STORMWATER MANAGEMENT PROGRAM

FOR THE

VILLAGE OF CARBON CLIFF

Prepared By:

IMEG

January 2026

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1 Regulatory Background

The National Pollutant Discharge Elimination System (NPDES) Phase II regulations were published in the Federal Register on December 8, 1999 and are codified in 40 CFR Parts 122 and 123. Phase II was established under the Clean Water Act (CWA) of 1972 to further protect streams, rivers, and other waters from polluted stormwater runoff.

The purpose of the Phase II program is to extend regulatory oversight to small municipal separate storm sewer systems (MS4s) not covered under Phase I, provide a watershed-based framework for stormwater management, and address significant discharges from urbanized areas.

The Illinois Environmental Protection Agency (IEPA) serves as the NPDES permitting authority for the State of Illinois and issues coverage under the Illinois Small MS4 General Permit (ILR40). The most recent permit reissue, effective August 1, 2025, incorporates updated program requirements, including electronic reporting, public posting of Stormwater Management Program (SWMP) documents, and consideration of green infrastructure where feasible.

1.1 Applicability

Small MS4s located within Urbanized Areas as defined by the U.S. Census Bureau are required to comply with the Phase II NPDES program. An Urbanized Area is defined as:

> *"A land area comprising one or more places that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile."*

The Village of Carbon Cliff, Illinois, is listed in the Federal Register as a governmental entity located fully or partially within an urbanized area, making it subject to the Phase II program and coverage under the IEPA MS4 General Permit (ILR40).

1.2 Requirements

Under Phase II and the 2025 IEPA MS4 permit (ILR40), MS4 operators are required to reduce pollutant discharges to the maximum extent practicable (MEP) to protect water quality. Compliance is achieved through the development and implementation of a Stormwater Management Program (SWMP). The SWMP must:

- Specify Best Management Practices (BMPs) for the six required Minimum Control Measures (MCMs) and implement them to the MEP.
- Establish measurable goals to evaluate the effectiveness of each BMP.
- Include implementation schedules or activity frequencies for each BMP.
- Define the responsible party or entity for carrying out each activity.

The six Minimum Control Measures required under Phase II and the 2025 IEPA MS4 permit are:

1. Public Education and Outreach on Stormwater Impacts
2. Public Involvement and Participation
3. Illicit Discharge Detection and Elimination

4. Construction Site Stormwater Runoff Control
5. Post-Construction Stormwater Management in New Development and Redevelopment
6. Pollution Prevention/Good Housekeeping for Municipal Operations

Each MCM must have associated BMPs, measurable goals, and documented responsibilities to ensure compliance with permit requirements.

Coverage under the MS4 program is granted through submission of a Notice of Intent (NOI) to IEPA. The NOI establishes the Village's commitment to implement its SWMP. Copies of the IEPA NOI form and the current General Permit (ILR40) are included in Appendix B of this document.

2 Village Setting and Characteristics

2.1 Setting

The Village of Carbon Cliff is located in western Illinois along Illinois Route 84, approximately five miles east of the Quad Cities. According to the 2020 Census, the village has a population of approximately 1,846 residents.

Carbon Cliff lies within a dendritic drainage system that directs stormwater eastward to the Rock River. Argillo Creek, the primary named waterway, flows west to east through the village before discharging into the Rock River. The village encompasses roughly 2.1 square miles of land. A map showing the village boundary is provided in Figure 1, Appendix A.

2.2 Existing Stormwater Related Programs

The Village of Carbon Cliff has several existing ordinances, policies, and municipal programs that support stormwater management and water quality protection. These programs provide the regulatory and operational foundation for the Village's MS4 Stormwater Management Program and address stormwater runoff, erosion and sediment control, drainage, and flood-related impacts.

2.2.1 Existing Stormwater Related Ordinances

The Village of Carbon Cliff has adopted several ordinances that provide regulatory authority and guidance for stormwater management, erosion control, and water quality protection. The following ordinances are currently in effect:

1. Ordinance No. 2001-62
Title: Storm Water Drainage and Detention, Soil Erosion and Sediment Control Code
Adoption Date: December 26, 2001
Summary:
- Establishes requirements for stormwater drainage and detention.
- Provides standards for erosion and sediment control associated with development and redevelopment activities.

2. Ordinance No. 2003-43

Title: RICSWCD USDA NRCS
Adoption Date: December 16, 2003
Summary:

- Enhances coordination between the Village, Rock Island County Soil and Water Conservation District (RICSWCD), and the USDA Natural Resources Conservation Service (NRCS).
- Promotes consistent application of soil erosion and sediment control practices across projects within the Village.

3. Ordinance No. 2012-28
Title: Requirements for Development in Steep Slope and Ravine Areas
Adoption Date: June 7, 2012
Summary:

- Regulates development and land disturbance on steep slopes, ravines, and related areas.
- Minimizes erosion, protects drainageways, and reduces stormwater runoff impacts.

4. Ordinance No. 2017-24
Title: Amendment to the Storm Water Drainage and Detention, Soil Erosion and Sediment Control Code
Adoption Date: October 16, 2017
Summary:

- Amends Ordinance No. 2001-62 to update stormwater drainage and detention requirements.
- Incorporates specific flood reduction and erosion control projects into the Village's stormwater code

All relevant ordinances referenced above can be found in Appendices C – F.

2.2.2 Municipal Operations and Public Works Operations

In addition to its regulatory ordinances, the Village of Carbon Cliff Public Works Department implements operational programs that contribute to stormwater quality protection. These programs focus on proper storage, handling, and maintenance practices to minimize potential pollutants from municipal operations. Key operational practices include:

- Road Salt Storage and Use: Road salt is stored in a covered facility to prevent exposure to precipitation. Salt application is limited to critical areas, including steep slopes and high-traffic intersections, to reduce the potential for salt runoff into storm drains and local waterways.

- Fertilizer and Pesticide Storage: All fertilizers, herbicides, and pesticides used by the Village are stored indoors in a secure, weather-protected area to prevent accidental runoff or contamination of storm water.

- Routine Inspections and Maintenance: Public Works staff conduct weekly inspections of municipal properties, streets, and stormwater infrastructure to identify maintenance

needs, debris accumulation, or potential pollutant sources. These inspections help ensure that storm drains, catch basins, and other municipal facilities are properly maintained and function effectively to protect water quality.

Through these operational programs, the Village minimizes the potential for pollutant discharge from municipal activities and demonstrates ongoing commitment to the goals of the MS4 program.

2.3 Existing Green Infrastructure

The Village has incorporated green infrastructure practices into its roadway improvements through the installation of permeable pavement systems. The pavers were implemented to allow stormwater to infiltrate through the surface and underlying stone base, reducing surface runoff, promoting groundwater recharge, and decreasing pollutant transport to the storm sewer system.

Permeable pavers have been implemented at the following locations:

1st Street, from 2nd Avenue to 1st Avenue

3rd Street, from 2nd Avenue to 1st Street

Denhardt Street, from 3rd Street to 4th Street

4th Street, from 2nd Avenue westward

These installations provide localized stormwater management by reducing impervious surface runoff volumes and helping mitigate localized flooding concerns. The Village will continue to maintain these permeable pavement systems through routine inspection, vacuum sweeping, and sediment removal to ensure long-term functionality. Future roadway projects will evaluate opportunities to incorporate additional green infrastructure practices where feasible to further reduce stormwater impacts and improve water quality.

2.4 Total Maximum Daily Loads (TMDLs)

A Total Maximum Daily Load (TMDL) represents the maximum amount of a specific pollutant that a waterbody can receive while still meeting water quality standards. TMDLs are established for impaired waters to guide pollutant reduction efforts and ensure compliance with the Clean Water Act.

Currently, there are no TMDLs developed for any waterbodies within the Village of Carbon Cliff. As a result, the Village's Stormwater Management Program (SWMP) focuses on implementing best management practices (BMPs) to reduce pollutants in stormwater runoff across all municipal areas and maintain water quality in local streams, including Argillo Creek and its tributaries.

The Village will continue to monitor regulatory updates from the Illinois Environmental Protection Agency (IEPA) regarding TMDL development. Should any TMDLs be established in

the future, the SWMP will be updated to include specific pollutant reduction strategies, measurable goals, and implementation schedules to comply with the new requirements.

3 Minimum Control Measures

The Minimum Control Measures (MCMs) identified in this Stormwater Management Program (SWMP) are designed to reduce the discharge of pollutants from the Village of Carbon Cliff's MS4 to the maximum extent practicable (MEP). Implementation of these MCMs helps protect water quality and ensures compliance with the Illinois Pollution Control Board Rules and Regulations as well as the Clean Water Act.

This SWMP addresses each MCM through the development and application of Best Management Practices (BMPs), measurable goals, implementation schedules, and responsible parties, all of which work together to minimize pollutant runoff and support sustainable stormwater management throughout the Village.

3.1 Public Education and Outreach on Stormwater Impacts

To comply with the Public Education and Outreach control measure, the Village will implement new Best Management Practices (BMPs) that aim to inform the public of the importance of stormwater management and actions they can take to reduce pollutants. The BMPs to be implemented are as follows:

- A.1 - Educational Materials: Provide stormwater information in newsletters, water bill inserts, or similar communications to reach all households in the community. Topics may include proper disposal of hazardous household materials, lawn and garden management, water conservation, waste management, and Low Impact Development (LID) practices.

- A.6 - Attendance at Community Events: Participate in at least two community events per year, such as the Rock Island County Soil and Water Conservation District Stormwater Conference and the Illinois Municipal League Conference. Educational materials and discussions at these events will focus on stormwater pollution and BMPs, and attendance will be recorded.

Measurable goals and timelines pertaining to the BMPs listed for implementation above can be seen in the summary table below.

Table 1: MCM 1 Public Education and Outreach BMPs Summary

Best Management Practice (BMP)	Measurable Goal	Frequency / Schedule	Responsible Party
A.1 Distributed Paper Mail	Distribute storm water educational content covering BMPs, water conservation, disposal of hazardous household materials, lawn and garden managmenet, waste management, and Low Impact Development (LID)	Quarterly	Village Director / Designee
A.6 Other Public Education	Attend at least two events per year (e.g., Rock Island County SWCD Stormwater Conference, Illinois Municipal League Conference) and document educational topics and attendance.	At least twice per year	Village Director / Designee

3.2 Public Involvement and Participation

To comply with the Public Involvement and Participation control measure, the Village will implement Best Management Practices (BMPs that provide opportunities for the public to participate in the development, review, and implementation of the Village's stormwater management program. These BMPs are intended to encourage community involvement, promote transparency, and ensure public awareness of stormwater-related activities. The BMPs to be implemented are as follows:

- B.4 - Public Access to Stormwater Information**:** The Village will make the Stormwater Management Plan available to the public through the Village website. Stormwater-related documents, reports, and updates will be posted as appropriate to allow residents easy access to information regarding stormwater management activities and requirements.

- B. 7 Public Meetings, Review, and Comment Opportunities: The Village will hold publicly noticed meetings to provide opportunities for public discussion, review, and comment on stormwater management plans, reports, and proposed stormwater projects. These meetings may be held annually or in conjunction with proposed stormwater projects. Public notices will be issued in accordance with applicable public notice requirements. Attendance, meeting notices, and public comments received will be documented and considered during the planning and implementation process.

All public involvement and participation activities will be documented, including meeting notices, attendance records, and records of public comments. Measurable goals and timelines associated with these BMPs are provided in the summary table below.

Table 2 - MCM 2 Public Involvement and Participation BMPs Summary

Best Management Practice (BMP)	Measurable Goal	Frequency / Schedule	Responsible Party
B.4 Public Hearing	Distribute storm water educational content covering BMPs, water conservation, disposal of hazardous household materials, lawn and garden managmenet, waste management, and Low Impact Development (LID)	Annually	Village Director / Designee
B.7 Other Public Involvement	Attend at least two events per year (e.g., Rock Island County SWCD Stormwater Conference, Illinois Municipal League Conference) and document educational topics and attendance.	At least twice per year	Village Director / Designee

3.3 Illicit Discharge Detection and Elimination

To comply with the Illicit Discharge Detection and Elimination (IDDE) control measure, the Village will implement Best Management Practices (BMPs) designed to detect, eliminate, and prevent illicit discharges to the Municipal Separate Storm Sewer System (MS4). These BMPs establish procedures for mapping, regulatory control, detection, investigation, enforcement, and program evaluation. The BMPs to be implemented are as follows:

- C.1 –Sewer Map Preparation: The Village will maintain and update a storm sewer system map that identifies all known storm sewer outfalls, pipes, conveyances, and receiving waters. The map will be reviewed and updated regularly and as needed to ensure all known outfalls, conveyances, and receiving waters are accurately identified.

- C.2 – Regulatory Control Program: The Village will implement and enforce a local Illicit Discharge Detection and Elimination (IDDE) ordinance that prohibits and eliminates illicit discharges to the MS4. The ordinance will be enforced as needed and reviewed at least once every five years to ensure continued effectiveness.

- C.3 – Detection and Elimination Prioritization Plan: The Village will develop and implement an IDDE inspection and investigation prioritization plan based on risk factors such as land use, discharge history, and receiving waters. The plan will be used annually to focus IDDE activities on higher-risk areas first.

- C.4 – Illicit Discharge Tracing Procedures: The Village will investigate illicit discharges through field inspections, upstream tracing, and coordination with applicable departments or agencies. All reported or observed suspected illicit discharges will be investigated as they occur, and findings will be documented.

- C.5 – Illicit Source Removal Procedures: The Village will require the elimination of confirmed illicit discharges through enforcement actions and corrective measures. Follow-up inspections will be conducted as necessary to ensure all sources are eliminated in a timely manner. All findings and corrective actions will be documented for Village records.

- C.6 – Program Evaluation and Assessment: The Village will conduct an annual evaluation of IDDE program implementation and effectiveness and make revisions as

necessary. Program effectiveness and any changes made will be documented for inclusion in the Annual Report.

- C.7 – Visual Dry Weather Screenings: The Village will perform visual inspections of stormwater outfalls during dry weather conditions to identify potential illicit discharges. All outfalls will be inspected at least once per year, and inspection findings will be documented.

- C.9 – Public Notification: The Village will provide a public mechanism for reporting suspected illicit discharges. This will include maintaining a public hotline through Village staff voicemail and/or an online reporting form to receive reports year-round. All reports received will be reviewed in a timely manner, investigated as appropriate, and documented, including the outcome and any corrective actions taken.

- C.10 – Other Illicit Discharge Controls (Staff Training): The Village will provide Illicit Discharge Detection and Elimination (IDDE) training to applicable staff at least once per year during the permit term to support internal coordination and effective IDDE implementation. Training materials and content will be updated as needed, and training completion will be documented.

Measurable goals and timelines associated with these BMPs are provided in the summary table below.

