submitted by the public; and**

**Procedures for site inspection and enforcement of control measures.**

### B. REGULATORY MECHANISM

Carl Junction has adopted an stormwater management ordinance (Ordinance No. 10-41, adding CH 425 Articles I, II, & III to City Code, adopted 2010, copy included) as the regulatory

mechanism requiring appropriate erosion and sediment controls on construction sites. The ordinance accomplishes the following:

- Adopts the Stormwater Management Criteria manual;
- Lays out procedures for acquiring a Site Development Permit;
- Establishes legal authority for the City to inspect permitted construction sites;
- Establishes legal authority for the City to enforce the regulations through denial of permit, stop-work orders, revocation of permit, and criminal charges, with associated fines and other penalties.

This regulatory mechanism was selected because ordinances are commonly used by Carl Junction to establish laws and set forth enforcement mechanisms.

Site Development Permits are required for any construction activities that result in the disturbance of greater than or equal to one acre, and also for sites disturbing less than one acre if the site is part of a larger common plan of development or sale. Applications for Site Development Permits must include an Erosion and Sediment Control Plan, to be reviewed and approved by the City before issuance of permit. Applicants must also provide a performance bond or other required security, as laid out in the Stormwater Criteria manual.

The Stormwater Management Criteria manual includes all requirements for submittal of the Erosion and Sediment Control Plan. The manual also contains construction specifications and design standards for erosion and sediment control BMPs. A copy of the manual is available upon request.

### C. INSPECTION PROGRAM

Carl Junction has incorporated erosion and sediment control (ESC) measures into the City's Construction Inspection program. Under the ESC portion of the stormwater management ordinance, the City may inspect permitted construction sites for the purpose of determining overall effectiveness of the erosion and sediment control BMPs and the need for additional control measures. Under the Illicit Discharge portion of the stormwater management ordinance, the City also regulates and inspects for the wastes listed in Section E below. The City's construction inspection forms, copies of which are included with this document, have been modified to allow for recording of inspections of the erosion and sediment control measures. The sites may be inspected using a priority rating system, with the site with the most potential risk to the community on top of the priority list.

### D. ENFORCEMENT

Under the stormwater management ordinance, the City of Carl Junction has legal authority to enforce erosion and sediment control regulations through the following escalating measures:

1. Denial of permit;
2. Stop-work order;
3. Revocation of permit; and
4. Criminal misdemeanor charges, with associated fines and other penalties.

*what about non-criminal misdemeanors & fines etc.?*

Procedures for this enforcement process are laid out in the stormwater management ordinance.

#### E. WASTES TO BE CONTROLLED

The City Carl Junction requires construction site operators to control wastes that may cause adverse impacts to water quality such as:

1. Discarded Building Materials
2. Sediment
3. Litter or Trash
4. Sanitary Waste

*storage/stock piles?*

These wastes are controlled through the Illicit Discharge section (Article III) of the stormwater management ordinance. These wastes are also included in the Construction Inspection Program.

#### F. SITE PLAN REVIEW

Carl Junction has implemented procedures in their ordinance for site plan review, including the review of pre-construction plans, which will incorporate consideration of potential water quality impacts. Carl Junction has implemented procedures and rationale for those sites that do not require site plan review. The estimated percentage of sites that will have a pre-construction site plan review is 100%.

#### G. RECEIPT & CONSIDERATION OF PUBLIC COMMENT

Construction plans are available at Carl Junction's City Hall for review by the public. Any citizen of Carl Junction may submit written comments relating to the plans. Comments are to be addressed by the City within 30 days of receipt. The public is notified of the availability of this process literature distributed by the City. *Website, too?*

#### H. SELECTED BMPS FOR CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

The goal of Carl Junction's Construction Site Stormwater Runoff Control program is to accomplish the following:

Effectively control erosion and sediment on construction sites through regulation and inspection, as well as enforcement when necessary;

Effectively control waste such as discarded building materials, concrete truck washout, chemical, litter, and sanitary waste at the construction site through regulation and inspection, as well as enforcement when necessary;

Review site plans for consideration of potential water quality impacts;

Receive and consider information submitted by the public; and

Inform developers, contractors and design professionals of proper erosion, sediment, and waste control measures for construction sites.

The strategy is to implement methods that were selected because they are existing effective methods used by Carl Junction or because of EPA guidance documents that list these BMP's as effective CSSRC methods. The City plans to use the following Best Management Practices to accomplish these goals (see also Table MSM4):

- ❖ KEEP RECORDS OF EVERY CONSTRUCTION SITE STORMWATER RUNOFF CONTROL PROGRAM ACTIVITY;
- ❖ Enforce existing stormwater ordinance;
- ❖ Review plans for compliance with erosion and sediment control regulations;
- ❖ Issue Site Development Permits for approved construction plans;
- ❖ Inspect construction sites for compliance with erosion and sediment control regulations and approved construction plans;
- ❖ Make stormwater plans available to the public for viewing at City Hall.
- ❖ Receive written comments from the public and address them within 30 days.
- ❖ Distribute literature containing public comment procedures using BMPs listed under MCM #1 of this document;
- ❖ Inform developers, contractors and design professionals of proper erosion, sediment, and waste control measures for construction sites using the BMPs listed under MCM #1 of this document (training may be provided in cooperation with City of Joplin or other entity, such as MDNR); and
- ❖ Provide training to City reviewers and inspectors involved in the CSSRC program (training may be provided in cooperation with City of Joplin or other entity, such as MDNR).

## I. MEASURABLE GOALS

The measurable goals for each BMP are shown in Table MCM4. The BMPs selected were chosen because of the evidence that they will have a positive impact on the target pollutants

identified as a concern for Carl Junction. Success of the Construction Site Stormwater Runoff Control program and its effect on water quality will be determined by the listed measurable goals.

#### J. RESPONSIBLE PARTIES

The person ultimately responsible for the overall management and implementation of the permittee's Construction Site Stormwater Runoff Control program is the **Mayor**. The persons responsible for the individual CSSRC program activities are listed in Table MCM4.

Table MCM4. Construction Site Stormwater Runoff Control Program BMPs

Stormwater Goal (BMP)	Implementation Date	Update Frequency	Responsible Party	Measurable Goal	Target Number
<u>KEEP RECORDS OF ALL BMPs</u>	Ongoing	EVERY activity	City Administrator	% of activities recorded	100%
Enforce Existing Stormwater Management/ Erosion & Sediment Control Ordinance	Ongoing	As needed	Public Works Superintendent	Completion	1
Review Plans for Compliance with Erosion & Sediment Control Regulations	Ongoing	As needed	Public Works Superintendent	# projects reviewed	All
Issue Site Development Permits for Approved Construction Plans	Ongoing	As needed	Public Works Superintendent	# Permits issued	n/a
Inspect Active Construction Sites for Compliance with CSSRC Regulations	Ongoing	As needed	Public Works Superintendent	# of Inspections	Minimum 3/Project
Make Stormwater Plans Available to the Public for Viewing at City Hall	Ongoing	As needed	Public Works Superintendent	% of plans available for viewing	100%
Receive Written Comments from the Public and Address Them within 30 Days	Ongoing	As needed	Public Works Superintendent	# of comments received & % of comments addressed	100%
Distribute Literature Containing Public Comment Procedures	See MCM#1	See MCM#1	See MCM#1	See MCM#1	See MCM#1
Inform Developers, Contractors and Design Professionals of Proper CSSRC BMPs	See MCM#1	See MCM#1	See MCM#1	See MCM#1	See MCM#1
CSSRC Training for City Reviewers and Inspectors	Fall 2013	Yearly or as needed	Public Works Superintendent	# Employees Trained	2/year

**MCM#5: Post-Construction Stormwater Management (PCSM) Program**

**A. REGULATORY REQUIREMENT**

**40 CFR 122.34 (b)(5) – Develop, implement and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects that are less than one acre that are part of a larger common plan of development or sale, that discharge into your small MS4. Develop and implement strategies which include a combination of structural and/or non-structural BMPs appropriate for your community. Use an ordinance or other regulatory mechanism to address post-construction runoff. Ensure adequate long-term operation and maintenance of BMPs.**

Section 4.2.5.1 of the general MS4 permit requires the following elements in this program:

**Development and implementation of strategies which include a combination of structural and/or non-structural BMPs appropriate for the permittee’s community;**

**Use of an ordinance or other regulatory mechanism to address post construction runoff from new development and redevelopment projects to the extent allowable under State or local law;**

**Means to ensure adequate long-term operation and maintenance of BMPs;**

**Policies and ordinances that provide requirements and standards to direct growth to identified areas, protect sensitive areas such as wetlands and riparian areas, maintain and/or increase open space (including a dedicated funding source for open space acquisition), provide buffers along sensitive water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation;**

**Policies or ordinances that encourage infill development in higher density urban areas and areas with existing stormwater infrastructure;**

**Education programs for developers and the public about project designs that minimize water quality impact; and**

**Other measures such as minimization of the percentage of impervious area after development, use of measures to minimize directly connected impervious areas and source control measures often thought of as good housekeeping, preventative maintenance and spill prevention.**

*deficient ref.  
Absent  
permit  
requirements  
for  
mimic/MSP  
criteria for  
new/reddev  
projects*

Carl Junction has developed, implemented, and is enforcing a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan or sale. The City accomplishes this goal through a stormwater management ordinance requiring any such development project to obtain a Site Development Permit, discussed below, before construction may begin.