Table 3 - MCM 3 Illicit Discharge Detection and Elimination BMPs Summary

Best Management Practice (BMP)	Measurable Goal	Frequency / Schedule	Responsible Party
C.1 Sewer Map Preparation	Maintain and regularly update a storm sewer map identifying all known outfalls, conveyances, and receiving waters	Annually	Village Director / Designee
C.2 Regulatory Control Program	Implement and enforce an IDDE ordinance prohibiting illicit discharges; review the ordinance at least once every five years	Every 5 Years / As Needed	Village Director / Designee
C.3 Detection/Elimination Prioritization Plan	Develop and implement a risk-based IDDE inspection and investigation plan focusing on high-risk areas	Annually / As Needed	Village Director / Public Works Staff
C.4 Illicit Discharge Tracing Procedures	Investigate suspected illicit discharges through inspections and upstream tracing; document all findings	Annually / As Needed	Village Director / Public Works Staff
C.5 Illicit Source Removal Procedures	Require elimination of confirmed illicit discharges through enforement and corrective actions; document enforcement and conduct follow-up inspections	As Needed	Village Director / Public Works Staff
C.6 Program Evaluation and Assessment	Conduct annual evaluations of IDDE program effectiveness and document revisions in the annual report	Annually	Village Director / Designee
C.7 Visual Dry Weather Screenings	Perform annual visual inspections of all storm water outfalls during dry weather and document results	Annually / As Needed	Village Director / Public Works Staff
C.9 Public Notification	Provide a public hotline and/or online reporting form to receive and investigate suspected illicit discharge reports year-round	Year-Round	Village Director / Designee
C.10 Other Illicit Discharge Controls	Provide annual IDDE training to applicable staff to support program implementation and internal coordination	Annually / As Needed	Village Director / Public Works Staff

3.4 Construction Site Stormwater Runoff Control

To comply with the Construction Site Runoff Control minimum control measure, the Village will implement Best Management Practices (BMPs) to reduce pollutants in stormwater runoff from construction activities. These BMPs focus on regulatory controls, erosion and sediment control requirements, plan review, public input, and inspection and enforcement procedures. The BMPs to be implemented are as follows:

- D.1 – Regulatory Control Program: The Village will enforce existing and implement new local ordinances and codes requiring construction site operations to comply with erosion and sediment control requirements in accordance with Illinois EPA requirements. These ordinances will be enforced as needed and reviewed at least once every five years.

- D.2 – Erosion and Sediment Control BMPs: The Village will require the use of appropriate erosion and sediment control BMPs at construction sites to reduce sediment discharges to the MS4.

- D.4 – Site Plan Review Procedures: The Village will review construction site plans prior to project approval to verify compliance with erosion, sediment, and stormwater control requirements.

- D.5 – Public Information Handling Procedures: The Village will provide a process to receive, document, and respond to public complaints related to construction site runoff. An online reporting form will be maintained to receive complaints as they are reported, and responses and outcomes will be documented.

- D.6 – Site Inspection and Enforcement Procedures: The Village will conduct inspections of construction sites to verify compliance with erosion and sediment control requirements. Inspections may be performed by Village staff or by qualified third-party inspectors or consultants retained by the Village. Enforcement actions will be taken as necessary.

Measurable goals and timelines associated with these BMPs are provided in the summary table below.

Table 4 - MCM 4 Construction Site Stormwater Runoff Control BMPs Summary

Best Management Practice (BMP)		Measurable Goal	Frequency / Schedule	Responsible Party
D.1	Regulatory Control Program	Enforce and update local ordinances when needed to require construction sites to comply with erosion and sediment control	Every 5 Years / As Needed	Village Director / Designee
D.2	Erosion and Sediment Control BMPs	Ensure construction sites implement required erosion and sediment control BMPs to reduce sediment discharges	As Needed	Village Director / Designee
D.4	Illicit Discharge Tracing Procedures	Review construction site plans prior to approval to verify compliance with erosion, sediment, and storm water control requirements	As Needed	Village Director / Retained Third-Party Consultant
D.5	Public Information Handling Procedures	Provide a process for receiving, documenting, and responding to public complaints on construction related runoff	As Needed	Village Director / Designee
D.6	Site Inspection and Enforcement Procedures	Conduct regular inspections of construction sites to enforce compliance with local and state regulations	As Needed	Village Director / Retained Third-Party Consultant

3.5 Post-Construction Stormwater Management in New Development and Redevelopment

To comply with the Post-Construction Stormwater Management minimum control measure, the Village will implement Best Management Practices (BMPs) to reduce pollutants in stormwater runoff from new development and redevelopment projects. These BMPs focus on regulatory controls, BMP design review, inspections, and long-term operation and maintenance. The BMPs to be implemented are as follows:

- E.2 – Regulatory Control Program: The Village will implement and enforce a post-construction stormwater management ordinance for new development and redevelopment projects to control runoff and pollutant discharges.

- E.3 – Long-Term Operation and Maintenance Procedures: The Village will require long-term operation and maintenance of post-construction stormwater BMPs by property owners with municipal oversight to ensure proper functioning and effectiveness.

- E.4 – Pre-Construction Review of BMP Designs: The Village will review pre-construction stormwater BMP designs during the project approval process to ensure compliance with state and local requirements.

- E.5 – Site Inspections During Construction: The Village will conduct construction site inspections, as applicable, to verify proper installation of approved stormwater BMPs. Inspections will be completed by qualified Village staff or third-party consultants retained by the Village.

- E.6 – Post-Construction Inspections: The Village will inspect completed post-construction stormwater BMPs to verify proper operation and maintenance. Inspections will be completed by qualified Village staff or third-party consultants retained by the Village. Newly constructed BMPs will be inspected upon completion and at least once per year thereafter.

Measurable goals and timelines associated with these BMPs are provided in the summary table below.

Table 5 - MCM 5 Post-Construction Stormwater Management BMPs Summary

Best Management Practice (BMP)		Measurable Goal	Frequency / Schedule	Responsible Party
E.2	Regulatory Control Program	Implement and enforce a post-construction storm water ordinance for new development and redevelopment to control runoff and pollutants.	As Needed	Village Director / Designee
E.3	Long Term O & M Procedures	Require property owners to maintain post-construction storm water BMPs with municipal oversight to ensure proper function and effectiveness.	Annually	Village Director / Designee
E.4	Pre-Construction Review of BMP Designs	Review pre-construction storm water BMP designs during project approval to ensure compliance with state and local requirements.	As Needed	Village Director / Retained Third-Party Consultant
E.5	Site Inspections During Construction	Conduct construction site inspections to verify installation of approved storm water BMPs. Inspection to be completed by qualified staff or third-party consultants	As Needed	Village Director / Retained Third-Party Consultant
E.6	Post-Construction Inspections	Inspect completed storm water BMPs to verify operation and maintenance; newly constructed BMPs inspected upon completion and annually thereafter.	Annually / As Needed	Village Director / Retained Third-Party Consultant

3.6 Pollution Prevention/Good Housekeeping for Municipal Operations

To comply with the Pollution Prevention/Good Housekeeping minimum control measure, the Village will implement Best Management Practices (BMPs) to reduce pollutants in stormwater runoff from municipal operations, facilities, and activities. These BMPs focus on staff training, routine inspections, proper maintenance, operational controls, and waste management. The BMPs to be implemented are as follows:

- F.1 – Employee Training Program: The Village will provide general stormwater pollution prevention training to municipal employees whose job duties may impact stormwater

quality. Training will cover applicable MS4 permit requirements and relevant components of the Stormwater Management Plan. Training will be updated as necessary and documented.

- F.2 – Inspection and Maintenance Program: The Village will inspect and maintain municipal facilities, infrastructure, and equipment to reduce the potential for stormwater pollution. Municipal facilities and operations will be inspected at least annually, and inspection results will be documented.

- F.3 – Municipal Operations Stormwater Control: The Village will implement stormwater pollution prevention practices during routine municipal operations to minimize pollutant discharges to the MS4 and receiving waters.

- F.4 – Municipal Operations Waste Disposal: The Village will ensure proper handling, storage, and disposal of wastes generated from municipal operations to prevent stormwater contamination.

Measurable goals and timelines associated with these BMPs are provided in the summary table below.

Table 6 - MCM 6 Pollution Prevention/Good Housekeeping for Municipal Operations BMPs Summary

Best Management Practice (BMP)		Measurable Goal	Frequency / Schedule	Responsible Party
F.1	Employee Training Program	Provide storm water pollution prevention training to municipal employees covering MS4 requirements and relevant components of the Storm Water Management Plan.	Annually / As Needed	Village Director / Designee
F.2	Inspection and Maintenance Program	Inspect and maintain municipal facilities, infrastructure, and equipment to reduce storm water pollution potential.	Annually / As Needed	Village Director / Designee
F.3	Municipal Operations Storm Water Control	Implement storm water pollution prevention practices during routine municipal operations to minimize discharges to the MS4 and receiving waters.	Annually / As Needed	Village Director / Designee
F.4	Municipal Operations Waste Disposal	Ensure proper handling, storage, and disposal of municipal wastes to prevent storm water contamination.	Year-Round	Village Director / Designee

4 Measurable Goals & Implementation Schedule Summary

The Village of Carbon Cliff's Stormwater Management Program (SWMP) includes a detailed implementation schedule for all Best Management Practices (BMPs) required under the NPDES Phase II MS4 permit. Certain internal preparation tasks—such as employee training, document preparation, ordinance review, and coordination with consultants—are scheduled to begin on March 1, 2026. These activities are intended to ensure that Village staff and designees are fully prepared and that all administrative requirements are completed in advance of operational implementation. Actual implementation of BMPs that directly impact stormwater management, including inspections, illicit discharge detection, municipal operations controls, and post-construction stormwater management, will begin on June 1, 2026, or later. Responsibilities for each BMP are clearly assigned to the Village Director, public works staff, and retained third-

party consultants to ensure accountability, proper documentation, and effective execution. This phased approach ensures that all preparatory steps are completed before operational activities commence, supporting compliance with the MS4 permit and protecting local water quality. A complete list of each BMP and its associated implementation date can be found in Appendix G.

5 Administration

This Stormwater Management Program (SWMP) will be administered by the Village's Director. The Village Director will update the SWMP as required and maintain all related records. Documentation of training, inspections, and SWMP updates will be maintained in Appendix H of this document. All relevant records will be retained for a minimum of three years.

Appendix A

Figures

VILLAGE OF CARBON CLIFF ILLINOIS

Aerial Map

N W E S

City of Silvis

City of East Moline

92 5 84

BARSTOW RD
BRAKESHOE CT
5TH ST
172ND ST
169TH ST
10TH AVE
SINCLAIR BLVD
INDUSTRIAL DR
1ST AVE
1 1/2 AVE
17TH ST PARK
2ND AVE
4TH AVE
5TH AVE
6TH AVE
16TH ST
7TH AVE
17TH ST
10TH AVE A CT
16TH ST CT
CROSSTOWN AVE
Mansur Wood Park
REBECCA LN
REBECCA DR
KOHRS DR
JOHNS PL
REBECCA PL
CRAMPTON AVE
REBECCA AVE
Tot Park
MANSUR RD
MANSUR AVE
MANSUR ST
ALLEN ST
CHARLES ST
MANSUR AVE
PLEASANT AVE
VALLEY VIEW ST
VALLEY VIEW DR
GREENWOOD AVE
CHERRY CT
ORCHARD CT
CLIFF CT
CLIFF DR
JAY ST
LILY AVE
Carbon Cliff Park
PARK AVE
STATE ST
1ST ST
2ND ST
3RD ST
DENMARK AVE
4TH ST
5TH ST
6TH ST
MERRY OAKS LN
MERRY OAKS CT
TWIN OAKS CT
10TH ST
OLD COLONA RD
FRONTAGE RD
KINGSBURY DR
OAKWOOD CT
LINDEN WOOD AVE
WOODLAWN AVE
MEGAN DR
VILLA PINES CIR
AVE OF THE CITIES
COLONA RD
FRIENDSHIP FARM RD
34TH AVE
36TH AVE
JOHN DEERE RD
Memorial Garden Cemetery
TPC DEERE RUN GOLF COURSE
City of Silvis
Rock Island County
Henry County
Rock River

Village Limits
Other Corporate Limits
County Boundary
Roads

Map prepared by:
Bi-State Regional Commission
June 2020

Sources:
Corporate Limits - RICO GIS (2020)
Other features - Bi-State Regional Commission

Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Bi-State Regional Commission disclaims all responsibility for the accuracy or completeness of the data shown hereon.

0 0.125 0.25 0.5 Miles

Appendix B

IEPA Notice of Intent (NOI) and General Permit

Illinois Environmental Protection Agency

2520 West Iles Avenue • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Notice of Intent for New or Renewal of General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4's)

Part I. Municipal (MS4) Contact Information

1. Name of Municipality: Village of Carbon Cliff MS4 #: ILR400307

   Population (based on 2020 census): 1864

2. MS4 Mailing Address: 1001 Mansur Avenue City: Carbon Cliff , IL Zip: 61239

3. Primary MS4 Contact Person (Authorized Representative for MS4 Permit)

   Name: Nick Gottwalt Title: Village Director

   Phone: 309-796-6045 Email Address: n.gottwalt@carboncliff.com

General Information

4. Latitude and Longitude at approximate geographical center of MS4 for which you are requesting authorization to discharge:

   Latitude: 41 (Degrees) 29 (Minutes) 32.99 (Seconds) Longitude: -90 (Degrees) 23 (Minutes) 27.59 (Seconds)

5. Community Type: Village Other:

6. Name(s) of governmental entity(ies) in which MS4 is located:

City/Village	Township	County
Carbon Cliff	Hampton	Rock Island

7. Area of land within your MS4 in square miles: 2.095

8. Percent of MS4 served by combined sewer: 0 Percent of MS4 served by separate sewer: 100

Impaired Waters

The most recent 303(d) list may be found at https://epa.illinois.gov/topics/water-quality/watershed-management/tmdls/303d-list.html. Information regarding TMDLs may be found at https://epa.illinois.gov/topics/water-quality/watershed-management/tmdls.html.

9.

Name(s) of known receiving waters (in and within 3 miles of MS4 area)	Impairment listed on 303d List or TMDL?
Argillo Creek	◯ Yes ☑ No
Rock River IL_P-04	☑ Yes ◯ No

9a. If impaired, which potential causes and source?

Causes: Fecal Coliform, Mercury, PCBs Source: Urban stormwater runoff

9b. Are the receiving waterbodies included in an approved TMDL or alternate water quality management plan? ◯ Yes ☑ No

9c. Is the MS4 community included in the chloride variance? ◯ Yes ☑ No

Program Responsibility

10. **Shared Responsibility**

Is your MS4 responsible for any permit requirements of another MS4 community? ◯ Yes ☑ No

Does your MS4 Community rely on another MS4 to satisfy any of the permit requirements? ◯ Yes ☑ No

11. **Co-Permittee**

Is your MS4 Community a Co-Permittee with another MS4 Community? ◯ Yes ⊘ No

12. Other contacts responsible for implementation or coordination of Stormwater Management Program

Name: _____ Title: _____

Phone: _____ Email: _____

Area of Responsibility: _____

Part II. Best Management Practices (include shared responsibilities) which have been implemented or are proposed to be implemented in the MS4 area

A. Public Education and Outreach

Approximate date first implemented: 3/1/2026

Frequency of each BMP program: Annual

Qualifying Local Programs

Participation in regional stormwater public education efforts coordinated by the Bi-State Regional Commission, including use of shared outreach materials from the “Every Drop Counts” campaign.

Measurable Goals (include shared responsibilities)

☑ A.1 Distributed Paper Material

Brief Description of BMP

The Village will distribute stormwater education materials to residents, including information on the impacts of stormwater discharges on local waterbodies and actions the public can take to reduce pollutants. Materials may include inserts with water bills and other written outreach materials. Educational efforts will be supplemented through participation in regional stormwater education events and trainings.

Measurable Goals, including frequencies

Distribute stormwater education materials to residents at least once per quarter. Participate in and document attendance at a minimum of two stormwater-related education or outreach events annually. Maintain records of distributed materials and event participation for annual reporting.

Milestones

Year 1:	Revise Storm water Management Program Plan to include formal public education and outreach procedures and measurable goals. Develop and distribute initial storm water education materials.
Year 2:	Continue annual distribution of storm water education materials and participate in at least two documented storm water education or outreach events.
Year 3:	Continue annual distribution of storm water education materials and participate in at least two documented storm water education or outreach events.
Year 4:	Continue annual distribution of storm water education materials and participate in at least two documented storm water education or outreach events.
Year 5:	Continue annual distribution of storm water education materials and participate in at least two documented storm water education or outreach events.

Additional Info

BMP Number: _____

☐ A.2 Speaking Engagement

☐ A.3 Public Service Announcement

☐ A.4 Community Event

☐ A.5 Classroom Education Material

☑ A.6 Other Public Education

Brief Description of BMP

The Village will participate in at least two educational events each year, such as the Rock Island Soil and Water Conservation District Stormwater Conference and the Illinois Municipal League Conference.

Measurable Goals, including frequencies

The Village will attend at least two educational events or conferences each year and will document the topics discussed, ideas shared, and attendance.

Milestones

Year 1: Continue to attend a minimum of two educational events or conferences.

Year 2: Continue to attend a minimum of two educational events or conferences.

Year 3: Continue to attend a minimum of two educational events or conferences.

Year 4: Continue to attend a minimum of two educational events or conferences.

Year 5: Continue to attend a minimum of two educational events or conferences.

Additional Info

BMP Number: _____

B. Public Participation/Involvement

Approximate date first implemented: 3/1/2026 Frequency of each BMP program: Annual

Qualifying Local Programs

Village of Carbon Cliff public participation process, including publicly noticed Village Board and committee meetings, posting of the Storm water Management Program Plan (SMPP) on the Village website for public review, and coordination with local and regional organizations for community involvement activities.

Measurable Goals (include shared responsibilities)

☐ B.2 Educational Volunteer

☐ B.3 Stakeholder Meeting

☑ B.4 Public Hearing

Brief Description of BMP

The Village will provide opportunities for public participation in the development and implementation of its storm water management program. This includes publicly noticed meetings where storm water topics are discussed, making the Storm water Management Program Plan available for public review, and encouraging public input on storm water-related activities and plans.

Measurable Goals, including frequencies

Conduct at least one publicly noticed meeting or hearing annually that includes storm water management topics. Maintain the Storm water Management Program Plan on the Village website for public access. Provide opportunities for public review and comment on storm water plans and reports. Document public participation activities and include them in the Annual Report.

Milestones

Year 1: Post the Storm water Management Program Plan on the Village website for public review. Schedule and conduct a publicly noticed meeting that includes storm water management topics.

Year 2: Continue annual public participation opportunities related to storm water management and encourage public input on the Storm Water Management Plan.

Year 3: Continue annual public participation opportunities related to storm water management and encourage public input on the Storm Water Management Plan.

Year 4: Continue annual public participation opportunities related to storm water management and encourage public input on the Storm Water Management Plan.

Year 5: Continue annual public participation opportunities and evaluate the effectiveness of public involvement activities.

Additional Info

BMP Number: _____

☐ B.5 Volunteer Monitoring

☐ B.6. Program Involvement

☑ B.7 Other Public Involvement

Brief Description of BMP

The Village will make the Storm Water Management Plan available to the public via the Village Website. Notification of its posting will be included in the first applicable education material distribution.

Measurable Goals, including frequencies

The Storm Water Management Plan will be updated annually with any changes.

Milestones

Year 1: Upload the Storm Water Management Plan to the Village website and include notice of its posting in first applicable educational material distribution.

Year 2: Update the SWMP annually with any changes.

Year 3: Update the SWMP annually with any changes.

Year 4: Update the SWMP annually with any changes.

Year 5: Update the SWMP annually with any changes.

Additional Info

BMP Number: _____

C. Illicit Discharge Detection and Elimination

Approximate date first implemented: 3/1/2026 Frequency of each BMP program: Annual

Qualifying Local Programs

☑ C.1 Sewer Map Preparation

Brief Description of BMP

Maintain and update a storm sewer system map showing all known outfalls, pipes, and receiving waters.

Measurable Goals (include shared responsibilities)

Measurable Goals, including frequencies

The Village will review and update the storm sewer system map to ensure all known outfalls, conveyances, and receiving waters are accurately identified. The map will be reviewed annually and updated as system changes occur or new information becomes available.

Milestones

Year 1: Review existing storm sewer system map and identify missing or outdated information, including outfalls and receiving waters.

Year 2: Complete updates to the storm sewer system map to include all known outfalls, pipes, and receiving waters.

Year 3: Conduct an annual review of the storm sewer system map and update as needed based on system modifications or field verification.

Year 4: Continue annual review and update of the storm sewer system map; verify accuracy during dry weather inspections or maintenance activities.

Year 5: Continue annual review and update of the storm sewer system map; verify accuracy during dry weather inspections or maintenance activities.

Additional Info

BMP Number: _____

☑ C.2 Regulatory Control Program

Brief Description of BMP

Implement and enforce a local IDDE ordinance to prohibit and eliminate illicit discharges to the MS4.

Measurable Goals, including frequencies

Review the IDDE ordinance at least once every five years and enforce as needed when illicit discharges are identified.

Milestones

Year 1: Review existing IDDE ordinance for IL EPA compliance.

Year 2: Update ordinance if necessary and adopt revisions.

Year 3: Implement enforcement procedures as needed

Year 4: Continue enforcement and documentation

Year 5: Continue enforcement and documentation & review effectiveness

Additional Info

BMP Number: _____

☑ C.3 Detection/Elimination Prioritization Plan

Brief Description of BMP

Prioritize IDDE inspections and investigations based on risk factors such as land use, discharge history, and receiving waters.

Measurable Goals, including frequencies

Develop and use an investigative approach annually to focus IDDE activities on high-risk areas

Milestones

Year 1: Identify high-priority areas and outfalls.

Year 2: Apply prioritization during inspections.

Year 3: Update priorities based on findings.

Year 4: Continue prioritized inspections.

Year 5: Evaluate effectiveness and document results.

Additional Info

BMP Number: _____

☑ C.4 Illicit Discharge Tracing Procedures

Brief Description of BMP

Investigate suspected illicit discharges through field inspections, upstream tracing, and coordination with Village staff.

Measurable Goals, including frequencies

Investigate all reported or observed suspected illicit discharges as they occur and document findings.

Milestones

Year 1: Review and formalize tracing procedures.

Year 2: Implement procedures for all investigations.

Year 3: Continue investigations and documentation.

Year 4: Continue investigations and documentation.

Year 5: Refine procedures as needed and assess effectiveness

Additional Info

BMP Number: _____

☑ C.5 Illicit Source Removal Procedures

Brief Description of BMP

Require elimination of confirmed illicit discharges through enforcement actions and corrective measures.

Measurable Goals, including frequencies

Ensure all confirmed illicit discharges are eliminated in a timely manner and follow-up inspections are conducted.

Milestones

Year 1: Establish source removal documentation procedures.

Year 2: Implement follow-up inspections.

Year 3: Continue enforcement and verification.

Year 4: Continue enforcement and verification.

Year 5: Continue enforcement and verification and assess effectiveness of removals and enforcement actions

Additional Info

BMP Number: _____

☑ C.6 Program Evaluation and Assessment

Brief Description of BMP

Conduct an annual evaluation of IDDE program implementation and effectiveness.

Measurable Goals, including frequencies

Review IDDE activities annually and include findings in the MS4 Annual Facility Inspection Report.

Milestones

Year 1: Establish evaluation criteria.

Year 2: Conduct annual review and adjust program as needed.

Year 3: Conduct annual review and adjust program as needed.

Year 4: Conduct annual review and adjust program as needed.

Year 5: Conduct annual review and adjust program as needed.

Additional Info

BMP Number: _____

☑ C.7 Visual Dry Weather Screening

Brief Description of BMP

Perform visual inspections of storm water outfalls during dry weather to identify potential illicit discharges.

Measurable Goals, including frequencies

Inspect all outfalls at least once per year during dry weather and document results.

Milestones

Year 1: Re-establish inspection schedule and forms.

Year 2: Inspect all outfalls annually and document results.

Year 3: Inspect all outfalls annually and document results.

Year 4: Inspect all outfalls annually and document results.

Year 5: Inspect all outfalls annually and document results.

Additional Info

BMP Number: _____

☐ C.8 Pollutant Field Testing

☑ C.9 Public Notification

Brief Description of BMP

Provide a public mechanism to report suspected illicit discharges.

Measurable Goals, including frequencies

Maintain a public hotline through the Village staff voicemail and/or an online reporting form to receive reports of suspected illicit discharges year-round. All reports will be reviewed in a timely manner, investigated as appropriate, and documented, including the outcome of the notification and any corrective actions taken.

Milestones

Year 1: Maintain public reporting mechanisms (voicemail and/or online form) and establish documentation procedures for tracking complaints and responses.

Year 2: Investigate all reported suspected illicit discharges and document findings and corrective actions, if required.

Year 3: Investigate all reported suspected illicit discharges and document findings and corrective actions, if required.

Year 4: Investigate all reported suspected illicit discharges and document findings and corrective actions, if required.

Year 5: Investigate all reported suspected illicit discharges and document findings and corrective actions, if required.

Additional Info

BMP Number: _____

☑ C.10 Other Illicit Discharge Controls

Brief Description of BMP

Provide staff training and internal coordination to support IDDE implementation.

Measurable Goals, including frequencies

Conduct IDDE training for applicable staff at least once during the permit term.

Milestones

Year 1: Provide refresher IDDE training.

Year 2: Reinforce documentation requirements.

Year 3: Update training as needed.

Year 4: Update training as needed.

Year 5: Update training as needed.

Additional Info

BMP Number: _____

D. Construction Site Runoff Control

Approximate date first implemented: 3/1/2026 Frequency of each BMP program: Annually / As Needed

Qualifying Local Programs

The Village of Carbon Cliff coordinates with the Rock Island County Soil and Water Conservation District to support construction site runoff control activities. The Soil and Water Conservation District provides technical assistance and guidance related to erosion and sediment control practices. Regulatory authority and enforcement responsibility remain with the Village.

☑ D.1 Regulatory Control Program

Brief Description of BMP

Implement and enforce local ordinances or codes requiring construction site operators to comply with erosion and sediment control requirements set forth by village and other applicable ordinances.

Measurable Goals, including frequencies

Ensure applicable construction activities comply with local and state erosion and sediment control requirements. Ordinances will be reviewed periodically and enforced as needed.

Milestones

Year 1: Review existing construction runoff control ordinance(s).

Year 2: Update ordinance if necessary to meet permit requirements.

Year 3: Enforce ordinance as construction projects occur

Year 4: Enforce ordinance as construction projects occur

Year 5: Enforce ordinance as construction projects occur and update ordinances as needed.

Additional Info

Measurable Goals (include shared responsibilities)

BMP Number: _____

☑ D.2 Erosion and Sediment Control BMPs

Brief Description of BMP

Require the use of appropriate erosion and sediment control BMPs at construction sites to reduce sediment discharges.

Measurable Goals, including frequencies

Review and require erosion and sediment control BMPs for all applicable construction projects throughout the permit term.

Milestones

Year 1: Require BMPs on applicable construction sites

Year 2: Require BMPs on applicable construction sites

Year 3: Require BMPs on applicable construction sites

Year 4: Require BMPs on applicable construction sites

Year 5: Require BMPs on applicable construction sites

Additional Info

BMP Number: _____

☐ D.3 Other Waste Control Program

☑ D.4 Site Plan Review Procedures

Brief Description of BMP

Review construction site plans to verify compliance with erosion, sediment, and waste control requirements prior to project approval.

Measurable Goals, including frequencies

Review construction plans for all applicable projects before construction begins.

Milestones

Year 1: Establish or confirm plan review procedures.

Year 2: Conduct plan reviews for applicable projects.

Year 3: Conduct plan reviews for applicable projects.

Year 4: Conduct plan reviews for applicable projects.

Year 5: Conduct plan reviews for applicable projects.

Additional Info

BMP Number: _____

☑ D.5 Public Information Handling Procedures

Brief Description of BMP

Provide a process to receive, document, and respond to public complaints related to construction site runoff.

Measurable Goals, including frequencies

Receive and investigate construction runoff complaints as they are reported and document responses and outcomes.

Milestones

Year 1: Document complaint intake procedures and responses

Year 2: Document complaint intake procedures and responses

Year 3: Document complaint intake procedures and responses

Year 4: Document complaint intake procedures and responses

Year 5: Document complaint intake procedures and responses

Additional Info

BMP Number: _____

☑ D.6 Site Inspection/Enforcement Procedures

Brief Description of BMP

Conduct inspections of construction sites to verify compliance with erosion and sediment control requirements. Inspections may be performed by Village staff or qualified third-party inspectors retained by the Village.

Measurable Goals, including frequencies

Inspect applicable construction sites as needed during active construction. Take enforcement or corrective action when deficiencies are identified, regardless of whether inspections are conducted by Village staff or contracted inspectors.

Milestones

Year 1: Establish or confirm site inspection and enforcement procedures, including the use of qualified third-party inspectors as appropriate.

Year 2: Conduct construction site inspections during active construction using Village staff and/or contracted inspectors.

Year 3: Conduct construction site inspections during active construction using Village staff and/or contracted inspectors.

Year 4: Conduct construction site inspections during active construction using Village staff and/or contracted inspectors.

Year 5: Conduct construction site inspections during active construction using Village staff and/or contracted inspectors.

Additional Info

BMP Number:

☐ D.7 Other Construction Site Runoff Controls

E. Post-Construction Runoff Control

Approximate date first implemented: 3/1/2026 Frequency of each BMP program: Annually / As Needed

Qualifying Local Programs

Measurable Goals (include shared responsibilities)

☐ E.1 Community Control Strategy

☑ E.2 Regulatory Control Program

Brief Description of BMP

Implementation and enforcement of a post-construction storm water management ordinance for new development and redevelopment to control runoff and pollutant discharge.

Measurable Goals, including frequencies

Review applicable development and redevelopment projects for ordinance compliance and enforce ordinance requirements as necessary.

Milestones

Year 1: Ordinance in effect and implemented

Year 2: Continue ordinance enforcement

Year 3: Continue ordinance enforcement

Year 4: Continue ordinance enforcement

Year 5: Continue ordinance enforcement

Additional Info

BMP Number:

☑ E.3 Long Term O & M Procedures

Brief Description of BMP

Require long-term operation and maintenance of post-construction storm water BMPs by property owners, with municipal oversight.

Measurable Goals, including frequencies

Conduct post-construction BMP inspections and maintenance as necessary.

Milestones

Year 1: Develop and implement inspection and maintenance schedule and procedures.

Year 2: Continue with inspection and maintenance schedule and procedures. Update as new construction areas are completed, if any.

Year 3: Continue with inspection and maintenance schedule and procedures. Update as new construction areas are completed, if any.

Year 4: Continue with inspection and maintenance schedule and procedures. Update as new construction areas are completed, if any.

Year 5: Continue with inspection and maintenance schedule and procedures. Update as new construction areas are completed, if any.

Additional Info

BMP Number: _____

☑ E.4 Pre-Construction Review of BMP Designs

Brief Description of BMP

Review post-construction storm water BMP designs during the project approval process to ensure compliance with municipal ordinance requirements.

Measurable Goals, including frequencies

Review BMP designs for applicable projects and verify inclusion of required post-construction controls for each project.