## B. REGULATORY MECHANISMS - ORDINANCES

Carl Junction has adopted an stormwater management ordinances (Ordinance No. 10-41, adding CH 425 Articles I, II, & III to City Code, adopted 2010, copy included) as the regulatory mechanism requiring appropriate post-construction stormwater controls for development and redevelopment. This stormwater ordinance accomplishes the following:

- Adopts the Stormwater Management Criteria manual;
- Lays out procedures for acquiring a Site Development Permit;
- Establishes legal authority for the City to inspect active permitted construction sites;
- Establishes legal authority for the City to enforce the regulations through denial of permit, stop-work orders, revocation of permit, and criminal charges, with associated fines and other penalties;

The City is currently in the process of adding Article IV (copy included) to the stormwater code as a provision for long-term maintenance of permanent stormwater controls. For all entities requiring a Site Development Permit and whose approved plans contain permanent stormwater BMPs, this addition to the stormwater code accomplishes the following:

- Requires designation of the entity responsible for long-term operation and maintenance of all permanent BMPs (usually the property owner or a homeowners' association);
- Establishes legal authority for the City to inspect all permanent stormwater BMPs;
- Establishes legal authority for the City to enforce the regulations through notices of violation, criminal charges, with associated fines and other penalties, and if necessary the City may perform maintenance work at the owner's expense.

These regulatory mechanisms were selected because ordinances are commonly used by Carl Junction to establish laws and set forth enforcement mechanisms.

## C. REGULATORY MECHANISMS – STORMWATER CRITERIA MANUAL

The Stormwater Management Criteria manual, adopted in the stormwater management ordinance, contains construction specifications and design standards for permanent structural and non-structural BMPs to address post-construction runoff quality and quantity. The goal of these design standards is to minimize water quality impacts, by requiring reasonable mimicking of pre-construction runoff conditions in affected new development and incorporating water quality protection in affected redevelopment projects to the maximum extent practicable. At a minimum, Carl Junction currently requires a water quality extended detention/retention basin for all land development on any site having a gross land area of one acre or more, including projects less than one acre that are part of a larger common plan of development or sale, unless waived by the city in accordance with the adopted stormwater regulations. Other structural BMPs listed in the manual include, but are not limited to, vegetative filter strips, grass swales, constructed wetlands, porous pavements, and sand filters. Non-structural BMPs addressed in the manual include minimizing disturbance of soils and vegetation, avoiding environmentally sensitive areas (e.g. streams, springs, sinkholes, lakes, wetlands), and disconnecting impervious area.

The design standards in the Stormwater Management Criteria manual require pre-construction runoff conditions in new development to be met for:

1. Certain flow volumes (e.g. Water Quality Control Volumes); and
2. Peak discharge rates.

*define?  
consistent w/ C1 guide  
definition?*

The design standards and stormwater management ordinances allow or enable the following:

1. The location of bioretention areas, rain gardens, filter strips, swales, and constructed wetlands in required setback areas; and
2. Construction of low impact development, or LID, stormwater management techniques (bioretention, swales, filter strips) on land held in common.

The Stormwater Management Criteria manual requires Site Development Permits for any construction activities that result in the disturbance of greater than or equal to one acre, and also for sites disturbing less than one acre if the site is part of a larger common plan of development or sale. Applications for Site Development Permits to be reviewed and approved by the City, must include the following items:

1. Existing and proposed mapping and plans, which illustrate:
  - a. Existing and proposed topography;
  - b. Perennial and intermittent streams;
  - c. Mapping of predominant soils;
  - d. Boundaries of existing predominant vegetation and proposed limits of clearing.;
  - e. Location and boundaries of resource protection areas such as wetlands, lakes, ponds and other setbacks (e.g. stream buffers);
  - f. Grading plan with location of existing and proposed roads, buildings and other structures;
  - g. Location of existing and proposed utilities and easements;
  - h. Flow paths;

- i. Location of floodplain/floodway limits;
  - j. Location and dimensions of proposed channel modifications, including bridge or culvert crossings; and
  - k. Location, size, maintenance access and limits of disturbance of proposed structural stormwater management practices.
2. Narrative and supporting calculations describing:
- a. Site Impervious Area, if using effective disconnections;
  - b. Development phasing or implementation sequence;
  - c. Other supporting calculations for hydrologic and hydraulic design.

*Location of SEMs on-site?*

*Pre-protection measures for SEMs? rain garden bioswales et al.?*

A copy of the manual is available upon request.

**D. SITE PLAN REVIEW**

As discussed in MCM#4 Section F, Carl Junction has implemented procedures in their ordinance for site plan review, including the review of pre-construction plans, which will incorporate consideration of potential water quality impacts. Permanent structural and non-structural BMPs proposed in the submitted plans will be evaluated for suitability and effectiveness for the particular site, as well as compatibility with other existing and planned permanent BMPs.

**E. SELECTED BMPS FOR CONSTRUCTION SITE STORMWATER RUNOFF CONTROL**

The goal of Carl Junction's Construction Site Stormwater Runoff Control program is to accomplish the following:

Develop and implement strategies which include a combination of structural and/or non-structural BMPs appropriate for the permittee's community;

Address post-construction runoff from new development and redevelopment projects through use of an ordinance or other regulatory mechanism;

Ensure adequate long-term operation and maintenance of BMPs;

Adopt and/or maintain policies and ordinances that provide requirements and standards to direct growth to identified areas, protect sensitive areas such as wetlands and riparian areas, maintain and/or increase open space, provide buffers along sensitive water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation;

Adopt and or maintain policies or ordinances that encourage infill development in higher density urban areas and areas with existing stormwater infrastructure;

Educate developers and the public about project designs that minimize water quality impact; and

Employment of other measures, such as minimization of the percentage of impervious area after development, use of measures to minimize directly connected impervious areas and source control measures often thought of as good housekeeping, preventative maintenance and spill prevention.

The strategy is to implement methods that were selected because they are existing effective methods used by Carl Junction or because of EPA guidance documents that list these BMP's as effective CSSRC methods. The City plans to use the following Best Management Practices to accomplish these goals (see also Table MSM5):

- ❖ KEEP RECORDS OF EVERY CONSTRUCTION SITE STORMWATER RUNOFF CONTROL PROGRAM ACTIVITY;
- ❖ Enforce existing stormwater ordinance, recording all enforcement procedures;
- ❖ Evaluate legal impediments to green infrastructure using the "Code and Ordinance Worksheet" available for free from the Center for Watershed Protection;
- ❖ Use the above evaluation to create a prioritized list of recommended changes to policy, ordinances and building codes in order to implement green strategies in the community;
- ❖ Implement, at minimum, one of the recommended changes per year of this permit cycle;
- ❖ Create and maintain a map of all permanent BMPs, municipal and non-municipal, constructed under the Site Development Permit system;
- ❖ Develop or adopt Inspection Checklists for each type of permanent BMP to be inspected;
- ❖ Inspect all constructed BMPs shown on BMP map, using Inspection Checklists, keeping records of each inspection;
- ❖ Post BMP Inspection Checklists and associated maintenance information of City's stormwater webpage for public education;
- ❖ Inform developers, contractors and design professionals of proper post-construction stormwater management measures using the BMPs listed under MCM #1 of this document (training may be provided in cooperation with City of Joplin or other entity, such as MDNR); and
- ❖ Provide training to City reviewers and inspectors involved in the PCSM program (training may be provided in cooperation with City of Joplin or other entity, such as MDNR).

*deed restrictions*

*review / approval process plans site design especially placement of rain gardens et al.*

## F. MEASURABLE GOALS

The measurable goals for each BMP are shown in Table MCM5. The BMPs selected were chosen because of the evidence that they will have a positive impact on the target pollutants identified as a concern for Carl Junction. Success of the Post-Construction Stormwater Management program and its effect on water quality will be determined by the listed measurable goals.

## G. RESPONSIBLE PARTIES

The person ultimately responsible for the overall management and implementation of the permittee's Post-Construction Stormwater Management program is the **Mayor**. The persons responsible for the individual PCSM program activities are listed in Table MCM5.