Milestones

Year 1: Develop and continue BMP design review

Year 2: Continue BMP design review

Year 3: Continue BMP design review

Year 4: Continue BMP design review

Year 5: Continue BMP design review

Additional Info

BMP Number: _____

☑ E.5 Site Inspections During Construction

Brief Description of BMP

Conduct construction inspections, as applicable, to verify installation of approved post-construction storm water BMPs. Inspection will be completed by qualified Village employees or third-party consultants retained by the Village.

Measurable Goals, including frequencies

Conduct site visits and inspection throughout the duration of construction on all projects within the Village, and identify and address any issues prior to project continuation.

Milestones

Year 1: Conduct inspections as needed

Year 2: Conduct inspections as needed

Year 3: Conduct inspections as needed

Year 4: Conduct inspections as needed

Year 5: Conduct inspections as needed

Additional Info

BMP Number: _____

☑ E.6 Post-Construction Inspections

Brief Description of BMP

Inspect completed post-construction storm water BMPs to verify proper operation and maintenance. Inspection will be completed by qualified village employee or third-party consultant retained by the village.

Measurable Goals, including frequencies

Post-construction inspection of all BMPs upon project completion and annually thereafter.

Milestones

Year 1: Conduct recent post-construction and annual inspections

Year 2: Conduct recent post-construction and annual inspections

Year 3: Conduct recent post-construction and annual inspections

Year 4: Conduct recent post-construction and annual inspections

Year 5: Conduct recent post-construction and annual inspections

Additional Info

BMP Number: _____

☐ E.7 Other Post-Construction Runoff Controls

F. Pollution Prevention/Good Housekeeping

Approximate date first implemented: 3/1/2026 Frequency of each BMP program: Annually / As Needed

Qualifying Local Programs

☑ F.1 Employee Training Program

Brief Description of BMP

Provide storm water pollution prevention training to municipal employees whose job duties may impact storm water

Measurable Goals (include shared responsibilities)

quality. Employees will receive training on all applicable MS4 permit requirements and relevant components of the Storm Water Management Plan.

Measurable Goals, including frequencies

Provide training to new employees, and yearly refresher training to existing employees. Yearly training will include all changes or updates made to the Storm Water Management Plan.

Milestones

Year 1: Begin employee training program.

Year 2: Continue employee training program and update to reflect changes to SWMP.

Year 3: Continue employee training program and update to reflect changes to SWMP.

Year 4: Continue employee training program and update to reflect changes to SWMP.

Year 5: Continue employee training program and update to reflect changes to SWMP.

Additional Info

BMP Number: _____

☑ F.2 Inspection and Maintenance Program

Brief Description of BMP

Inspect and maintain municipal facilities, infrastructure, and equipment to reduce the potential for storm water pollution.

Measurable Goals, including frequencies

Inspect municipal facilities and operations annually.

Milestones

Year 1: Conduct annual inspections.

Year 2: Conduct annual inspections.

Year 3: Conduct annual inspections.

Year 4: Conduct annual inspections.

Year 5: Conduct annual inspections.

Additional Info

BMP Number: _____

☑ F.3 Municipal Operations Storm Water Control

Brief Description of BMP

Implement storm water pollution prevention practices during routine municipal operations to minimize pollutant

discharges to the MS4.

Measurable Goals, including frequencies

Utilize storm water control practices during municipal operations and inspect operations for potential storm water impacts annually.

Milestones

Year 1: Continue storm water controls during municipal operations and made adjustments as necessary.

Year 2: Continue storm water controls during municipal operations and made adjustments as necessary.

Year 3: Continue storm water controls during municipal operations and made adjustments as necessary.

Year 4: Continue storm water controls during municipal operations and made adjustments as necessary.

Year 5: Continue storm water controls during municipal operations and made adjustments as necessary.

Additional Info

BMP Number: _____

☑ F.4 Municipal Operations Waste Disposal

Brief Description of BMP

Ensure proper handling, storage, and disposal of wastes generated from municipal operations to prevent storm water contamination.

Measurable Goals, including frequencies

Dispose of municipal wastes in accordance with applicable regulations and inspect waste storage and disposal areas annually.

Milestones

Year 1: Continue proper waste disposal practices and adjust as necessary.

Year 2: Continue proper waste disposal practices and adjust as necessary.

Year 3: Continue proper waste disposal practices and adjust as necessary.

Year 4: Continue proper waste disposal practices and adjust as necessary.

Year 5: Continue proper waste disposal practices and adjust as necessary.

Additional Info

BMP Number: _____

☐ F.5 Flood Management/Assess Guidelines

☐ F.6 Other Municipal Operations Controls

BMP Number	Location
A.1	Village-wide

BMPs Currently Implemented and Proposed

BMP Number	Location
A.6	Community-wide / Regional conferences and outreach events
B.4	Village-wide / Village website
B.7	Village-wide / Municipal facilities and meeting locations
C.1	Village-wide
C.2	Village-wide
C.3	Village-wide
C.4	Village-wide
C.5	Village-wide
C.6	Village-wide
C.7	All known outfalls
C.9	Village-wide
C.10	Village-wide
D.1	Village-wide
D.2	Construction sites
D.4	Village office
D.5	Village website
D.6	Construction sites
E.2	Village-wide
E.3	Areas of development
E.4	Village office
E.5	Construction sites
E.6	Areas of development
F.1	Village office / Municipal facilities
F.2	Municipal facilities
F.3	Municipal facilities
F.4	Municipal facilities

Approximate Pollutant Reduction Resulting from each BMP

BMP Number	Pollutant	Reduction
A.1	Nutrients, household hazardous waste, oil & grease, sediment	Indirect / Preventative
A.6	General stormwater pollutants, nutrients, bacteria, trash	Indirect / Educational
B.4	General stormwater pollutants, nutrients, sediment, trash	Indirect / Preventative
B.7	General stormwater pollutants, nutrients, sediment, bacteria	Indirect / Preventative
C.1	General stormwater pollutants, nutrients, sediment	Indirect / Preventative
C.2	Any potential pollutant existing within the Village boundary	Direct / Moderate
C.3	Any potential pollutant existing within the Village boundary	Direct / Moderate
C.4	Any potential pollutant existing within the Village boundary	Direct / Moderate
C.5	Any potential pollutant existing within the Village boundary	Direct / High
C.6	Any potential pollutant existing within the Village boundary	Indirect / Preventative
C.7	Any potential pollutant existing within the Village boundary	Direct / Moderate - High
C.9	Any potential pollutant existing within the Village boundary	Indirect / Preventative
C.10	Any potential pollutant existing within the Village boundary	Indirect / Educational
D.1	Sediment	Direct / Moderate
D.2	Sediment	Direct / High
D.4	Sediment	Indirect / Preventative
D.5	Sediment	Direct / Low
D.6	Sediment	Direct / High
E.2	Sediment, nutrients, TSS	Direct / Moderate
E.3	Sediment, nutrients, TSS	Direct / Moderate
E.4	Sediment, nutrients, TSS	Indirect / Preventative
E.5	Sediment, nutrients, TSS	Direct / High
E.6	Sediment, nutrients, TSS	Direct / Moderate
F.1	Sediment, nutrients, TSS, oils & grease, metals	Indirect / Educational
F.2	Sediment, nutrients, TSS, oils & grease, metals	Direct / Moderate
F.3	Sediment, nutrients, TSS, oils & grease, metals	Direct / High
F.4	Sediment, nutrients, TSS, oils & grease, metals	Direct / High

Instream Monitoring Program

Is there an instream monitoring program currently in place? ◯ Yes ⊘ No

Is an instream monitoring program currently being proposed? ⊘ Yes ◯ No

If Yes, which parameters are monitored and at what frequency?

Parameter	Frequency
Flow (illicit discharge at outfalls)	Annually (per outfall)

Sediment Monitoring

Is sediment monitoring currently taking place? ◯ Yes ⊘ No

Sample Monitoring of Outfalls

Is sample monitoring of outfalls currently taking place? ◯ Yes ⊘ No

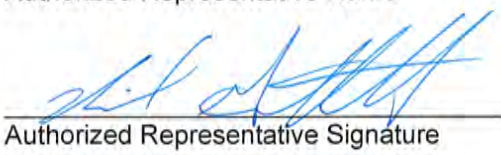
Other Monitoring

Describe other types of monitoring implemented or proposed to evaluate the BMP effectiveness or water quality impact of stormwater.

Part III. Certification

I certify under penalty of law that this document an all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fines and imprisonment.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony (415 ILCS 5/44 (h)).

Nick Gottwalt	Village Director
Authorized Representative Name	Title
	29-JAN-2026
Authorized Representative Signature	Date

You may complete this form online and save a copy locally before printing and signing the form. It should then be sent to:

Illinois Environmental Protection Agency
Bureau of Water
Division of Water Pollution Control
Attn: Permit Section
P.O. Box 19276
1021 North Grand Avenue East
Springfield, IL 62794-9276

Information required by this form must be provided to comply with 415 ILCS 5/39 (2000). Failure to do so may prevent this form from being processed and could result in your application being denied.

Appendix C

Ordinance No. 2001-62 Storm Water Drainage and Detention, Soil Erosion and Sediment Control Code

Ordinance No. 01 - 62

AN ORDINANCE ADOPTING
THE STORMWATER DRAINAGE AND
DETENTION, SOIL EROSION AND
SEDIMENT CONTROL CODE
OF THE VILLAGE OF CARBON CLIFF

WHEREAS legal notice regarding the intention of the Village of Carbon Cliff Plan Commission to hold public hearings on a proposed Stormwater Drainage and Detention, Soil Erosion and Sediment Control Code of the Village of Carbon Cliff was printed and published, with the Certification of Publication of the public hearing on January 25, 2001, at 7:00 p.m. attached hereto and included herein as Exhibit 1; and

WHEREAS the President and Board of Trustees of the Village of Carbon Cliff deem that minutes of the meeting of the Carbon Cliff Plan Commission of January 25, 2001 have been reviewed, said minutes containing findings of fact and recommendations to adopt the ordinance on the Stormwater Drainage and Detention, Soil Erosion and Sediment Control Code of the Village of Carbon Cliff, a copy of the minutes are attached hereto and included herein as Exhibit 2;

BE IT ORDAINED by the President and Board of Trustees of the Village of Carbon Cliff that:

SECTION ONE:

That pursuant to the enabling authority as set forth in the Illinois Compiled Statutes, 65 ILCS 5/1-2-1, 5/11-12-12, 5/11/30-2, and 5/11/31-2, the regulations cited and known as the "Stormwater Drainage and Detention, Soil Erosion and Sediment Control Code of the Village of Carbon Cliff" including Articles I – Article VIII with Appendix A, B and Exhibits A, B, and C attached hereto and incorporated herein by reference, as Exhibit 3, are hereby adopted.

SECTION TWO:

All ordinances and resolutions or any part thereof in conflict with all or any part of this Code are hereby repealed in so far as they do conflict.

SECTION THREE:

That if any section, subdivision, or sentence of this Code shall for any reason be held invalid or unconstitutional, such decision shall not affect the validity of the remaining portion of this Code.

SECTION FOUR:

That within thirty (30) days after the adoption of this ordinance "Stormwater Drainage and Detention, Soil Erosion and Sediment Control Code of the Village of Carbon Cliff" shall be printed in pamphlet form, published under the authority of the Village of Carbon Cliff Board of Trustees, and three (3) copies thereof filed in the office of the Village Clerk. Said Code shall become effective ten (10) days after such publication and filing.

SECTION FIVE:

This ordinance shall be in full force and effect from and after its passage and approval and publication, as required by law.

Adopted by the Board of Trustees for the Village of Carbon Cliff, Illinois, this 18th day of December, 2001, pursuant to a roll call vote as follows:

Trustee Brewer	Absent	Trustee Chapman	yes
Trustee James	yes	Trustee Gast	yes
Trustee Wienandt	yes	Trustee Williams	yes

President Williams _____

Approved this 26th day of December, 2001.

KAWilliams

Kenneth A. Williams, Village President
Village of Carbon Cliff

Attested to the 26th day of December, 2001.

Karen L. Hopkins

Karen L. Hopkins, Village Clerk
Village of Carbon Cliff

Published in pamphlet form by authority of the Board of Trustees of the Village of Carbon Cliff, Rock Island County, Illinois, this 26th day of DECEMBER, 2001

EXHIBIT 1

CERTIFICATION OF PUBLICATION

STATE OF ILLINOIS }
ROCK ISLAND COUNTY } SS.

VILLAGE OF CARBON CLIFF
NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that the Carbon Cliff Plan Commission will hold a public hearing at the request of Kenneth A. Williams, Village President, on behalf of the Village for the Village of Carbon Cliff, to consider a proposed ordinance providing for the Control of Stormwater Drainage and Detention, Soil Erosion and Sediment Control within the Village of Carbon Cliff, Illinois.

Said public hearing will be held on January 25, 2001, at 7:00 p.m. at the Carbon Cliff Village Hall, 106 First Avenue, Carbon Cliff, Illinois, at which time the Plan Commission will hear any testimony for or against the proposed ordinance.

A copy of the proposed ordinance is on file at the office of the Village Clerk, Carbon Cliff Village Hall, 106 First Avenue, Carbon Cliff, Illinois.

Respectfully submitted,
Rich Keehner
Director of Community and Administrative Services
Carbon Cliff, Illinois

ed, the MOLINE DISPATCH PUBLISHING COMPANY L.L.C., hereby certifies that it is a Limited Liability Company, existing ness under the laws of the State of Delaware, licensed to do business in the State of Illinois, and states that it is publisher CH and THE ROCK ISLAND ARGUS daily, public, secular newspapers of general circulation printed and published daily in ine, County of Rock Island, State of Illinois, and further certifies that a notice whereof the annexed printed notice, a true ed and published in said newspapers.

____times; that said notice was so printed and published in said newspaper __1__ time ____ in each week ____successive weeks, the date of the first said newspaper containing said notice being the _05_ day of JAN A.D. 20 01 and the last said newspaper containing the said notice being the _05_ day of JAN A.D. 20 01.

s that said THE DISPATCH and THE ROCK ISLAND ARGUS have been regularly published at least one year prior to the of said notice:

s $ 31.50

MOLINE DISPATCH PUBLISHING COMPANY L.L.C

By _____

Moline, Illinois JAN 10 2001

ILLINOIS }
COUNTY } SS.

wege being first duly sworn on his oath, says that he is the Manager of the MOLINE DISPATCH PUBLISHING COMPANY L.L.C. and the facts set forth in the foregoing certificate of true and that the annexed notice was published as therein specified, and that said THE DISPATCH and THE ROCK have been regularly published in the city of Moline, County of Rock Island and State of Illinois, for more than one year of the first publication of said notice.

sworn to before me this 10 day of JAN 20 01.

VILLAGE OF CARBON CLIFF

Linda Bridgeford
Notary Public

EXHIBIT 2

VILLAGE OF CARBON CLIFF

The Carbon Cliff Plan Commission was called to order by the Director of Community and Administrative Services, Rich Keehner, at 7:07 P.M., Thursday, January 25, 2001, in the Carbon Cliff Village hall, 106 1st Avenue, Carbon Cliff, Illinois.

Commissioners present: Barrie Gibson, H. D. Ferguson, Gene Fry, Jessie Sanders, and Dennis Uzelac.

Commissioners absent: Betty Versluys and Claudia Robinson.

Others present: Village President Kenneth Williams, CMO Larry Lawrence, Building Inspector Clinton Robinson, SWD representative Joe Gates, and Mike McKitrick.