Table MCM5. Post-Construction Stormwater Management Program BMPs

Stormwater Goal (BMP)	Implementation Date	Update Frequency	Responsible Party	Measurable Goal	Target Number
KEEP RECORDS OF ALL BMPs	Ongoing	EVERY activity	City Administrator	% of activities recorded	100%
Enforce Existing Stormwater Management Ordinance	Ongoing	As needed	Public Works Superintendent	Report # and type of enforcement actions	Annual Report
Evaluate Legal Impediments to Green Infrastructure using the "Code and Ordinance Worksheet" available for free from Center for Watershed Protection	2/1/2014	As needed	Public Works Superintendent	# projects reviewed	All
Create Prioritized List of Recommended Changes to Ordinances and Building Codes, Determined During Evaluation above, to Implement Green Strategies	2/15/2014	As needed	Public Works Superintendent	# Permits issued	n/a
Implement Yearly, a Minimum of 1 of the Recommended Changes listed above	4/1/2014	Yearly	Public Works Superintendent	# Measures Implemented	1/year min.
Create and Maintain Map of All Constructed BMPs, Municipal and Non-Municipal	5/1/2014	As needed, when plans are approved	Public Works Superintendent	% of plans available for viewing	100%
Develop or Adopt Inspection Checklists for Each Type of Structural BMP	5/1/2014	As needed	Public Works Superintendent	Completion	1
Yearly Inspections All Constructed BMPs Shown on BMP Map. Keep Records of all Inspections.	5/15/2014	Yearly	Public Works Superintendent	# Facilities Inspected/year	All
Post BMP Inspection Checklists and Maintenance Information on City's SW webpage	10/1/2014	As needed	Public Works Superintendent	Completion	1
Inform Developers, Contractors and Design Professionals of Proper PCSM BMPs	See MCM#1	See MCM#1	See MCM#1	See MCM#1	See MCM#1
PCSM Training for City Reviewers and Inspectors	Fall 2013	Yearly or as needed	Public Works Superintendent	# Employees Trained	2/year

*modify/improve review/approval process?*

## **MCM#6: Pollution Prevention/Good Housekeeping (PPGH) Program for Municipal Operations**

### **A. REGULATORY REQUIREMENT**

**40 CFR 122.34 (b)(6) – Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.**

Section 4.2.6.1 of the general MS4 permit requires the program to specifically address the following areas:

**Maintenance BMPs, maintenance schedules and long term inspection procedures for controls to reduce floatables and other pollutants to the permittee's MS4;**

**Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas and salt/sand storage locations and snow disposal areas the permittee operates;**

**Good housekeeping practices to keep solid waste from entry into waters of the state to the maximum extent practicable;**

**Adhere to all applicable federal and state regulations concerning underground storage, aboveground storage, and dispensers, including spill prevention, control, and countermeasures at all fueling facilities;**

**Manage RCRA and CERCLA regulated substances according to RCRA and CERCLA regulations when transported, stored, or used for maintenance, cleaning or repair;**

**Procedures for the proper storage of all paints, solvents, petroleum products and petroleum waste products (except fuels) so they are not exposed to stormwater;**

**Procedures for the proper disposal of waste removed from the permittee's MS4 and area of jurisdiction, including dredged materials, accumulated sediments, floatables and other debris;**

**Procedures to ensure that new flood management projects are assessed for incorporation of additional water quality protection devices or practices;**

**Training of employees in the prevention and reduction of stormwater pollution at municipal facilities and during municipal operations; and**

**Keep a list of all municipal operations which are impacted by the above listed requirements.**

**B. OPERATION AND MAINTENANCE MANUAL**

The City of Carl Junction has developed, and is in the process of adopting, a municipal Operation and Maintenance (O&M) manual, with the ultimate goal of preventing or reducing pollutant runoff from municipal operations. The manual contains lists of all municipal facilities, as well as pollution prevention and good housekeeping BMPs for municipal operations. The following activities, among others, have been addressed in the manual:

1. All public parks, ball fields, other recreational facilities and other open spaces;
2. All municipal construction activities, including those disturbing less than 1 acre'
3. All municipal turf grass/landscape management activities;
4. All municipal vehicle fueling, operation and maintenance activities;
5. All public works, parks and other municipal maintenance yards;
6. All municipal waste handling and disposal areas; and
7. Other municipal operations.

The manual also addresses the following items:

1. Municipal industrial facilities subject to other NPDES permits;
2. Maintenance BMPs, maintenance schedules and inspection procedures;
3. Controls for reducing or eliminating the discharge of pollutants from
  - a. Streets, roads, highways, municipal parking lots,
  - b. Maintenance and storage yards,
  - c. Fleet or maintenance shops with outdoor storage areas, and
  - d. Salt/sand storage locations and snow disposal areas;
4. Keeping solid waste from entry into waters of the state from municipal facilities;
5. Municipal fueling facilities;
6. Management of substances regulated under RCRA or CERCLA;
7. Proper storage of all paints, solvents, petroleum products and petroleum waste products (except fuels);
8. Proper disposal of waste removed from the permittee's MS4 and area of jurisdiction;
9. Assessing new flood management projects for incorporation of additional water quality protection devices or practices; and
10. Training of municipal employees.

A copy of the municipal Operation and Maintenance manual is available upon request.

## C. PPGH INSPECTIONS

The City of Carl Junction has implemented a PPGH inspection program in which major City facilities are to be inspected quarterly, and minor facilities are to be inspected annually, for compliance with BMPs listed in the O&M manual. Inspection forms are to be completed for each facility inspection and copies are to be kept for later reference. Progress is to be measured by improvement in results from inspections. Additional training needs are also to be determined from inspection results.

## D. TRAINING

Carl Junction has implemented a program that provides municipal employee training in the prevention and reduction of stormwater pollution from municipal activities. All municipal employees are to receive general PPGH training. The O&M manual specifies which employees are to receive more detailed training. Refresher training will be offered and additional training needs are also to be determined from inspection results. Training may be provided in cooperation with City of Joplin or other entity, such as MDNR

## E. SELECTED BMPS FOR CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

The goal of Carl Junction's Pollution Prevention/Good Housekeeping program is to accomplish the following:

Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

The strategy is to implement methods that were selected because they are existing effective methods used by Carl junction or because of EPA guidance documents that list these BMP's as effective PPGH methods. The City plans to use the following Best Management Practices to accomplish these goals (see also Table MSM6):

- ❖ KEEP RECORDS OF EVERY PPGH PROGRAM ACTIVITY;
- ❖ Distribute copies of new O&M manual to municipal employees;
- ❖ Develop maintenance schedules for all municipal equipment and operations;
- ❖ Develop and prominently post standard operating procedures for all fueling operations;
- ❖ Develop PPGH inspection forms/BMP checklists (one for each facility type);
- ❖ Complete initial inspection of all municipal facilities;
- ❖ Use initial inspection to determine major deficiencies (e.g. additional specialized training needed, spill kit labels/accessibility, need for posted standard operating procedures for certain activities, need to disconnect storm drains in problem areas, etc.);
- ❖ Prioritize initial deficiencies and address them accordingly;
- ❖ Inspect all major facilities (e.g. Community Center, parks, Public Works, etc.) quarterly;
- ❖ Inspect all minor facilities (e.g. lift stations, well houses, water towers) annually;

- ❖ Provide general good housekeeping training to all municipal employees, including police and firefighters, so our employees can be our eyes and ears on the ground (training may be provided in cooperation with City of Joplin or other entity, such as MDNR).; and
- ❖ Provide additional, specialized training to municipal employees as specified in the O&M manual, (training may be provided in cooperation with City of Joplin or other entity, such as MDNR).

#### F. MEASURABLE GOALS

The measurable goals for each BMP are shown in Table MCM6. The BMPs selected were chosen because of the evidence that they will have a positive impact on the target pollutants identified as a concern for Carl Junction. Success of the Pollution Prevention/Good Housekeeping program and its effect on water quality will be determined by the listed measurable goals.

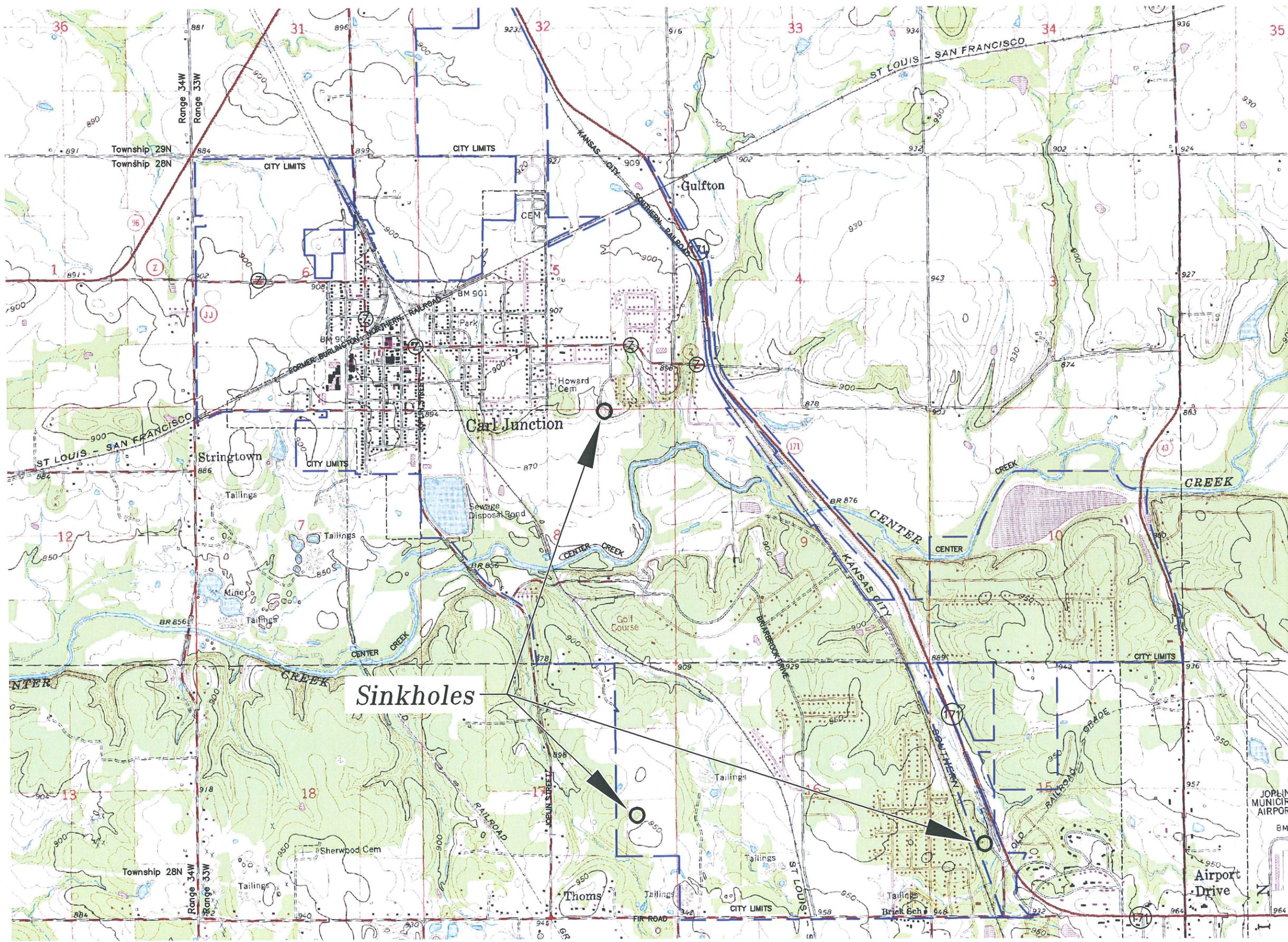
#### G. RESPONSIBLE PARTIES

The person ultimately responsible for the overall management and implementation of the permittee's Pollution Prevention/Good Housekeeping program is the **Mayor**. The persons responsible for the individual PCSM program activities are listed in Table MCM6.

Table MCM6. Pollution Prevention/Good Housekeeping Program BMPs

Stormwater Goal (BMP)	Implementation Date	Update Frequency	Responsible Party	Measurable Goal	Target Number
KEEP RECORDS OF ALL BMPs	Ongoing	EVERY activity	City Administrator	% of activities recorded	100%
Distribute Copies of O&M Manual to Municipal Employees	8/1/2013	As needed	Public Works Superintendent	Completion	1
Develop Maintenance Schedules for All Municipal Equipment and Operations	11/1/2013	Yearly	Public Works Superintendent	% Complete	100%
Develop and Prominently Post Standard Operating Procedures for All Municipal Fueling Operations (Vehicles and Other Equipment)	2/1/2014	As needed	Public Works Superintendent	Number of SOPs posted/ % Complete	One SOP posted for each fueling operation/ 100%
Develop PPGH Inspection Forms/BMP Checklists for Each Type of Facility	2/1/2014	As needed	Public Works Superintendent	Number of checklists developed/ % Complete	One checklist for each facility type /100%
Complete Initial Inspection of All Municipal Facilities	2/28/2014	n/a	Public Works Superintendent	Completion	1
Use Initial Inspection to Determine Major PPGH Deficiencies	3/31/2014	As needed	Public Works Superintendent	Completion	1
Prioritize Deficiencies and Begin to Address Them	3/31/2014	Ongoing	Public Works Superintendent	# Items Addressed	All within 4 years
Inspect All Major Facilities (e.g. Community Center, parks, Public Work, etc.)	2/28/2014	Quarterly	Public Works Superintendent	# Inspections	4/year for all major facilities
Inspect all minor facilities (e.g. lift stations, well houses, water towers)	3/1/2014	Annually	Public Works Superintendent	# Inspections	1/year for all minor facilities
General PPGH Training for All Municipal Employees (including Police)	Fall 2012	Yearly, or as needed	Public Works Superintendent	# Employees Trained	10/year
Specialized PPGH Training for Municipal Employees, as specified in O&M manual	Fall 2013	Yearly or as needed	Public Works Superintendent	# Employees Trained	5/year

# APPENDICES



(FEET)  
 500 0 500 1000 2000

SCALE: 1"=2000'  
 CONTOUR INTERVAL: TEN FEET

○ SINKHOLE-LEVEL 1  
 - - - CORPORATE BOUNDARIES

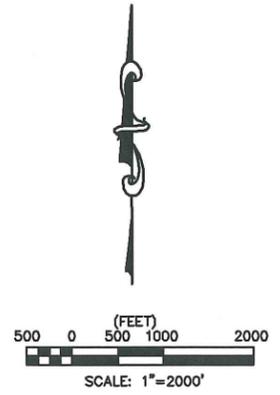
**Sinkholes**



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	CJ Outfall 2013.dwg	

DWN BY	sms	Sinkhole Map
CKD BY	sms	Carl Junction MS4 Permit Renewal 2013
APPD BY	sms	City of Carl Junction, Missouri
DATE	5-1-2013	



- #6 STORMWATER OUTFALL
- CORPORATE BOUNDARIES
- STREAM
- SECTION LINE



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DATE	REVISION
CERTIFICATE OF AUTHORITY REGISTERED PROFESSIONAL ENGINEER MISSOURI NO. 000427 OKLAHOMA NO. 875	
CJ Outfall 2013.dwg	

DWN. BY	sms
CHK. BY	sms
APP'D. BY	sms
DATE	5-1-2013

**OUTFALL MAP**  
 Carl Junction MS4 Permit Renewal 2013  
 City of Carl Junction, Missouri

**AN ORDINANCE AMENDING TITLE IV: LAND USE, CHAPTER 425: STORMWATER MANAGEMENT, BY ADOPTING EPA PHASE II, STORMWATER MANAGEMENT CODE, AUGUST 2010, WHICH CREATES NEW ARTICLE I. GENERAL PROVISIONS, INCLUDING EXISTING SECTIONS 425.010 AND 425.020, AND CREATES NEW ARTICLE II. EROSION AND SEDIMENT CONTROL, AND ADDS NEW SECTIONS 425.030 TO 425.100, INCLUSIVE, AND CREATES NEW ARTICLE III. ILLICIT DISCHARGES, AND ADDS NEW SECTIONS 425.200 TO 425.410, INCLUSIVE, TO THE CARL JUNCTION, MISSOURI CITY CODE.**

**WHEREAS**, on or about the 25<sup>th</sup> day of October, 2010, after at least fifteen days notice of the time and place had been published in an official paper of general circulation in the City of Carl Junction, Missouri, and in accordance with Section 89.050 of the Revised Statutes of Missouri, the Planning and Zoning Commission of the City of Carl Junction, Missouri held a public hearing at which parties in interest and citizens had an opportunity to be heard in relation to this Ordinance to amend Title IV: Land Use, Chapter 425: Stormwater Management, by adopting EPA Phase II, Stormwater Management Code, August 2010, which creates new Article I. General Provisions, including existing sections 425.010 and 425.020, and creates new Article II. Erosion and Sediment Control, and adds new sections 425.030 to 425.100, inclusive, and creates new Article III. Illicit Discharges, and adds new sections 425.200 to 425.410, inclusive, to the Carl Junction, Missouri City Code; and,

**WHEREAS**, on or about the 25th day of October 2010, after the aforesaid public hearing, the Planning and Zoning Commission of the City of Carl Junction, Missouri made a recommendation concerning the adoption of this Ordinance as hereinabove described; and,

**WHEREAS**, on or about the 2nd day of November, 2010, after a public hearing

duly advertised in accordance with Section 89.050 of the Revised Statutes of Missouri, the Board of Aldermen of the City of Carl Junction, Missouri received and considered the aforesaid recommendation of the Planning and Zoning Commission of the City of Carl Junction, Missouri.

**NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF ALDERMEN OF THE CITY OF CARL JUNCTION, MISSOURI, AS FOLLOWS:**

Section 1. That Title IV: Land Use be, and the same hereby is, amended by amending Chapter 425: Stormwater Management, by adopting EPA Phase II, Stormwater Management Code, August 2010, which creates new Article I. General Provisions, including existing sections 425.010 and 425.020, and creates new Article II. Erosion and Sediment Control, and adds new sections 425.030 to 425.100, inclusive, and creates new Article III. Illicit Discharges, and adds new sections 425.200 to 425.410, inclusive, to the Carl Junction, Missouri City Code, a true and accurate copy of same being attached hereto and incorporated herein as Exhibit "A".

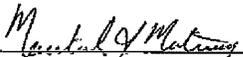
Section 2. That this ordinance shall take effect from and after its passage and approval.

Passed this 2nd day of November, 2010.



Mike Moss, Mayor

ATTEST:

  
Maribeth Matney, City Clerk

CHAPTER 425

EPA Phase II

STORMWATER MANAGEMENT CODE

August 2010

City of Carl Junction, Missouri



## CHAPTER 425: STORMWATER MANAGEMENT

### ARTICLE I. GENERAL PROVISIONS

#### SECTION 425.010: COMPREHENSIVE STORMWATER MANAGEMENT PLAN ADOPTION

#### SECTION 425.020: STORMWATER MANAGEMENT CRITERIA MANUAL, DATED APRIL 2009, ADOPTION

### ARTICLE II. EROSION AND SEDIMENT CONTROL

#### SECTION 425.030: INTRODUCTION AND PURPOSE

During the construction process, soil is highly vulnerable to erosion by wind and water. Eroded soil endangers water resources by reducing water quality and causing the siltation of aquatic habitat for fish and other desirable species. Eroded soil also necessitates repair of sewers and ditches and the dredging of waterways. In addition, clearing and grading during construction cause the loss of native vegetation necessary for terrestrial and aquatic habitat.