The Public Hearing was called at the request of Village President Kenneth Williams on behalf of and for the Village of Carbon Cliff, to consider a proposed Ordinance providing for the Control of Stormwater Drainage and Detention, Soil Erosion and Sediment Control within the Village of Carbon Cliff, Illinois.

The Notice of the Public Hearing is attached hereto and incorporated herein as Exhibit A, the proposed Ordinance is attached hereto and incorporated herein as Exhibit B, and the Village Engineer's comments are attached hereto and incorporated herein as Exhibit C.

During discussion, it was noted by the commissioners that the Village of Carbon Cliff needs a Stormwater Drainage and Soil Erosion Control Ordinance, that the ordinance before them spells out what needs to be completed by the developer, Village, and Rock Island Soil and Water Conservation District (RISWCD), and as the Village develops the ordinance, if adopted, could be modified. It was also noted that RISWCD would perform the necessary site inspections and plan review. To accomplish the site inspections RISWCD could hire additional staff by using the fee collected from the developer, if necessary.

Discussion arose concerning local areas with stormwater and erosion concerns. These areas include East Moline ravine areas, a Merry Oaks sewer line that is exposed, Silvis cleaning their sewer lines after a heavy rain, and that the City of Peoria has adopted a stormwater and soil erosion ordinance that is performing very well. Additionally, other local agencies have inquired about this very same ordinance. These agencies, among others, include The City of Geneseo, and Bi-State Regional Commission.

Discussion also centered on comments, made earlier in the day, by Village Engineer Tim Kammler. These comments include that the Stormwater Drainage and Soil Erosion Control Ordinance may not be developer friendly, may be very time consuming to review the developers plan, noted a lack of Village personnel to inspect and enforce regulations on the development site, and that the Design Criteria, Standards and Methods (Section 33) is too complex.

FACTS: No citizen came forward at the Public Hearing to voice objection to this ordinance, Providing for the Control of Stormwater Drainage and Detention, Soil Erosion and Sediment Control Within the Village of Carbon Cliff, Illinois. After heavy rain, flooding of the lower area of the Village is getting worse, not better. In order to receive possible future funding from the Federal Government, to correct drainage problems, the Village should show that it is proactive towards resolving this issue. This proactive approach will be accomplished by this ordinance. This ordinance is a necessary step in the orderly development of the Village. This ordinance, suggested back in 1997 by the Watershed Committee, is appropriate for future development, not detrimental to it.

ONE: Motion by Gibson to accept and approve the Findings of Fact. Second by Sanders. The motion carried with the following roll call vote: Gibson–Yes, Sanders–Yes, H. D. Ferguson–Yes, Fry–Yes, Uzelac–Yes. 5–Yes, 0–No, 2–Absent.

TWO: Motion by Gibson to recommend to the Village Board that they adopt this Ordinance. Second by Fry. The motion carried with the following roll call vote: Gibson-Yes, Fry-Yes, H. D. Ferguson-Yes, Sanders-Yes, Uzelac-Yes. 5-Yes, 0-No, 2-Absent.

THREE: Motion by Gibson to adjourn. Second by Sanders. Motion carried with the following roll call vote: Gibson–Yes, Sanders–Yes, H. D. Ferguson–Yes, Fry–Yes, Uzelac–Yes. 5–Yes, 0–No, 2–Absent.

Adjourned at 8:17 P.M.

Rich Keehner,
Secretary

EXHIBIT 3

STORMWATER DRAINAGE AND DETENTION, SOIL EROSION AND SEDIMENT CONTROL CODE FOR THE VILLAGE OF CARBON CLIFF, ILLINOIS

Table of Contents

ARTICLE I

Authority and Purpose; Other Relevant Permitting; Applicability; Exemptions; Exceptions; and Separability:

Section 10 - Authority and Purpose: This ordinance is enacted pursuant to the police powers granted to the Village of Carbon Cliff, Illinois, by the Illinois Compiled Statutes, 65 ILCS 5/1-2-1, 5/11-12-12, 5/11/30-2, and 5/11/31-2.

The purpose of this ordinance is to diminish threats to public health and safety, protect property, prevent damage to the environment and promote public welfare by guiding, regulating, and controlling the design, construction, use, and maintenance of any new development or redevelopment or other activity which disturbs or breaks the topsoil or otherwise results in the movement of earth and/or changes the stormwater drainage pattern and/or stormwater flows from that which would have occurred if the land had been left in its natural state. This stormwater runoff and resulting soil erosion could result in the inundation of damageable properties, the erosion and destabilization of downstream channels, and the pollution of valuable stream and lake resources. One cause of increases in stormwater runoff quantity or rate and impairment of quality, and loss of valuable topsoil is the new development or redevelopment of the land. This ordinance regulates these activities to minimize adverse impacts.

This ordinance is adopted to accomplish the following objectives:

a.) To assure that new development or redevelopment does not increase the drainage or flood hazards, or create unstable conditions susceptible to soil erosion;

b.) To protect new buildings and major improvements to buildings from flood damage due to increased stormwater runoff and soil erosion;

c.) To protect human life and health from the hazards of increased flooding and soil erosion on a watershed basis;

d.) To lessen the burden on the taxpayer for flood control projects, repairs to flood-damaged public facilities and utilities, correction of channel erosion problems, and flood rescue and relief operations caused by stormwater runoff and soil erosion quantities from new development or redevelopment;

e.) To protect, conserve, and promote the orderly development of land and soil, water, air, animal, and plant resources;

f.) To preserve the natural hydrologic and hydraulic functions of watercourses, wetlands and flood plains for protecting water quality, and enhance stormwater management and aquatic habitats;

g.) To preserve the natural characteristics of stream corridors in order to manage flood

and stormwater impacts, improve water and groundwater quality, reduce soil erosion, protect aquatic and riparian habitat, maintain quality forest resources, provide recreational opportunities, provide aesthetic benefits, enhance community and economic development.

Section 11 - Other Relevant Permitting: Before a Development Permit under this ordinance becomes effective, all required Federal, State, and Local permits will have been received for the site subject to new development or redevelopment. The acquisition of these permits shall be the sole responsibility of the applicant. These may include but are not limited to Section 404 of the Clean Waters Act; Section 106 of the National Historic Preservation Act; Section 10 of the Rivers and Harbors Act; or permitting required by the Illinois Department of Natural Resources, Office of Water Resources in accordance with the Rivers, Lakes and Streams Act, 615 ILCS; the Soil and Water Conservation Districts Act, 70 ILCS; the Farmland Preservation Act, 505 ILCS; the Illinois Groundwater Protection Act, 415 ILCS; and the National Pollutant Discharge Elimination System Permit (NPDES) and Section 401 of the Clean Water Act thru the Illinois Environmental Protection Agency, Division of Water Pollution Control; and the Threatened and Endangered Species Act, 16 USC 1531 ET. SEQ. Compliance is also required with but not limited to the Zoning Ordinance of the Village of Carbon Cliff, Illinois, and the Uniform Building Code, most recent edition adopted by the Village, Chapter on Excavation and Grading.

Section 12 - Applicability: This ordinance shall apply to all new development or redevelopment in the Village. Except as otherwise provided in this ordinance, no person, firm or corporation, public or private, the State of Illinois and its agencies or political subdivisions, the United States of America, and its agencies or political subdivisions, any agent, servant, officer or employee of any of the foregoing which meets the following provisions or is otherwise exempted in this ordinance, shall not commence any development activities without first having obtained a development permit from the Zoning Officer.

12.01 - Any new development or redevelopment that will include an area that will meet or exceed ten thousand (10,000) square feet of total impervious surface (i.e., streets, roof, patio or parking area or any combination thereof); or

12.02 - Any land disturbing activity (i.e., clearing, grading, stripping, excavation, fill, or any combination thereof) that will affect an area that will meet or exceed ten thousand (10,000) square feet or that will exceed 100 cubic yards; or

12.03 - Any land disturbing activity greater than 500 square feet if the activity is within 100 feet of a river, lake, pond, stream, abandoned mine, or wetland; and is done in conjunction with sub sections 12.01 or 12.02; or

12.04 - Any land disturbing activity on the sloping side of the slope disturbance line and is in conjunction with sections 12.01, 12.02, or 12.03; or

12.05 - Any tree cutting or mechanized land clearing where the tree, native to Northwestern Illinois, is in excess of eight (8) inches in diameter and is done in conjunction with Article I, Sections 12.01, 12.02, 12.03 or 12.04.

12.06 - The construction of one single family dwelling that is not constructed as part of a residential development shall not be subject to the provisions of this ordinance regarding permanent stormwater control measures.

12.07 – The Village in consultation with the Rock Island County Soil and Water Conservation District (RISWCD), reserves the right to require any non-agricultural, construction development activity, regardless of disturbed area or type of activity, to comply with this ordinance if it is determined to be the cause of or a contributor to an existing or potential erosion, sediment, or stormwater impact.

a.) Soil erosion and sediment control planning for individual home sites may utilize a soil erosion and sediment control planning "kit" provided by the Rock Island County Soil and Water Conservation District.

Section 13 - Exemptions: A development permit shall not be required for the following:

a.) Any new development, redevelopment or other activity falling below the minimum standards as set forth in Article I, Section 12.

b.) The agricultural use of land, including the implementation of conservation measures included in a farm conservation plan approved by the Natural Resources Conservation Service, and including the construction of agricultural structures.

c.) The maintenance of any existing stormwater drainage/detention component or structure or any existing soil erosion/sediment control component or structure; including dredging, levee restoration, tree removal or other function which maintains the original design capacities of the above.

d.) The construction of, improvements to, or the maintenance of any street, road, highway or interstate highway performed by any unit of government whose powers grant such authority.

Section 14 - Variances: The Board of Appeals, after a public hearing, may determine and vary the requirements and regulations of this ordinance in harmony with its general purpose and intent, where the Board of Appeals make written findings of fact in accordance with the standards herein after prescribed and further, find that there are practical difficulties or particular hardships in the way of carrying out the strict letter of requirements and regulations of this ordinance.

14.01 - Application for variance shall be made by a verified petition of the applicant for a development permit, stating fully the grounds of the petition and the facts relied upon by the applicant. Such petition shall be filed with the development permit application. Each application for a variance shall be made in writing and filed with the Zoning Officer. The Zoning Officer and the Village Engineer will review and transmit recommendations to the Board of Appeals, which shall review such recommendations prior to granting or denying the variance.

14.02 – Standards for variance. The Board of Appeals shall not vary the requirements and regulations of this ordinance, as authorized in this section, unless there is evidence presented to it in each specific case:

14.021 - The land is of such shape or size or is affected by such physical conditions or is subject to such title limitations of record, that it is impossible or impractical for the applicant to comply with all of the requirements of this ordinance;

14.022 - The variance is necessary for the preservation and enjoyment of a substantial property right of the applicant; and

14.023 - The granting of the variance will not be detrimental to the public welfare, environment or injurious to other property in the vicinity of the subject's property.

14.03 - The Board of Appeals shall hold a public hearing on each application for variance, in accordance with Article XV subsection 157.022 of the Village of Carbon Cliff Zoning Ordinance. Within thirty (30) days after the public hearing, the Board of Appeals shall either approve the site development permit application with the variances and conditions it deems necessary or it shall disapprove such development permit application and variance application or it shall take other such action as appropriate.

Section 15 - Responsibility: The applicant shall not be relieved of responsibility for damage to persons or property otherwise imposed by law, and the Village or its officers or agents, including the directors and staff of the Rock Island County SWCD will not be made liable for such damage, by (1) the issuance of a development permit under this ordinance, (2) compliance with the provisions of that development permit or conditions attached to it by the Zoning Officer (3) failure of the Village of Carbon Cliff Officials to observe or recognize hazardous or unsightly conditions, (4) failure of the Village officials to recommend denial or to deny a development permit, or (5) exemptions from development permit requirements of this ordinance.

Article II - Definitions:

Section 20 - Definitions: For the purposes of this ordinance certain terms are defined and set forth below:

20.01 - Abandoned Mine: An abandoned mine is a large excavation in the earth that is no longer being used. These conditions make such areas unstable and susceptible to subsidence and surface collapse. Subsurface excavations and fractures in the bedrock may channel runoff water to public or private water supplies, making those sources especially susceptible to groundwater contamination.

20.02 - Adverse Impacts: Any negative impact on plant, soil, air or water resources affecting their beneficial uses including recreation, aesthetics, aquatic habitat, quality, and quantity.

20.03 - Applicant: Any person, firm, or governmental agency who executes the necessary forms to procure official approval of a development or permit to carry out construction of a new development

or re-development from the Village of Carbon Cliff, Illinois.

20.04 - Base Flood Elevation: The elevation at all locations delineating the level of flooding resulting from the 100-year frequency flood event, which has a one percent (1%) probability of being equaled or exceeded in any given year. The base flood elevation at any location is defined in Article III, Section 38.03. of Ordinance No. 85-35, The Village of Carbon Cliff Zoning Ordinance.

20.05 – Board of Appeals: " Board of Appeals" shall mean the Zoning Board of Appeals of the Village of Carbon Cliff, Illinois, with the jurisdiction as set forth in Article XV, Section 152, of ordinance No. 85-35, "Village of Carbon Cliff Zoning Ordinance."

20.06 – Building Official: Is the officer or other designated authority charged with the administration and enforcement of the Uniform Building Code for the Village of Carbon Cliff, Illinois.

20.07 - Building Permit: A permit issued by the Village of Carbon Cliff, Illinois, for the construction, erection or alteration of a structure or building and the related ground and surface preparation prior to and after completion of construction, erection or alteration of a structure or building.

20.08 - Bypass Flows: Stormwater runoff from upstream properties tributary to a property's drainage system but not under its control.

20.09 - Certify or Certification: Formally attesting that the specific inspections and tests were performed, and that such inspections and tests comply with the applicable requirements of this ordinance.

20.10 - Channel: Any defined river, stream, creek, brook, branch, natural or artificial depression, ponded area, on-stream lake or impoundment, abandoned mine, flowage, slough, ditch, conduit, culvert, gully, ravine, wash, or natural or manmade drainageway, which has a definite bed and bank or shoreline, in or into which surface or groundwater flows, either perennially or intermittently.

20.11 - Channel Modification: Alteration of a channel by changing the physical dimensions or materials of its bed or banks. Channel modification includes damming, riprapping (or other armoring), filling, widening, deepening, straightening, relocating, lining, and significant removal of bottom or woody rooted vegetation. Channel modification does not include the man-made clearing of debris or removal of trash.

20.12 - Clearing: Any activity, which removes the natural vegetative ground cover.

20.13 - Compensatory Storage: An artificially excavated, hydraulically equivalent volume of storage within the floodplain used to balance the loss of natural flood storage capacity when fill or structure are placed within the floodplain.

20.14 - Conduit: Any channel, pipe, sewer or culvert used for the conveyance ór movement of water, whether open or closed.

20.15 – County: County of Rock Island, Illinois.

20.16 - Cubic Yard: A one- (1) yard by one (1) yard by one (1) yard amount of material in excavation and/or fill.

20.17 - Detention Basin: A facility constructed or modified to provide for the temporary storage of stormwater runoff and the controlled release by gravity of this runoff at a prescribed rate during and after a flood or storm.

20.18 - Detention Time: The amount of time stormwater is held within a detention basin.