As a result, the purpose of this local regulation is to safeguard persons, protect property, and prevent damage to the environment in Carl Junction. This ordinance will also promote the public welfare by guiding, regulating, and controlling the design, construction, use, and maintenance of any development or other activity that disturbs or breaks the topsoil or results in the movement of earth on land in Carl Junction.

#### SECTION 425.040: DEFINITIONS

Unless specifically defined below, words or phrases use in this Chapter shall be interpreted so as to give them the meaning they have in common usage and to give this Chapter it's most reasonable application.

*Certified Contractor:* A person who has received training and is licensed by the City of Carl Junction to inspect and maintain erosion and sediment control practices.

*Clearing:* Any activity that removes the vegetative surface cover.

*Drainage Way:* Any channel that conveys surface runoff throughout the site.

*Erosion Control:* A measure that prevents erosion.

*Erosion and Sediment Control Plan:* A set of plans prepared by or under the direction of a licensed professional engineer. Indicating the specific measures and sequencing to be used to control sediment and erosion on a development site during and after construction.

*Grading:* Excavation of fill of material, including the resulting conditions thereof.

*Perimeter Control:* A barrier that prevents sediment from leaving a site by filtering sediment-laden runoff or diverting it to a sediment trap or basin.

*Phasing:* clearing a parcel of land in distinct phases, with the stabilization of each phase completed before the clearing of the next.

*Sediment Control:* Measures that prevent eroded sediment from leaving the site.

*Site:* A parcel of land or a contiguous combination thereof, where grading work is performed as a single unified operation.

*Site Development Permit:* A permit issued by the City of Carl Junction for the construction or alteration of ground. Improvements and structures for the control of erosion, runoff, and grading.

*Stabilization:* The use of practices that prevent exposed soil from eroding.

*Start of Construction:* The first land-disturbing activity associated with a development, including land preparation such as clearing, grading, and filling; installation of streets and walkways; excavation for basements, footings, piers, or foundations; erection of temporary forms; and installation of accessory buildings such as garages.

*Watercourse:* Any body of water, including, but not limited to lakes, ponds, rivers, streams, and bodies of water delineated by the City of Carl Junction.

*Waterway:* A channel that directs surface runoff to a watercourse or to the public storm drain.

#### SECTION 425.050: PERMITS

A. No person shall be granted a site development permit for land-disturbing activity that would require the uncovering of 1 (one) acre or more without the approval of a Land Disturbance Permit by the Missouri Department of Natural Resources.

B. No site development permit is required for the following activities:

1. Any emergency activity that is immediately necessary for the protection of life, property, or natural resources.
2. Existing nursery and agricultural operations conducted as a permitted main or accessory use.
3. Construction of a dwelling on any single existing lot within the City of Carl Junction that is less than 1 (one) acre or that which is included in an active Land Disturbance Permit.

C. Each application shall bear the name(s) and address(es) of the owner or developer of the site and of any consulting firm retained by the applicant together with the name of the applicant's principal contact at such firm and shall be accompanied by a filing fee.

D. Each application shall include a statement that any land clearing, construction, or development involving the movement of earth shall be in accordance with the Erosion and Sediment Control Plan and that a certified contractor shall be on site on all days when construction or grading activity takes place.

#### SECTION 425.060: REVIEW AND APPROVAL

A. The City of Carl Junction will review each application for a site development permit to determine its conformance with the provisions of this regulation. Within 45 days after receiving an application the city of Carl Junction shall, in writing:

1. Approve the permit application;
2. approve the permit application subject to such reasonable conditions as may be necessary to secure substantially the objectives of this regulation, and issue the permit subject to these conditions; or,
3. Disapprove the permit application, indicating the reason(s) and procedure for submitting a revised application and/or submission.

B. Failure of the City of Carl Junction to act on an original or revised application within 45 days of receipt shall authorize the applicant to proceed in accordance with the plans as filed unless such time is extended by agreement between the applicant and the City of Carl Junction. Pending preparation and approval of a revised plan, development activities shall be allowed to proceed in accordance with conditions established by the City of Carl Junction.

#### SECTION 425.070: EROSION AND SEDIMENT CONTROL PLAN

A. The Erosion and Sediment Control Plan shall include the following:

1. A natural resources map identifying soils, forest cover, and resources protected under other chapters of this code. This map should be at a scale no smaller than 1"=100'.
2. A sequence of construction of the development site, including stripping and clearing; rough grading; construction of utilities, infrastructure, and buildings; and final grading and landscaping. Sequencing shall identify the expected date on which clearing will begin, the estimated duration of exposure of cleared areas, areas of clearing, installation of temporary erosion and sediment control measures, and establishment of permanent vegetation.
3. All erosion and sediment control measures necessary to meet the objectives of this local regulation throughout all phases of construction and after completion of

development of the site. Depending upon the complexity of the project, the drafting of intermediate plans may be required at the close of each season.

4. Seeding mixtures and rates, types of sod, method of seedbed preparation, expected seeding dates, type of line and fertilizer application, and kind and quantity of mulching for both temporary and permanent vegetative control measures.

5. Provisions for maintenance of control facilities, including easements and estimates of the cost of maintenance.

B. Modifications to the plan shall be processed and approved or disapproved in the same manner as Section 425.070 of this regulation, may be authorized by the City of Carl Junction by written authorization to the permittee, and shall include;

1. Major amendments of the erosion and sediment control plan submitted to the City of Carl Junction.

2. Field modifications of a minor nature.

#### SECTION 425.080: DESIGN REQUIREMENTS

A. Grading, erosion control practices, sediment control practices, and waterway crossing shall meet the design criteria set forth in the most recent version of the City of Carl Junction Stormwater Management Criteria, and shall be adequate to prevent transportation of sediment from the site to the satisfaction of the City of Carl Junction. Cut and fill slopes shall be no greater than 2:1, except as approved by the City of Carl Junction to meet other community or environmental objectives.

B. Clearing and grading of natural resources, such as forest and wetlands, shall not be permitted, except when in compliance will all other chapters of this code. Clearing techniques that retain natural, vegetation and drainage patterns, as described in the Carl Junction Stormwater Management Criteria, shall be used to the satisfaction of the City of Carl Junction.

C. Clearing, except that necessary to establish sediment control devices, shall not begin until all sediment control devices have been installed and have been stabilized.

D. Phasing shall be required on all sites disturbing greater than 10 acres, with the size of each phase to be established at plan review and as approved by the City of Carl Junction.

E. Erosion control requirements shall include the following:

1. Soil stabilization shall be completed within thirty (30) days of clearing or inactivity in construction.

2. If seeding or another vegetative erosion control method is used, it shall become established within thirty (30) days or the City of Carl Junction may require the site to be reseeded or a non-vegetative option employed.
3. Special techniques that meet the design criteria outlined in the City of Carl Junction Stormwater Management Criteria on steep slopes or in drainage ways shall be used to ensure stabilization.
4. Techniques shall be employed to prevent the blowing dust or sediment from the site.
5. Techniques that divert upland runoff past disturbed slopes shall be employed.

F. Sediment controls requirements shall include:

1. Settling basins, sediment traps, or tanks and perimeter controls.
2. Settling basins that are designed in a manner that allows adaption to provide long term stormwater management, if required by the City of Carl Junction.
3. Protection of adjacent properties by the use of vegetated buffer strip in combination with perimeter controls.

G. Waterways and watercourse protection requirements shall include:

1. A temporary stream crossing installed and approved by the City of Carl Junction if a wet watercourse will be crossed regularly during construction.
2. Stabilization of the watercourse channel before, during and after any in-channel work.
3. All on-site stormwater conveyance channels designed according to the criteria outlined in the City of Carl Junction Stormwater Management Criteria.
4. Stabilization adequate to prevent erosion located at the outlets of all pipes and paved channels.

H. Construction Site access requirements shall include:

1. A temporary access road provided at all sites.
2. Other measures required by the City of Carl Junction in order to ensure that sediment is not tracked onto public streets by construction vehicles or washed into storm drains.

## SECTION 425.090: INSPECTION

A. The City of Carl Junction or designated agent shall make inspections as hereinafter required and either shall approve that portion of the work completed or shall notify the permittee wherein the work fails to comply with the Erosion and Sediment Control Plan as approved. Plans for grading, stripping, excavating and filling work bearing the stamp of approval of the City of Carl Junction shall be maintained at the site during the progress of the work. To obtain inspections, the permittee shall notify the City of Carl Junction at least 24 hours before the following:

1. Start of construction.
2. Installation of sediment and erosion measures.
3. Completion of site clearing.
4. Completion of rough grading.
5. Completion of final grading.
6. Close of the construction season.
7. Completion of final landscaping.

B. The permittee of his/her agent shall make regular inspections of all control measures in accordance with the inspection schedule outlined on the approved Erosion and Sediment Control Plan(s). The purpose of such inspections will be to determine the overall effectiveness of the control plan and the need for additional control measures. All inspections shall be documented in written form and submitted to the City of Carl Junction at the time interval specified in the approved permit.

C. The City of Carl Junction or its designated agent shall enter the property of the applicant as deemed necessary to make regular inspections to ensure the validity of the reports under paragraph B above.

## SECTION 425.100: ENFORCEMENT

A. Stop-Work Order; Revocation of Permit.

1. In the event that any person holding a site development permit pursuant to this Chapter violates the terms of the permit or implement site development in such a manner as to materially adversely affect the health, welfare, or safety of persons residing or working in the neighborhood or development site so as to be materially detrimental to the public welfare or injurious to property or improvements in the neighborhood, the City of Carl Junction may suspend or revoke the site development permit.

## B. Violations and Penalties.

1. No person shall construct, enlarge, alter, repair, or maintain any grading, excavation, or fill, or cause the same to be done, contrary to or in violation of any terms of this Chapter. Any person violating any of the provisions of this Chapter shall be deemed guilty of a misdemeanor and each day during which any violation of any of the provisions of this Chapter is committed, continued, or permitted, shall constitute a separate offense. Upon conviction of any such violation, such person, partnership, or corporation shall be punished by a fine of not more than \$500.00 for each offense. In addition to any other penalty authorized by this section, any person, partnership, or corporation convicted of violating any of the provisions of this Chapter shall be required to bear the expense of such restoration.

## ARTICLE III: ILLICIT DISCHARGES

### SECTION 425.200: PURPOSE/INTENT

A. The purpose of this Article is to provide for the health, safety, and general welfare of the citizens of Carl Junction through the regulation of non-storm water discharges to the storm drainage system to the maximum extent practicable as required by federal and state law. This Article establishes methods for controlling the introduction of pollutants into the municipal separate storm sewer system (MS4) in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process. The objectives of this Article are:

1. To regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) by stormwater discharges by any user.
2. To prohibit Illicit Connections and Discharges to the municipal separate storm sewer system.
3. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this Article.

### SECTION 425.210: DEFINITIONS

For the purposes of this Chapter, the following shall mean:

*Authorized Enforcement Agency:* Employees or designees of the City of Carl Junction designated to enforce this Chapter.

*Best Management Practices (BMP's):* Schedules of activities, prohibitions of practices, general good house keeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater conveyance systems.

BMP's also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

*Clean Water Act:* The federal Water Pollution Control Act (33 U.S.C. ~1251 et seq.) and any subsequent amendments thereto.

*Construction Activity:* Activities subject to NPDES Construction Permits. Currently these include construction projects resulting in land disturbance of 5 acre or more. Beginning March 2003, NPDES Storm Water Phase II permits will be required for construction projects resulting in land disturbance of 1 acre or more. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.

*Hazardous Materials:* Any material, including any substance waste or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

*Illegal Discharge:* Any direct or indirect non-storm water discharge to the storm drain system, except as exempted in Section 425.155 of this Article.

*Illicit Connections:* An illicit connection is defined as either of the following: Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the storm drain system including but not limited to any conveyance which allow any non-storm water discharge including sewage, process wastewater, and wash water to enter the storm drain system and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency, or, Any drain or conveyance connected from a commercial or industrial land use to the storm drain system which has not been approved by an authorized enforcement agency.

*Industrial Activity:* Activities subject to NPDES Industrial Permits as defined in 40 CFR, Section 122.26(b)(14).

*National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge Permit:* Means a permit issued by EPA (or by a State under authority delegated pursuant to 33 USC~1342(b)) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

*Non-Storm Water Discharge:* Any discharge to the storm drain system that is not composed entirely of storm water.

*Person:* Means any individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting as whether the owner or as the owner's agent.

*Pollutant:* Anything which causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordinances, and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

*Premises:* Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

*Storm Drainage System:* Publicly-owned facilities by which storm water is collected and/or conveyed, including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage channels, reservoirs, and other drainage structures.

*Storm Water:* Any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

*Stormwater Pollution Prevention Plan:* A document which describes the Best Management Practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to Stormwater, Stormwater Conveyance Systems, and/or Receiving Waters to the Maximum Extent Practicable.

*Wastewater:* Any water or other liquid, other than uncontaminated storm water, discharged from a facility.

#### SECTION 425.220: APPLICABILITY

This Article shall apply to all water entering the storm drain system generated on any developed and undeveloped lands unless explicitly exempted by the City of Carl Junction.

#### SECTION 425.230: RESPONSIBILITY OF ADMINISTRATION.

The City of Carl Junction shall administer, implement, and enforce the provisions of this Article. Any powers granted or duties imposed upon the authorized enforcement agency may be delegated in writing by the administrator of the authorized enforcement agency to persons or entities acting in the beneficial interest of or in the employ of the agency.

#### SECTION 425.240: SEVERABILITY

The provisions of this Article are hereby declared to be severable. If any provisions, clause, sentence, or paragraph of this Article or the application thereof to any person, establishment, or

circumstances shall be held invalid, such invalidity shall not affect the other provisions or application of this Article.

#### SECTION 425.250: ULTIMATE RESPONSIBILITY

The standards set forth herein and promulgated pursuant to this Article are minimum standards; therefore this Article does not intend nor imply that compliance by any person will ensure that there will be no contamination, pollution, nor unauthorized discharge of pollutants.

#### SECTION 425.260: DISCHARGE PROHIBITIONS

A. Prohibitions of Illegal Discharges: No person shall discharge or cause to be discharged into the municipal storm drain system or water courses any materials, including but not limited to pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards, other than storm water.

B. The commencement, or conduct or continuance of any illegal discharge to the storm drain system is prohibited except as described as follows:

1. The following discharges are exempt from discharge prohibitions established by this Article; water line flushing or other potable water sources, landscape irrigation or lawn watering, diverted stream flows, rising ground water, ground water infiltration to storm drains, uncontaminated pumped ground water, foundation or footing drains (not including active groundwater dewatering systems), crawl space pumps, air conditioning condensation, springs, non-commercial washing of vehicles, natural riparian habitat or wet-land flows, swimming pools (if dechlorinated – typically less than one (1) PPM chlorine), fire fighting activities, and any other water source not containing pollutants.
2. Discharges specified in writing by the City of Carl Junction as being necessary to protect public health and safety.
3. Dye testing is an allowable discharge, but requires a verbal notification to the City of Carl Junction prior to the test.
4. The prohibition shall not apply to any non-storm water discharge permitted under an NPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the Federal Environmental Protection Agency, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the storm drain system.

C. Prohibitions of Illicit Connections.

1. The construction, use maintenance or continued existence of illicit connections to the storm drain system is prohibited.

2. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
3. A person is considered to be in violation of this Article if the person connects a line conveying sewage to the MS4, or allows such a connection to continue.

#### SECTION 425.270: SUSPENSION OF MS4 ACCESS

##### A. Suspension due to Illicit Discharges in Emergency Situations.

1. The City of Carl Junction may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the MS4 or Waters of the United States. If the violator fails to comply with a suspension order issued in an emergency, the City of Carl Junction may take such steps as deemed necessary to prevent or minimize damage to the MS4 or Waters of the United States, or to minimize danger to persons.

##### B. Suspension due to the Detection of Illicit Discharge.

1. Any person discharging to the MS4 in violation of this Article may have their MS4 access terminated if such termination would abate or reduce an illicit discharge. The City of Carl Junction will notify a violator of the proposed termination of its MS4 access. The violator may petition the City of Carl Junction for a reconsideration and hearing.
2. A person commits an offense if the person reinstates MS4 access to premises terminated pursuant to this section, without the prior approval of the City of Carl Junction.

#### SECTION 425.280: INDUSTRIAL OR CONSTRUCTION ACTIVITY DISCHARGES

Any person subject to an industrial or construction activity NPDES storm water discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the City of Carl Junction prior to the allowing of discharge to the MS4.

#### SECTION 425.290: MONITORING OF DISCHARGES.

A. Applicability. This section applies to all facilities that have storm water discharges associated with industrial activity, including construction activity.

##### B. Access to Facilities.

1. The City of Carl Junction shall be permitted to enter and inspect facilities subject to regulation under this Article as often as may be necessary to determine compliance with this Article. If a discharger has security measures in force which require proper

identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to representatives of the City of Carl Junction.

2. Facility operators shall allow the City of Carl Junction ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under the conditions of an NPDES permit to discharge storm water, and the performance of any additional duties as defined by state and federal law.

3. The City of Carl Junction shall have the right to set up on any permitted facility such devices as are necessary in the opinion of the City of Carl Junction to conduct monitoring and/or sampling of the facilities storm water discharge.

4. The City of Carl Junction has the right to require the discharger to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater flow and quality shall be calibrated to ensure accuracy.

5. Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the operator at the written or oral request of the City of Carl Junction and shall not be replaced. The costs of clearing such access shall be borne by the operator.

6. Unreasonable delays in allowing the City of Carl Junction access to permitted facility is a violation of a storm water discharge permit and of this Article. A person who is the operator of a facility with a NPDES permit to discharge storm water associated with industrial activity commits an offense if the person denies the City of Carl Junction reasonable access to the permitted facility for the purpose of conducting any activity authorized or required by this Article.

7. If the City of Carl Junction has been refused access to any part of the premises from which stormwater is discharges, and he/she is able to demonstrate probable cause to believe that there may be a violation of this Article, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this Article or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the City of Carl Junction may seek issuance of a search warrant from any court of competent jurisdiction.