20.19 - Development: Any manmade change to real estate or property, including:

a.) The division or subdivision of any duly recorded parcel of property;

b.) Construction, reconstruction or placement of a building or any addition to a building valued at more than one thousand dollars ($1,000);

c.) Installation of a manufactured home on a site, preparing a site for a manufactured home, or installing a travel trailer on a site for more than 180 days per year;

d.) Construction of roads, bridges, or similar projects;

e.) Redevelopment of a site;

f.) Filling, dredging, grading, clearing, excavating, paving drilling, mining or other non-agricultural alterations of a ground surface;

g.) Storage of materials or deposit of solid or liquid waste;

h.) Any other activity that might alter the magnitude, frequency, direction, or velocity of stormwater flows from a property.

20.20 - Drainage Plan: A plan, including engineering drawings and supporting calculations, which describes the existing stormwater drainage system and environmental features, including grading, as well as proposed alterations or changes to the drainage system and environment of a property.

20.21 - Dry Basin: A detention basin designed to drain after temporary storage of stormwater flows and to normally be dry over much of its bottom area.

20.22 - Erosion: The general process whereby soil or earth is moved by rainfall, flowing water, wind or wave action.

20.23 - Excavation: Any act by which organic matter, earth, sand, gravel, rock or any other similar material, is cut into, dug, quarried, uncovered, removed, displaced, re-located or bulldozed and shall include the conditions resulting from such actions.

20.24 - Excess Stormwater Runoff: The volume and rate of flow of stormwater discharged from a new development or re-development, which is or will be in excess of that volume and rate which

existed before development or re-development.

20.25 - Existing Grade: The vertical location of the existing ground surface prior to excavation or filling.

20.26 - Fill: Any act by which earth, sand, gravel, rock, or any other material, is deposited, placed, replaced, pushed, dumped, pulled, transported or moved by man to a new location and shall include the conditions resulting therefrom.

20.27 - Final Grade: The vertical location of the ground surface after grading work is completed in accordance with the engineering plans.

20.28 - Flood Fringe: That area as designated by the Federal Emergency Management Agency (FEMA) on either side of the floodway. This area is subject to inundation from the base flood but conveys little or no flow.

20.29 - Flood Hazard Boundary Map (FHBM): A very generalized map prepared by the Federal Emergency Management Agency (FEMA) which shows only where floodplains are located based on very basic data. FHBM's do not include base flood elevations.

20.30 - Flood Insurance Rate Map (FIRM): A map prepared by the Federal Emergency Management Agency (FEMA) that depicts the special flood hazard area (SFHA) within a community. This map includes insurance rate zones and regulatory floodplains and may or may not depict regulatory floodways.

20.31 - Floodplain: That land adjacent to a body of water with ground surface elevations at or below the base flood or the 100-year frequency flood elevation which is subject to inundation. The floodplain as designated by the Federal Emergency Management Agency (FEMA) is also known as the Special Flood Hazard Area (SFHA). This area is the collective combination of the regulatory floodway and the flood fringe.

20.32 - Floodway: The channel and that portion of the floodplain, including on-stream lakes, adjacent to a stream or watercourse which is needed to store and convey the anticipated existing and future 100-year frequency flood discharge with no more than a 0.1 foot increase in stage due to any loss of flood conveyance or storage and no more than a ten percent (10%) increase in velocities.

20.33 - Grading: The excavation or fill or any combination thereof and shall include the conditions resulting from any excavation or fill.

20.34 - Hydrograph: A graph showing for a given location on a stream or conduit, the flow rate with respect to time.

20.35 - Hydrograph Method: This method estimates runoff volume and runoff hydrographs for the point of interest by generating hydrographs for individual subareas, combining them, and routing them through stream lengths and reservoir structures. Factors such as rainfall amount and distribution, runoff

curve number, time of concentration, and travel time are included.

20.36 - Impervious Surface: That area of property that is covered by materials other than soil and vegetation and that has no intended capacity to absorb stormwater, such as parking lots, driveways, sidewalks, patios, tennis courts, roofs and other structures.

20.37 - Infiltration: The passage or movement of water into the soil surfaces.

20.38 - Loessal Soil: A sediment, commonly non-stratified and unconsolidated, composed predominately of silt sized particles with accessory clay and sand.

20.39 - Lot: An individual platted parcel in an approved subdivision.

20.40 - Major Drainage System: That portion of a drainage system needed to store and convey flows beyond the capacity of the minor drainage system.

20.41 - Minor Drainage System: That portion of a drainage system designed for the convenience of the public. It consists of street gutters, storm sewers, small open channels, and swales and, where manmade, is to be designed to handle the 10-year runoff event.

20.42 - Mitigation: Mitigation is when the prescribed controls are not sufficient and additional measures are required to offset the development, including those measures necessary to minimize the negative effects which stormwater drainage and development activities might have on the public health, safety and welfare. Examples of mitigation include, but are not limited to compensatory storage, soil erosion and sedimentation control, and channel restoration.

20.43 - Natural: Conditions resulting from physical, chemical, and biological processes without intervention by man.

20.44 - Natural Drainage: Channels formed in the existing surface topography of the earth prior to changes made by unnatural causes.

20.45 - One Hundred-Year Event: A rainfall, runoff, or flood event having a one percent (1%) probability of equaled or exceeded in any given year. A 24-hour storm duration is assumed unless otherwise noted.

20.46 - Parcel: All contiguous land in one ownership.

20.47 - Peak Flow: The maximum rate of flow of water at a given point in a channel or conduit.

20.48 - Permittee: Any person to whom a building permit or a development permit is issued.

20.49 - Person: Any individual, firm or corporation, public or private, the State of Illinois and its agencies or political subdivisions, the United States of America, and its agencies or political subdivisions, and any agent, servant, officer or employee of any of the foregoing.

20.50 - Plan Commission: Plan Commission shall mean the Plan Commission of the Village of Carbon Cliff, Illinois, as created and with the jurisdiction as set forth in Article XV, Section 153, of ordinance No. 85-35, "Village of Carbon Cliff Zoning Ordinance."

20.51 - Positive Drainage: Provision for overland paths for all areas of a property including depressional areas that may also be drained by storm sewer.

20.52 - Prime Farmland: Prime farmland is land that is best suited to food, feed, forage, fiber and oilseed crops. It may be cropland, pasture, woodland, or other land, but it is not urban and built up land or water areas. It is either used for food or fiber or is available for those uses. The soil qualities, growing season and moisture supply are those needed for a well-managed soil to economically produce a sustained high yield of crops. Prime farmland produces the highest yields with minimum inputs of energy and economic resources, and farming it results in the least damage to the environment.

20.53 - Property: A parcel of real estate.

20.54 - Retention Basin: A facility designed to completely retain a specified amount of stormwater runoff without release except by means of evaporation, infiltration, emergency bypass or pumping.

20.55 – Rock Island County SWCD/RICSWCD: Rock Island County Soil & Water Conservation District.

20.56 - Sedimentation: The process that deposits soils, debris, and other materials either on other ground surfaces or in bodies of water or stormwater drainage systems.

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

20.58 - Slope Disturbance Line: The line which delineates relatively level building areas from areas where slopes exceed 7 percent (7%) and where special precautions must be taken.

20.59 - Stormwater Drainage System: All means, natural and manmade, used for conducting stormwater to, through or from a drainage area to the point of final outlet from a property. The stormwater drainage system includes but is not limited to any of the following: conduits and appurtenance features, canals, channels, ditches, streams, culverts, streets, storm sewers, detention basins, swales and pumping stations.

20.60 - Stormwater Runoff: The waters derived from melting snow or rain falling within a tributary drainage basin which are in excess of the infiltration capacity of the soils of that basin, which flow over the surface of the ground or are collected in channels or conduits.

20.61 - Storm Sewer: A closed conduit for conveying collected stormwater.

20.62 - Stream: Any river, creek, brook, branch, flowage, ravine, or natural or man-made drainageway which has a definite bed and banks or shoreline, in or into which surface or groundwater

flows, either perennially or intermittently.

20.63 - Stripping: Any activity which removes the vegetative surface cover including tree removal, by spraying or clearing, and storage or removal of topsoil.

20.64 – Ten-Year Event: A runoff, rainfall, or flood event having a ten percent (10%) chance of occurring in any given year. A 24 hour storm duration is assumed unless otherwise note.

20.65 - Time of Concentration: The elapsed time for stormwater to flow from the most hydraulically remote point in a drainage basin to a particular point of interest in that watershed.

20.66 - Tributary Watershed: All of the land surface area that contributes runoff to a given point.

20.67 – Two-Year Event: A runoff, rainfall, or flood event having a fifty percent (50%) chance of occurring in any given year. A 24-hour storm duration is assumed unless otherwise noted.

20.68 - Vacant: Land on which there are no structures or only structures which are secondary to the use or maintenance of the land itself.

20.69 – Village: Village of Carbon Cliff, Illinois.

20.70 – Village Attorney: Attorney for the Village of Carbon Cliff, Illinois.

20.71 – Village Engineer: Engineer for the Village of Carbon Cliff, Illinois.

20.72 - Watershed: All land area drained by, or contributing water to, the same stream, creek, ditch, lake, marsh, stormwater facility, groundwater or depressional area.

20.73 - Wet Basin: A detention basin designed to maintain a permanent pool of water after the temporary storage of stormwater runoff.

20.74 - Wetlands: Wetlands are defined by regulation as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." For general, but not inclusive locations of designated wetlands refer to mapping prepared jointly by the U.S. Department of Interior, Fish and Wildlife Service and the Illinois Department of Natural Resources, Office of Resource Conservation; National Wetlands Inventory Mapping, 1987. More specific wetland information is published in the Rock River Wetlands Special Area Management Plan, by the Bi-State Regional Commission in cooperation with the Natural Resources Conservation Service (NRCS), the US Fish and Wildlife Service and the US Army Corps of Engineers. The applicant may be required to provide a field investigation by a qualified wetland delineator.

20.75 – Zoning Officer: Zoning Officer for the Village of Carbon Cliff, Illinois, with the powers and duties as set forth in Article XV, Section 151, of Ordinance No. 85-35, "Village of Carbon Cliff Zoning Ordinance."

Article III- Stormwater Drainage and Detention:

Section 30 - Drainage Plan Submittal Requirements: Each applicant shall submit the following information, to ensure that the provisions of this ordinance are met. The submittal shall include sufficient information to evaluate the environmental characteristics of the property, the potential adverse impacts and benefits of the development on water resources both on-site and off-site, and the effectiveness of the proposed drainage plan in managing stormwater runoff, and meet the provisions of Article I, Section 11. The applicant shall certify on the drawings that all clearing, grading, drainage, and construction shall be accomplished in strict conformance with the drainage plan. The following information shall be submitted for both existing and proposed property conditions for all new developments or re-developments that meet or exceed the minimum requirements of Article I, Section 12.

30.01 - Drainage Plan Requirements: A topographic survey of the property at two-foot (2) contours unless otherwise specified or approved by the Village Engineer. The plan map shall be keyed to a consistent datum specified by the Village. If the mapping is compiled using a digital format and the Global Positioning System (GPS), the applicant will provide both paper and digital copies including GPS points.

30.011 - Mapping and Descriptions: An existing drainage and proposed drainage plan for the property and one hundred (100) feet surrounding the property at a scale of not more than one hundred (100) feet to one (1) inch, and including the following: Unless otherwise specified by the Village Engineer

a.) Property boundary, dimensions, and approximate acreage;

b.) Building setback lines;

c.) All existing and proposed structures and sizes;

d.) Square feet of existing and proposed impervious surface;

e.) All existing, or proposed easements;

f.) All existing, abandoned, or proposed water or monitoring wellhead locations;

g.) All sanitary or combined sewer lines and septic systems;

h.) The banks and centerline of streams and channels;

i.) Shoreline of lakes, ponds, and detention basins with normal water level elevation;

j.) Farm drains and tiles;

k.) Soils classifications;

l.) Location, size and slope of stormwater conduits and drainage swales;

m.) Depressional storage areas;

n.) Detention facilities;

o.) Roads, streets and associated stormwater inlets including finished grades;

p.) Base flood elevation, flood fringe, and regulatory floodway;

q.) Basis of design for the final drainage network components;

r.) A statement giving any applicable engineering assumptions and calculations;

r.) A vicinity map showing the relationship of the site to its general surroundings at a scale of not less than two thousand (2,000) feet to one (1) inch (1:24,000);

t.) Title, scale, north arrow, legend, seal of Licensed Professional Engineer, date, and name of person preparing plans;

u.) Cross-section data for open channel flow paths and designated overland flow paths;

u.) Direction of storm flows;

w.) Flow rates and velocities at critical points in the drainage system;

x.) A statement by the design engineer of the drainage system's provision for handling events greater than the 100 year, 24 hour runoff;

y.) A statement of certification of all drainage plans, calculations, and supporting data by a Licensed Professional Engineer;

z.) Abandoned mine location and type; and

aa.) Subwatershed boundaries within the property.

30.012 - Environmental Features: A depiction of environmental features of the property and immediate vicinity including the following:

a.) The limits of designated regulatory and non-regulatory wetland areas;

b.) The location and limits of abandoned mining activity;

c.) The location of trees greater than eight (8) inches in diameter;

d.) Any designated natural areas, prime farmland; and

e.) Any proposed environmental mitigation features.

Section 31 - Minimization of Increases in Runoff Volumes and Rates: In the selection of a drainage plan for a new development or redevelopment, the applicant shall evaluate and implement site design features which minimize the increase in runoff volumes and rates from the site and addresses the water quality treatment requirements of this ordinance. The applicant's drainage plan submittal shall include evaluations of site design features which are consistent with the following hierarchy:

a.) Preservation of regulatory floodplains, flood prone and wetland areas;

b.) Minimize impervious surfaces on the property, consistent with the needs of the project;

c.) Attenuate flows by use of open vegetated swales and natural depressions and preserves the existing natural stream channel;

d.) Infiltration of runoff on-site;

e.) Provide stormwater retention structures;

f.) Provide wet or wetland detention structures;

g.) Provide dry detention structures; and

h.) Construct storm sewers.

Section 32 - Water Quality and Multiple Uses: The drainage system should be designed to minimize adverse surface and groundwater quality impacts off-site and on the property itself. Detention basins shall incorporate design features to capture stormwater runoff pollutants. In particular, designers shall give preference to wet bottom and wetland type designs and all flows from the development shall be routed through the basin (i.e. low flows shall not be bypassed). Detention of stormwater shall be promoted throughout the property's drainage system to reduce the volume of stormwater runoff and to reduce the quantity of runoff pollutants.

The drainage system should incorporate multiple uses where practicable. Uses considered compatible with stormwater management include open space, aesthetics, aquatic habitat, recreation (boating, fishing, trails, playing fields), wetlands and water quality mitigation.

Section 33 - Design Criteria, Standards, and Methods:

33.01 - Release Rates: The drainage system for new developments or redevelopments shall be designed to control the peak rate of discharge from the property for the 2 year, 24 hour and 100 year, 24 hour events to pre project levels which will not cause an increase in flooding or channel instability

downstream when considered in aggregate with other developed properties and downstream drainage capacities. The peak discharge rate from events less than or equal to the 2 year, 24 hour event and the peak discharge rate for the 100-year, 24 hour event shall be determined by the Village Engineer.

33.011 - Detention Basin Outlet Design: Backwater on the outlet structure from the downstream drainage system shall be addressed when designing the outlet.

33.02 - Detention Storage Requirements: The design maximum storage to be provided in the detention basin shall be based on the runoff from the runoff difference before and after development from the 100 year, 24 hour event. All detention basin storage shall be computed using Hydrograph Methods utilizing reservoir routing (also called modified pulse or level pool) or equivalent method as described in Section 33.04.

33.03 - Drainage System Design and Evaluation: The following criteria should be used in evaluating and designing the drainage system. The design will provide capacity to pass the 10 year, 24 hour peak flow in the minor drainage system and an overload flow path for flows in excess of the design capacity. Whenever practicable, the stormwater systems shall not result in the interbasin transfer of drainage unless no other alternative exists.

33.031 - Design Methodologies: Major and minor conveyance systems for areas up to 10 acres, may be designed using the Rational Formula. The Rational Formula may also be used in sizing the minor drainage system for larger sites up to 100 acres. Runoff hydrograph methods as described in Section 33.04 must be used for major drainage system design for all systems with greater than 10 acres of drainage area and for the design of all detention basins.

33.032 - Positive Drainage: Whenever practicable, all developments must be provided an overland flow path that will pass the 100 year, 24 hour flow at a stage at least one (1) foot below the lowest foundation grade in the vicinity of the flow path. Overland flow paths designed to handle flows in excess of the minor drainage system capacity shall be provided drainage easements. Street ponding and flow depths shall not exceed curb heights.

33.04 - Methods for generating runoff hydrographs: Runoff hydrographs shall be developed incorporating the following assumptions of rainfall amounts and antecedent moisture.

33.041 - Rainfall: Unless a continuous simulation approach to drainage system hydrology is used, all design rainfall events shall be based on the Illinois State Water Survey's Bulletin 70. The first quartile point rainfall distribution shall be used for the design and analysis of conveyance systems with critical durations less than or equal to 12 hours. The third quartile point rainfall distribution shall be used for the design and analysis of detention basins and conveyance system with critical durations greater than 12 and less than or equal to 24 hours. The fourth quartile distribution shall be used in the design and analysis of systems with durations greater than 24 hours. The first, third, and fourth quartile distributions described by Huff are presented in Table 37 of Bulletin 70. Refer to Table 13 of Bulletin 70 for rainfall depth, duration, and frequency. The NRCS Type II distribution may be used as an alternate to the Huff distributions.

33.042 - Antecedent Moisture: Computations of runoff hydrographs, which do not rely on a continuous accounting of antecedent moisture conditions, shall use wet antecedent moisture condition as a minimum.

33.05 - Agriculture Tiles and Sanitary Sewers: Connections to sanitary sewers or existing agricultural stormwater management system (tiles) shall not be permitted for new developments. However, in exceptional circumstances and with the approval of the Village Engineer, connections to existing agricultural stormwater management systems may be allowed if the applicant demonstrates that the existing system, has adequate hydraulic capacity, and structural integrity. Additionally, development meeting the criteria in Section 33 shall either obtain a maintenance agreement or deed or plat restriction covering the entire downstream drain tile in accordance to be determined of this ordinance before a connection to that system is permitted. Field tile systems disturbed during the process of land development must be reconnected by those responsible for their disturbance unless the approved drainage plan incorporates the tiles in the land development design.

33.06 - Wet Detention Basin Design: Wet detention basins shall be designed to remove stormwater pollutants, to be safe, to be aesthetically pleasing, and as much as feasible to be available for recreational use.

33.061 - Wet Basin Depths: Wet basins shall be at least three feet deep, excluding near-shore banks and safety ledges. If fish habitat is to be provided they shall be at least ten (10) feet deep over twenty-five (25%) percent of the bottom area to prevent winterkill.

33.062 - Wet Basin Shoreline Slopes: The side slopes of wet basins at the normal pool elevation shall not be steeper than five to one (5 to 1 horizontal to vertical). It is recommended that native aquatic vegetation be established around the perimeter to provide protection from shoreline erosion.

33.063 - Permanent Pool Volume: The permanent pool volume in a wet basin at normal depth shall be equal to the runoff volume from its watershed for the 2 year, 24-hour event as a minimum.

33.064 - Wet Basin Inlet and Outlet Orientation: The distance between detention inlets and outlets shall be maximized. Inlets and outlets shall be at opposite ends of the basin providing that the orientation does not create undue hardship based on topography or other natural constraints. Designers are encouraged to use baffles or berms in the basin bottom to prevent short-circuiting. There shall be no low flow bypass between the inlet and outlet. Paved low flow channels shall not be used. The minimum flow length shall be ten (10) feet with a recommended minimum ratio of two to one (2:1) for width.

33.07 - Dry Detention Basin Design: In addition to the other requirements of this ordinance, dry basins shall be designed to remove stormwater pollutants, to be safe, to be aesthetically pleasing and as much as feasible to be available for multiple uses.

33.071 - Dry Basin Drainage: Dry basins shall be designed so that eighty percent (80%) of their bottom area shall have standing water no longer than seventy-two (72) hours for any runoff event less than the 100-year, 24 hour event. Grading plans shall clearly distinguish the wet portion of the basin

bottom. Underdrains directed to the outlet may be used to accomplish this requirement.

33.072 - Velocity Dissipation: Velocity dissipation measures shall be incorporated into dry basin designs to minimize erosion at inlets and outlets and to minimize resuspension of pollutants.

33.073 - Dry Basin Inlet and Outlet Orientation: Shall be the same as Article III, Section 33.064.

33.074 - Temporary Sediment Trap: A sediment trap shall be constructed at each major inlet to a dry basin during construction. The temporary sediment trap should be designed in accordance with criteria in the Illinois Urban Manual.

33.08 - Existing Depressional Areas: Existing depressional storage volume will be maintained and the volume of detention storage provided to meet the requirements of this ordinance shall be in addition to existing storage.

33.09 - Minimum Detention Outlet Size: Where a single pipe outlet or orifice plate is to be used to control discharge, it shall have a minimum diameter of twelve (12) inches. If design release rates call for smaller outlets, a design that minimizes the possibility of clogging shall be used. Minimum outlet restrictor size shall be 4" provided there is adequate downstream capacity. Detention volumes for a development shall be dictated by adherence to the release rates specified in Section 33.01.

33.10 - Detention in Flood Plains: The placement of detention basins within the flood plain is strongly discouraged because of questions about their reliable operation during flood events. However, the stormwater detention requirements of this ordinance may be fulfilled by providing detention storage within flood fringe areas on the project site provided the following provisions are met as well as compliance with Article I, Section 11.

33.1001 - Detention in Flood Fringe Areas: The placement of a detention basin in a flood fringe area shall require compensatory storage for 1.5 times the volume below the base flood elevation occupied by the detention basin including any berms. The release from the detention storage provided shall still be controlled consistent with the requirements of this section. The applicant shall demonstrate its operation for all stream-flow and flood plain backwater conditions. Excavations for compensatory storage along watercourses shall be opposite or adjacent to the area occupied by detention. All flood plain storage lost below the existing ten-year flood elevation shall be replaced below the existing ten-year elevation. All flood plain storage lost above the existing ten-year flood elevation shall be replaced above the existing ten-year flood elevation. All compensatory storage excavations shall be constructed to drain freely and openly to the watercourse and comply with Article I, Section 11.

33.1002 - Detention on Prime Farmland: The placement of detention basins shall avoid the utilization of prime farmland. All detention basin construction shall examine potential impacts to adjacent agricultural land and shall address measures that will be implemented to eliminate such impacts and comply with Article I, Section 11.

33.1003 - Detention in Floodways: Detention basins shall be placed in the floodway only in accordance with Article III, Section 33.1004.

33.1004 - On-Stream Detention: On-stream detention basins are discouraged but allowable if they provide regional public benefits and if they meet the other provisions of this ordinance with respect to water quality and control of the 2 year and 100 year, 24 hour events from the property. Further criteria are presented in Article III, Section 34 of this ordinance. If on-stream detention is used in watersheds larger than one square mile, the applicant will use hydrographic modeling to demonstrate that the design will not increase the water level for any properties upstream or downstream of the property. Also, impoundment of the stream as part of on-stream detention:

a.) Shall not prevent the migration of indigenous fish species, which require access to upstream areas as part of their life cycle, such as for spawning;

b.) Shall not cause or contribute to the degradation of water quality or stream aquatic habitat;

c.) Shall include a design calling for gradual bank slopes, appropriate bank stabilization measures, and a pre-sedimentation basin;

d.) Shall not involve any stream channelization or the filling of wetlands;

e.) Shall require the implementation of an effective non-point source management program throughout the upstream watershed which shall include as a minimum: runoff reduction "Best Management Practices" (BMP's) consistent with Article III, Section 31; 2 year, 24 hour detention / sedimentation basins for all development consistent with Article III, Section 33.074;

f.) Shall not occur downstream of a wastewater discharge;

g.) Shall not contribute to the duration or flood frequency of any adjacent land, and

h.) Shall comply with Article I, Section 11.

33.11 - Drainage Into Wetlands, Rivers, Streams, Lakes, Ponds, and Depressional Storage Areas: Wetlands, lakes, ponds and depressional storage areas shall be protected from damaging modifications and adverse changes in runoff quality and quantity associated with land developments. In addition to the other requirements of this ordinance, the following requirements shall be met for all developments whose drainage flows into wetlands, rivers, lakes, ponds or depressional storage areas:

33.1101 -Detention in Wetlands, Rivers, Streams, Lakes, Ponds or Depressional Storage Areas: Existing wetlands, rivers, lakes, ponds or depressional storage areas shall not be modified for the purposes of stormwater detention unless it is demonstrated that the proposed modifications will maintain or improve its habitat and ability to perform beneficial functions and shall comply with Article I, Section 11. Existing storage and release rate characteristics of wetlands, rivers, lakes, ponds or depressional storage areas shall be maintained and the volume of detention storage provided to meet the requirements of this section shall be in addition to this existing storage.

33.1102 - Sediment Control: The existing wetlands, rivers, lakes, ponds, or depressional storage areas shall be protected during construction and as further regulated in Article IV of this ordinance, and shall not be filled.

33.1103 - Alteration of Drainage Patterns: Site drainage patterns shall not be altered to substantially decrease or increase the existing area tributary to wetlands, rivers, lakes, ponds or depressional storage areas. Drainage patterns shall not be altered by development to direct runoff offsite to other than natural drainage outlets existing prior to development.

33.1104 - Detention/Sedimentation: All runoff from the development shall be routed through a preliminary detention/sedimentation basin designed to capture the two-year, 24-hour event and hold it for at least 24 hours, before being discharged to the wetland, river, lake, pond, or depressional storage area. This basin shall be constructed before property grading begins and shall be maintained throughout the construction process. In addition, the drainage hierarchy defined in Article III, Section 30 should be followed to minimize runoff volumes and rates being discharged to the wetland, river, stream, lake, pond, or depressional storage area and as further regulated in Article II and Article IV of this ordinance.

33.1105 - Vegetated Buffer Strip: A buffer strip of at least 25 feet in width, preferably vegetated with native plant species, shall be maintained or restored around the periphery of a wetland, river, stream, lake, pond or depressional storage area.

33.1106 - Loessal Soils: Care must be taken to avoid open flow discharges of stormwater over silt (Loessal) soils due to high potential for erosion.

33.1107 - Abandoned Mines: The following requirements apply for new developments or re-developments where abandoned mines are determined to be present:

a.) A stormwater detention basin shall not be placed in or over an abandoned mine;

b.) Stormwater detention basins shall not be located closer than one hundred (100) feet from the opening of an abandoned mine;

c.) The outflow from a stormwater detention basin, channel, ditch or any stormwater runoff generated as a result of a new development or redevelopment shall not empty into or be directed, redirected by any means into or through any abandoned mine;

d.) If, after the review of the stormwater drainage plan, the Village Engineer may determine that more detailed information is required, a abandoned mine evaluation may be required. A abandoned mine evaluation which addresses the geologic, engineering and environmental factors resulting from a new development or redevelopment be performed by a professional with experience and expertise in abandoned mine topography, whom shall certify the results of the evaluation. This evaluation shall be the responsibility of the applicant and performed at no cost to the Village. After a review of this evaluation and with the consultation of the Rock Island Soil and Water

Conservation District, the Village Engineer may either approve or disapprove the drainage plan as submitted;

e.) Whenever an abandoned mine is discovered or it becomes apparent that the abandoned mine has not yet been identified, it shall be reported to the Rock Island Soil and Water Conservation District; and

f.) Shall comply with Article I, Section 11.

33.12 - Street Detention, Parking Lot Detention, and Culvert Drainage:

33.1201 - Street Detention: If streets are to be used as part of the minor or major drainage system, ponding depths shall not exceed curb heights and shall not remain flooded for more than eight (8) hours for any event less than or equal to the 100 year, 24 hour event.

33.1203 - Parking Lot Detention: The maximum stormwater ponding depth in any parking area shall not exceed six (6) inches for more than four (4) hours.

33.1203 - Culvert, Road and Driveway Crossings: Sizing of culvert crossings shall consider entrance and exit losses as well as tailwater conditions on the culvert.

33.13 - Infiltration Practices: To effectively reduce runoff volumes, infiltration practices including basins, trenches, and porous pavement and shall follow criteria in the Illinois Urban Manual with Article I, Section 11. An appropriate sediment control device shall be provided to remove coarse sediment from stormwater flows before they reach infiltration basins or trenches. Stormwater shall not be allowed to stand more than seventy-two hours over eighty percent of the dry basin's bottom area for the maximum design event to be ex-filtrated. The bottom of infiltration basins or trenches shall be a minimum of three feet above the seasonally high groundwater and bedrock level. Engineering calculations demonstrating infiltration rates shall be included with the application.

33.1301 - Vegetated Filter Strips and Swales: To effectively filter stormwater pollutants and promote infiltration of runoff, sites should be designed to maximize the use of vegetated filter strips and swales, shall be designed to follow criteria in the Illinois Urban Manual. Whenever practicable, runoff from impervious surfaces should be directed onto filter trips and swales comprised of native grasses and forbs before being routed to a storm sewer or detention basin.

33.14 - Safety Considerations: The drainage system components, especially all detention basins, shall be designed to protect the safety of any children or adults coming in contact with the system during runoff events and shall comply with Article I, Section 11.

33.1401 - Side Slopes: The side slopes of all detention basins at 100 year, 24 hour capacity shall be as level as practicable to prevent accidental falls into the basin and for stability and ease of maintenance. Side slopes of detention basins and open channels shall not be steeper than three (3) to one (1) (horizontal to vertical).

33.1402 - Safety Ledge: All wet detention basins shall have a level safety ledge at least four feet in width 2.5 to 3 feet below the normal water depth.

33.1403 - Velocity: Velocities throughout the surface drainage system shall be controlled to safe levels taking into consideration rates and depths of flow.

33.1404 - Overflow Structures: All stormwater detention basins shall be provided with an overflow structure capable of safely passing excess flows at a stage at least one foot below the lowest foundation grade in the vicinity of the detention basin. The design flow rate of the overflow structure shall be equivalent to the 100 year, 24-hour inflow rate.

33.15 - Maintenance Considerations: The stormwater drainage system shall be designed to minimize and facilitate maintenance. Turfed side slopes shall be designed to allow lawn-mowing equipment to easily negotiate them. Wet basins shall be provided with alternate outflows, which can be used to completely drain the pool for sediment removal. Pumping may be considered if drainage by gravity is not feasible. Pre-sedimentation basins shall be included, where feasible, for localizing sediment deposition and removal. Site access for heavy equipment shall be provided. Use of native vegetation is strongly encouraged to reduce maintenance, increase wildlife habitat, and to provide other benefits.

33.1501 - A maintenance plan for the ongoing maintenance of all stormwater management system components including wetlands is required prior to plan approval. The plan shall include:

a.) Maintenance tasks;

b.) The party responsible for performing the maintenance tasks;

c.) A description of all permanent public or private access maintenance easements and overland flow paths, and compensatory storage areas; and

d.) A description of dedicated sources of funding for the required maintenance.