#### **SECTION 425.300: REQUIREMENTS TO PREVENT, CONTROL AND REDUCE STORM WATER POLLUTANTS BY THE USE OF BEST MANAGEMENT PRACTICES.**

The City of Carl Junction will adopt requirements identifying Best Management Practices for any activity, operation, or facility which may cause or contribute to pollution or contamination of storm water, the storm drain system, or waters of the United States, the owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge or prohibited materials or other wastes into the municipal storm drain

system of watercourses through the use of these structural and non-structural BMP's. Further, any person responsible for a property or premise, which is, or may be, the source of an illicit discharge, may be required to implement, at said person's expense, additional structural and non-structural BMP's to prevent the further discharge of pollutants to the municipal separate storm sewer system. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of storm water associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this section. These BMP's shall be part of a stormwater pollution prevention plan (SWPPP) as necessary for compliance with requirements of the NPDES permit.

#### SECTION 425.310: WATERCOURSE PROTECTION.

Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse within the property free of trash, debris, excessive vegetation, and other obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse. In addition, the owner or lessee shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse.

#### SECTION 425.320: NOTIFICATION OF SPILLS.

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into storm water, the storm drain system, or water of the United States said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials said person shall notify the City of Carl Junction in person or by phone or facsimile no later than the next business day. Notification in person or by phone shall be confirmed by written notice addressed and mailed to the City of Carl Junction within three (3) business days of the phone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three (3) years.

##### A. Notification of Violation.

Whenever the City of Carl Junction finds that a person has violated a prohibition or failed to meet a requirement of this Article, the City of Carl Junction may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

1. The performance of monitoring, analysis, and reporting;
2. The elimination of illicit connections or discharges;

3. The violating discharges, practices, or operations shall cease and desist;
4. The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property; and
5. Payment of a fine to cover administrative and remediation costs; and
6. The implementation of source control or treatment BMP's.

If abatement of a violation and/or restoration of affected property are required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore with the established deadline, the work will be done by a designated agency or a contractor and the expense thereof shall be charged to the violator.

#### SECTION 425.330: APPEAL OF NOTICE OF VIOLATION.

Any person receiving a Notice of Violation may appeal the determination of the City of Carl Junction. The notice of appeal must be received within ten (10) days from the date of the Notice of Violation. Hearing on the appeal before the appropriate authority or his/her designee shall take place within fifteen (15) days from the date of receipt of the notice of appeal. The decision of the municipal authority or their designee shall be final.

#### SECTION 425.340: ENFORCEMENT MEASURES AFTER APPEAL.

If the violation has not been corrected pursuant to the requirements set forth in the Notice of Violation, or, in the event of an appeal, within fifteen (15) days of the decision of the municipal authority upholding the decision of the authorized enforcement agency, then representatives of the authorized enforcement agency shall enter upon the subject private property and are authorized to take any and all measures necessary to abate the violation and/or restore the property. It shall be unlawful for any person, owner, agent of person in possession of any premises to refuse to allow the City of Carl Junction or designated contractor to enter upon the premises for the purposes set forth above.

#### SECTION 425.350: COST OF ABATEMENT OF THE VIOLATION.

Within 30 days after abatement of the violation, the owner of the property will be notified of the cost of abatement, including administrative costs. The property owner may file a written protest objecting to the amount of assessment within 10 days. If the amount due is not paid within a timely manner as determined by the decision of the municipal authority or by the expiration of the time in which to file an appeal, the charges shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment. Any person violating any of the provisions of this article shall become liable to the city by reason of such violation. The liability shall be paid in not more than 12 equal payments. Interest at the rate of percent per annum shall be assessed on the balance beginning on the 1<sup>st</sup> day following the discovery of the violation.

SECTION 425.360: INJUNCTIVE RELIEF.

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this Article. If a person has violated or continues to violate the provisions of this Article, the City of Carl Junction may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.

SECTION 425.370: APPEAL OF NOTICE OF VIOLATION.

In lieu of enforcement proceedings, penalties, and remedies authorized by this Article, the City of Carl Junction may impose upon a violator alternative compensatory actions, such as storm drain stenciling, attendance at compliance workshops, creek clean up, etc.

SECTION 425.380: VIOLATIONS DEEMED A PUBLIC NUISANCE.

In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this Article is a threat to public health, safety, and welfare, and is declared and deemed a nuisance, and may be summarily abated, or restored at the violator's expense, and/or a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.

SECTION 425.390: CRIMINAL PROSECUTION.

Any person that has violated or continues to violate this Article shall be liable to criminal prosecution to the fullest extent of the law, and shall be subject to criminal penalty of \$500.00 dollars per violation per day and/or imprisonment for a period of time not to exceed 30 days.

The City of Carl Junction may recover all attorneys' fees court costs and other expenses associated with enforcement of this Article, including sampling and monitoring expenses.

SECTION 425.400: REMEDIES NOT EXCLUSIVE.

The remedies listed in this Article are not exclusive of any other remedies available under any applicable federal, state, or local law and it is within the discretion of the City of Carl Junction to seek cumulative remedies.

SECTION 425.410: ADOPTION OF ARTICLE.

This Article shall be in full force and effect immediately after its final passage and adoption. All prior ordinances and parts of ordinances in conflict with this Article are hereby repealed.

CHAPTER 425

EPA Phase II

STORMWATER MANAGEMENT CODE

City of Carl Junction, Missouri



Article IV

DRAFT May 1, 2013

## CHAPTER 425: STORMWATER MANAGEMENT

### ARTICLE IV. MAINTENANCE OF PERMANENT STORMWATER CONTROLS

#### SECTION 425.420: INTRODUCTION AND PURPOSE

Increased impervious area and compacted soils due to development can endanger water resources by increasing flow volumes in streams, causing stream degradation and downstream flooding, and by reducing water quality. The function of permanent stormwater controls is to reduce the negative effects of development. Permanent stormwater controls must be maintained to remain effective. The purpose of this ordinance is to safeguard persons, protect property, and prevent damage to the environment in Carl Junction by establishing legal authority to carry out all inspection and work necessary to ensure compliance with this Article.

#### SECTION 425.430: DEFINITIONS

For the purposes of this Chapter, the following shall mean:

*Best Management Practice (BMP):* Structural device, measure, facility or activity that helps to achieve stormwater management control objectives at a designated site.

*Erosion and Sediment Control Plan:* A set of plans prepared by or under the direction of a licensed professional engineer. Indicating the specific measures and sequencing to be used to control sediment and erosion on a development site during and after construction.

*Site:* A parcel of land or a contiguous combination thereof, where grading work is performed as a single unified operation.

*Site Development Permit:* A permit issued by the City of Carl Junction for the construction or alteration of ground. Improvements and structures for the control of erosion, runoff, and grading.

#### SECTION 425.440: APPLICABILITY

This Article shall apply to all entities requiring a Site Development Permit from the City of Carl Junction whose approved plans contain permanent stormwater BMPs, unless explicitly exempted by the City of Carl Junction.

#### SECTION 425.450: RESPONSIBILITY OF ADMINISTRATION.

The City of Carl Junction shall administer, implement, and enforce the provisions of this Article. Any powers granted or duties imposed upon the authorized enforcement agency may be delegated in writing by the administrator of the authorized enforcement agency to persons or entities acting in the beneficial interest of or in the employ of the agency.

SECTION 425.460: SEVERABILITY

The provisions of this Article are hereby declared to be severable. If any provisions, clause, sentence, or paragraph of this Article or the application thereof to any person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provisions or application of this Article.

SECTION 425.470: ULTIMATE RESPONSIBILITY

The standards set forth herein and promulgated pursuant to this Article are minimum standards; therefore this Article does not intend nor imply that compliance by any person will ensure that there will be no increase in flow volumes in streams, stream degradation, downstream flooding, or reduction in water quality.

SECTION 425.480: MAINTENANCE OF BMPS

A. For any site requiring a Site Development Permit, all stormwater BMPs shall be maintained according to the measures outlined in the most recent version of the City of Carl Junction Stormwater Management Criteria, and as per approved plans and any maintenance agreements.

B. The person(s) or organization(s) responsible for maintenance shall be designated in the plans. Options include:

1. Property owner.
2. Homeowner's association, provided that provisions for financing necessary maintenance are included in deed restrictions or other contractual agreements.
3. Other, as approved by City.

C. Any maintenance agreement shall specify responsibilities for financing maintenance.

D. If maintenance activities are not completed in a timely manner, or as specified in the plans, the City of Carl Junction may complete the necessary maintenance at the owner's/operator's expense. The

SECTION 425.490: INSPECTION.

A. Applicability. This section applies to all entities requiring a Site Development Permit from the City of Carl Junction whose approved plans contain permanent stormwater BMPs, unless explicitly exempted by the City of Carl Junction.

B. Access to Facilities.

1. The City of Carl Junction shall be permitted to enter and inspect facilities subject to regulation under this Article as often as may be necessary to determine compliance

with this Article. If a site has security measures in force which require proper identification and clearance before entry into its premises, the site owner shall make the necessary arrangements to allow access to representatives of the City of Carl Junction.

2. Facility operators shall allow the City of Carl Junction ready access to all parts of the premises for the purposes of inspection, examination and copying of records, performance of maintenance work, and the performance of any additional duties as defined by state and federal law.

3. Any temporary or permanent obstruction to safe and easy access to the facility for purposes of inspection or performing maintenance work shall be promptly removed by the operator at the written or oral request of the City of Carl Junction and shall not be replaced. The costs of clearing such access shall be borne by the operator.

4. Unreasonable delays in allowing the City of Carl Junction access to facility are a violation of this Article.

5. If the City of Carl Junction has been refused access to any part of the premises containing permanent stormwater BMPs, and he/she is able to demonstrate probable cause to believe that there may be a violation of this Article, or that there is a need to inspect and/or perform maintenance work as part of a routine inspection program designed to verify compliance with this Article or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the City of Carl Junction may seek issuance of a search warrant from any court of competent jurisdiction.

#### SECTION 425.500: NOTIFICATION OF VIOLATION.

Whenever the City of Carl Junction finds that a person has violated a prohibition or failed to meet a requirement of this Article, the City of Carl Junction may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

1. The performance maintenance work;
2. The violating practices, or operations shall cease and desist;
3. Payment of a fine to cover administrative; and

If maintenance work is required, the notice shall set forth a deadline within which such work must be completed. Said notice shall further advise that, should the violator fail to perform the work with the established deadline, the work will be done by the City, a designated agency or a contractor and the expense thereof shall be charged to the violator.

#### SECTION 425.510: APPEAL OF NOTICE OF VIOLATION.

Any person receiving a Notice of Violation may appeal the determination of the City of Carl Junction. The notice of appeal must be received within ten (10) days from the date of the Notice of Violation. Hearing on the appeal before the appropriate authority or his/her designee shall take place within fifteen (15) days from the date of receipt of the notice of appeal. The decision of the municipal authority or their designee shall be final.

#### SECTION 425.520: ENFORCEMENT MEASURES AFTER APPEAL.

If the violation has not been corrected pursuant to the requirements set forth in the Notice of Violation, or, in the event of an appeal, within fifteen (15) days of the decision of the municipal authority upholding the decision of the authorized enforcement agency, then representatives of the authorized enforcement agency shall enter upon the subject private property and are authorized to take any and all measures necessary to abate the violation and/or restore the property. It shall be unlawful for any person, owner, agent of person in possession of any premises to refuse to allow the City of Carl Junction or designated agent or contractor to enter upon the premises for the purposes set forth above.

#### SECTION 425.530: COST OF ABATEMENT OF THE VIOLATION.

Within 30 days after abatement of the violation, the owner of the property will be notified of the cost of abatement, including administrative costs. The property owner may file a written protest objecting to the amount of assessment within 10 days. If the amount due is not paid within a timely manner, determined by the decision of the municipal authority or by the expiration of the time in which to file an appeal, the charges shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment. Any person violating any of the provisions of this article shall become liable to the city by reason of such violation. The liability shall be paid in not more than 12 equal payments. Interest at the rate of percent per annum shall be assessed on the balance beginning on the 1<sup>st</sup> day following the discovery of the violation.

#### SECTION 425.540: INJUNCTIVE RELIEF.

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this Article. If a person has violated or continues to violate the provisions of this Article, the City of Carl Junction may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.

#### SECTION 425.550: VIOLATIONS DEEMED A PUBLIC NUISANCE.

In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this Article is a threat to public health, safety, and welfare, and is declared and deemed a nuisance, and may be summarily abated, or restored at the violator's expense, and/or a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.

SECTION 425.560: CRIMINAL PROSECUTION.

Any person that has violated or continues to violate this Article shall be liable to criminal prosecution to the fullest extent of the law, and shall be subject to criminal penalty of \$500.00 dollars per violation per day and/or imprisonment for a period of time not to exceed 30 days.

The City of Carl Junction may recover all attorneys' fees court costs and other expenses associated with enforcement of this Article, including sampling and monitoring expenses.

SECTION 425.570: REMEDIES NOT EXCLUSIVE.

The remedies listed in this Article are not exclusive of any other remedies available under any applicable federal, state, or local law and it is within the discretion of the City of Carl Junction to seek cumulative remedies.

SECTION 425.580: ADOPTION OF ARTICLE.

This Article shall be in full force and effect immediately after its final passage and adoption. All prior ordinances and parts of ordinances in conflict with this Article are hereby repealed.

BUILDING INSPECTION REPORT  
CITY OF CARL JUNCTION  
303 NORTH MAIN (417)649-7237

FOOTING INSPECTION

DATE: \_\_\_\_\_ PERMIT #: \_\_\_\_\_

OWNER: \_\_\_\_\_ ADDRESS: \_\_\_\_\_

SETBACKS:

\_\_\_\_\_ FRONT

\_\_\_\_\_ LEFT

\_\_\_\_\_ RIGHT

\_\_\_\_\_ REAR

FOOTINGS:

\_\_\_\_\_ DEPTH

\_\_\_\_\_ WIDTH

\_\_\_\_\_ VERTICAL REBAR

\_\_\_\_\_ RE-BAR SPACING

EROSION/SEDIMENT CONTROLS:

\_\_\_\_\_ CONSTRUCTION ENTRANCE

\_\_\_\_\_ EROSION/SEDIMENT CONTROLS  
IN PLACE AND FUNCTIONING

\_\_\_\_\_ DEBRIS, SEDIMENT, WASTE, OIL, TRASH,  
ETC. ON ROAD AND/OR LEAVING SITE  
MATERIALS, WASTE RECEPTACLES,  
ETC. COVERED/SECURED

NOTES: \_\_\_\_\_

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\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ PASSED INSPECTION

\_\_\_\_\_ FAILED INSPECTION

SIGNED: \_\_\_\_\_

Richard "Bud" Rogers, Building Inspector

BUILDING INSPECTION REPORT  
CITY OF CARL JUNCTION  
303 NORTH MAIN (417)649-7237

FOUNDATION INSPECTION

DATE: \_\_\_\_\_ PERMIT #: \_\_\_\_\_

OWNER: \_\_\_\_\_ ADDRESS: \_\_\_\_\_

TYPE OF FOUNDATION:

BLOCK:

POURED :

\_\_\_\_\_ HEIGHT

\_\_\_\_\_ HEIGHT

\_\_\_\_\_ WIDTH

\_\_\_\_\_ WIDTH

\_\_\_\_\_ WATERPROOFING

\_\_\_\_\_ WATERPROOFING

\_\_\_\_\_ ANCHOR BOLTS

\_\_\_\_\_ ANCHOR BOLTS

\_\_\_\_\_ MASONARY CONNECTORS

\_\_\_\_\_ MASONARY CONNECTORS

EROSION/SEDIMENT CONTROLS:

\_\_\_\_\_ CONSTRUCTION ENTRANCE

\_\_\_\_\_ DEBRIS, SEDIMENT, WASTE, OIL, TRASH,  
ETC. ON ROAD AND/OR LEAVING SITE

\_\_\_\_\_ EROSION/SEDIMENT CONTROLS  
IN PLACE AND FUNCTIONING

\_\_\_\_\_ MATERIALS, WASTE RECEPTACLES,  
ETC. COVERED/SECURED

Notes:

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\_\_\_\_\_ PASSED INSPECTION

\_\_\_\_\_ FAILED INSPECTION

SIGNED: \_\_\_\_\_

Richard "Bud" Rogers, Building Inspector

BUILDING INSPECTION REPORT  
CITY OF CARL JUNCTION  
303 NORTH MAIN (417) 649-7237

FINAL INSPECTION

DATE: \_\_\_\_\_ PERMIT #: \_\_\_\_\_

OWNER: \_\_\_\_\_ ADDRESS: \_\_\_\_\_

ELECTRICAL:

\_\_\_\_\_ ARC FAULT  
\_\_\_\_\_ CORRECT BREAKERS  
\_\_\_\_\_ GCFI  
\_\_\_\_\_ ELEC.BOX LABELED  
\_\_\_\_\_ SMOKE DETECTORS  
\_\_\_\_\_ INTERCONNECTED

WATER HEATER:

\_\_\_\_\_ SHUT OFF VALVE  
\_\_\_\_\_ HEATER LOCATION  
\_\_\_\_\_ PRV & DRAIN LINE  
\_\_\_\_\_ DRAIN PAN IF REQUIRED  
\_\_\_\_\_ CORRECT VENT SIZE IF GAS  
\_\_\_\_\_ ELECTRIC DISCONNECT

PLUMBING:

\_\_\_\_\_ DRAINS WORKING  
\_\_\_\_\_ WATER PRESSURE  
\_\_\_\_\_ SUMP PUMP DISCHARGE  
\_\_\_\_\_ OUTSIDE HYDRANTS

HEAT & AC SYSTEM :

\_\_\_\_\_ CONDENSATION DRAIN  
\_\_\_\_\_ DISCONNECT INSTALLED  
\_\_\_\_\_ SERVICE LIGHT AND OUTLET  
\_\_\_\_\_ FILTERS INSTALLED  
\_\_\_\_\_ CHECK DUCT WORK

EXTERIOR:

\_\_\_\_\_ 95% COMPLETE MINIMUM  
\_\_\_\_\_ DRIVE & SIDEWALKS  
\_\_\_\_\_ GUTTERS & DOWNSPOUTS  
\_\_\_\_\_ HANDRAIL & RAILINGS

STORMWATER CONTROLS:

\_\_\_\_\_ VEGETATION ESTABLISHED  
(MIN. 70% COVERAGE ON 100% OF DISTURBED AREA)  
\_\_\_\_\_ PERMANENT STORMWATER CONTROLS  
IN PLACE AND FUNCTIONING PER APPROVED PLANS

NOTES: \_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_ PASSED INSPECTION  
\_\_\_\_\_ FAILED INSPECTION

SIGNED: \_\_\_\_\_  
Richard "Bud" Rogers, Building Inspector