Section 34 - Accommodating Flows From Upstream Tributary Areas: Stormwater runoff from areas tributary to the property shall be considered in the design of the property's drainage system. Whenever practicable, flows from upstream areas that are not to be detained should be routed around the basin being provided for the site being developed.

34.01 - Upstream Areas Not meeting Ordinance Requirements: When there are areas not meeting the storage and release rates of this ordinance, tributary to the applicant's property, regionalized detention on the applicant's property shall be explored by the applicant. The following steps shall be followed:

a.) The applicant shall compute the storage volume needed for his property using the release rates of Article III, Section 33, the applicant's property area, and the procedures described in Article III, Section 32;

b.) Areas tributary to the applicant's property, not meeting the storage and release rate requirements of this ordinance, shall be identified; and

c.) Using the areas determined above plus the applicant's property area, total storage needed for the combined properties shall be computed.

Allowable release rates shall be computed using the combined property areas. Storage shall be computed as described in Article III, Section 33. If tributary areas are not developed, a reasonable fully developed land cover, based on local zoning, shall be used for the purposes of computing storage.

Once the necessary combined storage is computed the Village may choose to pay for over-sizing the applicant's detention basin to accommodate the regional flows. The applicant's responsibility will be limited to the storage for his property as computed above. If regional storage is selected by the Village then the design produced in Article III, Section 32 shall be implemented. If regional storage is rejected by the Village the applicant shall bypass all tributary area flows around the applicant's basin whenever practicable. If the applicant must route upstream flows through his basin and the upstream areas exceed one-square mile in size, the applicant must meet the provision of Section 33.1004 for on-stream basins.

34.02 - Upstream Areas Meeting Ordinance Requirements: When there are areas which meet the storage and release rate requirements of this ordinance, tributary to the applicant's property, the upstream flows shall be bypassed around the applicant's detention basin if this is the only practicable alternative. Storage needed for the applicant's property shall be computed as described in Article III, Section 34.01. However, if the Village decides to route tributary area flows through an applicant's basin, the final design stormwater releases shall be based on the combined total of the applicant's property plus tributary areas. It must be shown that at no time will the runoff rate from the applicant's property exceed the allowable release rate for his/her property alone.

Section 35 - Early Completion of Detention Facilities: Where detention, retention, or depressional storage areas are to be used as part of the drainage system for a property, they shall be constructed as the first element of the initial earthwork program. Any eroded sediment captured in these facilities shall be removed by the applicant on a regular basis and before project completion in order to maintain the design volume of the facilities.

Section 36 - Fee in Lieu of Detention: All new development or redevelopment not exceeding fifteen thousand (15,000) square feet of impervious surface may pay a fee of $10,000 for each acre-foot of detention which would be required under this ordinance rather than installing detention facilities on the property, unless specifically directed to do otherwise by the Zoning Officer. The Village, also shall have the option of requiring a fee of $10,000 for each acre-foot of detention needed in lieu of the applicant building a basin on-site provided a new development or re-development project exceeds fifteen thousand (15,000) square feet of impervious surface, provided the property will discharge stormwater to the Village storm drainage system, if applicable.

In instances where regional benefits and economies of scale can be achieved, it will be permissible for

adjacent properties to utilize a common regional detention basin. Applicants shall have the option of paying a fee of $10,000 for each acre-foot of detention required so that the Village can build regional facilities or the applicants can jointly build the necessary facilities themselves.

Article IV - SOIL EROSION AND SEDIMENT CONTROL:

Section 40 - Findings: The Village hereby finds that:

a.) The soil types found in the Village Illinois are susceptible to erosion and if left unprotected could cause severe loss of soil with resultant damage to property;

b.) The topography of the Village contains areas with steep slopes upon which, if clearing of trees and/or inappropriate construction takes place, could result in severe erosion and slope stability problems, which could result in damage to property;

c.) Excessive quantities of soil may erode from areas undergoing development for certain non-agricultural uses including but not limited to the construction of dwelling units, commercial buildings and industrial plants, the building of roads and highways, the modification of stream channels and drainageways, and the creation of recreational facilities;

d.) The washing, blowing, and falling of eroded soil across and upon roadways endangers the health and safety of users thereof, by decreasing vision and reducing traction of road vehicles;

e.) Soil erosion necessitates the costly repairing of gullies, washed out fills, and embankments;

f.) Sediment from soil erosion clogs drainage systems and pollutes rivers, streams, lakes, wetlands, and reservoirs;

g.) Sediment limits the use of water and waterways for most beneficial purposes, promotes the growth of undesirable aquatic weeds, destroys fish and other desirable aquatic life, and is costly and difficult to remove; and

h.) Sediment reduces the channel capacity of waterways and the storage capacity of flood plains and natural depressions, resulting in increased chances of flooding at risk to public health and safety.

Section - 41 - General Principles: It is the objective of this ordinance to control soil erosion and sedimentation caused by development activities, including clearing, grading, stripping, excavating, and filling of land, in the Village. Measures taken to control soil erosion and off-site sediment runoff shall be adequate to assure that sediment is not transported from the site by a storm event of ten-year, 24 hour frequency or less. The following principles shall apply to all new

development or redevelopment activities within the Village and to the preparation of the submissions required under Article IV, Section 42 of this ordinance:

a.) New development or redevelopment shall be related to the topography and soils of the site so as to create the least potential for erosion. Areas of steep slopes greater than seven percent (7%) where high cuts and fills maybe required are to be avoided wherever possible, and natural contours should be followed as closely as possible,

b.) Natural vegetation shall be retained and protected wherever possible. Areas immediately adjacent to natural watercourses, lakes, ponds, and wetlands are to be left undisturbed wherever possible. Temporary crossings of watercourses, when permitted, must include appropriate stabilization measures,

c.) Special precautions shall be taken to prevent damages resultant from any necessary development activity within or adjacent to any stream, lake, pond, abandoned wetland or mine. Preventive measures shall reflect the sensitivity of these areas to erosion and sedimentation,

d.) The smallest practical area of land should be exposed for the shortest practical time during development,

e.) Sediment basins or traps, filter barriers, diversions, and any other appropriate sediment or runoff control measures shall be installed prior to site clearing and grading and maintained to remove sediment from run-off waters from land undergoing development,

f.) The selection of erosion and sediment control measures shall be based on assessment of the probable frequency of climatic and other events likely to contribute to erosion, and on evaluation of the risks, costs, and benefits involved,

g.) In the design of erosion control facilities and practices, aesthetics and the requirements of continuing maintenance must be considered,

h.) Provisions shall be made to accommodate the increased run-off caused by changed soil and surface conditions during and after development. Drainageways should be designed so that their final gradients and the resultant velocities and rates of discharge will not create additional erosion on-site or downstream,

i.) Permanent vegetation and structures shall be installed and functional as soon as practical during development,

j.) Those areas being converted from agricultural purposes to other land uses shall be vegetated with an appropriate protective cover prior to development,

k.) All waste generated as a result of site development activity shall be properly disposed of and shall be prevented from being carried off the site by either wind or water,

l.) All construction sites shall provide measures to prevent sediment from being tracked onto public or private roadways, and

m.) All temporary soil erosion and sediment control practices shall be maintained to function as intended until the contributing drainage area has been permanently stabilized at which time they shall be removed.

Section 42 - Soil Erosion and Sediment Control Plan Submittal Requirements: Each applicant shall submit the information depending on development size, as regulated to ensure that the provisions of this ordinance are met. The submittal shall include sufficient information to evaluate the environmental characteristics of the property, the potential adverse impacts of the development related to erosion both on-site and off-site, and the effectiveness of the proposed erosion and sediment control plan in reducing sediment loss and meet the provisions of Article I, Section 11. The applicant shall certify on the drawing that all clearing, grading, drainage, and construction shall be accomplished in strict conformance with the erosion and sediment control plan. The following information shall be submitted for both existing and proposed property conditions; new developments or re-developments meeting the requirements of Article I, Section 12.

42.01 - Soil Erosion and Sediment Control Plan Requirements: Shall meet the requirements of Article III, Section 30.01, Section 30.011, and Section 30.012.

42.011 - Mapping and Descriptions: The existing and proposed erosion and sediment control features of the property and immediate vicinity including:

a.) As required in Article III, Section 30.01, Section 30.011, and Section 30.012;

b.) Location of the slope disturbance line;

c.) Location and description of the soil erosion and sediment control measures to be employed during construction;

d.) For any structures proposed to be located on the slope side of the slope disturbance line the map shall include the limits of disturbance including tree removal, soil erosion and sediment control measures during construction, cross section view of any proposed cut or fill, erosion and sediment control measures during construction, details of method (s) proposed for providing slope stability, permanent stormwater control measures, and permanent erosion and sediment control measures all being certified by a registered professional engineer or a "Certified Professional Erosion Control Specialist;"

e.) The predominant soil types on the site, their location, and their limitations for the proposed use as defined by the U.S.D.A. Natural Resources Conservation Service;

f.) The proposed use of the site, including present and planned development, areas of clearing, stripping, grading, excavation and filling; proposed contours, finished grades, and street profiles; the stormwater plan as required in Article II; kinds and locations of utilities, areas and acreages proposed to be paved, sodded or seeded, vegetatively stabilized, or left undisturbed; and the location of trees over eight (8) inches in diameter and their type;

g.) A soil erosion and sediment control plan, including a narrative, shall be submitted showing all measures necessary to meet the objectives of this ordinance throughout all phases of construction. The development of a soil erosion and sediment control plan shall follow the requirements of this ordinance and the procedures in the latest edition of the "Illinois Procedures and Standards for Urban Soil Erosion and Sediment Control" (commonly known as the Greenbook), which is hereby incorporated into this ordinance by reference. The Village in consultation with the RISWCD, may waive specific requirements for the content of submissions upon finding that the information submitted is sufficient to show that the work will comply with the objectives and principles of this ordinance. Permanent soil erosion and sediment control features needed at the completion of any development site shall be included in the submittal. The submitted soil erosion and sediment control plan shall include:

1.) Location and description, including standard details, of all sediment control measures and specifics of sediment basins and traps, including outlet details;

2.) Location and description of all soil stabilization and erosion control measures, including seeding mixtures and rates, types of sod, method of seedbed preparation (type and extent of tillage, weed control, planting equipment, etc...), expected seeding dates, type, method and rate of lime and fertilizer application (soil fertility testing required), kind and quantity of mulching for both temporary and permanent vegetative control measures, and types of non-vegetative stabilization measures;

3.) Location and description of all runoff control measures, including diversions, waterways, and outlets;

4.) Location and description of methods to prevent tracking of sediment off-site including construction entrance details, as appropriate;

5.) Description of dust and traffic control measures;

6.) Locations of stockpiles and description of stabilization methods;

7.) Description of offsite fill or borrow volumes, locations and methods of stabilization;

8.) Provisions for maintenance of control measures, including type and frequency of maintenance, easements, and estimates of the cost of maintenance; and

9.) Identification (name, address, and telephone) of the person(s) or entity which will have legal responsibility for maintenance of soil erosion control structures and measures during development and after development is completed.

Section 43 - Design and Operation Standards and Requirements:
The practice standards and specifications outlined in the Soil Erosion and Sediment Control plan shall follow criteria in the latest edition of the Illinois Urban Manual.

a.) All clearing, grading, stripping, excavating, and filling which is subject to the approval requirements of this ordinance shall be subject to the applicable standards and requirements set forth and/or referenced in this ordinance;

b.) Responsibility: The permittee shall not be relieved of responsibility for damage to persons or property otherwise imposed by law, and the Village or its officers or agents, including the Directors and Staff of the RISWCD will not be made liable for such damage by (1) the issuance of a permit under this ordinance, (2) compliance with the provisions of that permit or with conditions attached to it by the Village, (3) failure of the Village officials to observe or recognize hazardous or unsightly conditions, (4) failure of the Village officials to recommend denial of or to deny a permit, or (5) exemptions from the permit requirements of this ordinance; and

c.) Site Design Requirements: Practice standards and specifications for measures outlined in the soil erosion and sediment control plan shall follow criteria in the latest edition of the "Illinois Urban Manual: A Technical Manual Designed for Urban Ecosystem Protection and Enhancement", which is hereby incorporated into this ordinance by reference.

43.01 - Erosion and Sediment Control Design Requirements: New developments or re-developments shall comply with Article IV, Section 42 and meet the following:

43.011 - Control measures shall be constructed to control runoff from the property to such an extent possible that sediment is retained on-site.

43.012 - Temporary on-site control measures required shall be constructed and functional prior to initiating clearing, grading, stripping, excavating or fill activities on the site.

43.013 - Disturbed areas shall be stabilized with permanent measures within seven (7) calendar days following the end of active disturbance, or redisturbance consistent with the following criteria:

a.) Appropriate permanent stabilization measures shall include seeding, mulching, sodding, with non-vegetative measures as a last resort; and

b.) Areas having slopes greater than 12% shall be stabilized with sod, mat, or blanket in combination with seeding or equivalent.

43.014 - All temporary and permanent erosion and sediment control practices must be maintained and repaired as needed to assure effective performance of their intended function.

43.015 - All temporary erosion and sediment control measures shall be disposed in a proper manner within thirty (30) days after final site stabilization is achieved with permanent soil stabilization measures. Trapped sediment and other disturbed soils resulting from the disposition of temporary measures shall be permanently stabilized to prevent further erosion and sedimentation.

43.016 - Site Development Requirements: On-site sediment control measures, as specified by the following criteria, shall be constructed as specified in the referenced handbooks, and functional prior to initiating clearing, grading, stripping, excavating or fill activities on the site.

a.) For new developments or redevelopments less than one (1) acre, filter barriers (including filter fences, straw bales, or equivalent control measures) shall be constructed to control all on-site runoff. Vegetated filter strips, with a minimum width of twenty-five (25) feet, may be used as an alternative only where runoff in sheet flow is expected;

b.) For new developments or re-developments more than one (1) acre but less than five (5) acres, a sediment trap or equivalent control measure shall be constructed at the downslope point of the disturbed area,

c.) For new developments or re-developments greater than five (5) acres, a sediment basin or equivalent control measure shall be constructed at the down slope point of the disturbed area;

d.) Sediment basin and sediment trap designs shall provide for both "dry" detention and "wet" detention sediment storage. The detention storage shall be composed of equal volumes of "wet" detention storage and "dry" detention storage and each shall be sized as regulated in Article III, Section 33. The release rate of the basin shall be that rate as regulated in Article III. The elevation of the outlet structure shall be placed such that it only drains the dry detention storage;

e.) The sediment storage shall be sized to store the estimated sediment load generated

from the site over the duration of the construction period with a minimum storage equivalent to the volume or sediment generated in one year. For construction periods exceeding one year, the 1-year sediment load and a sediment removal schedule may be substituted; and

f.) To the extent possible or as otherwise regulated in this ordinance all desirable trees eight (8) inches in diameter and larger shall be protected for their present and future value for erosion protection and other environmental benefits. Trees that have been selected for preservation shall be marked prior to the beginning of any clearing, grading, stripping, excavation, or filling of the site. A "No" construction zone shall be established and marked at the perimeter of the dripline of each tree which is to be preserved.

43.017 - Stormwater conveyance channels, including ditches, swales, and diversions, and the outlets of all channels and pipes shall be designed and constructed as regulated in Article III. All constructed or modified channels shall be stabilized within 48 hours, consistent with the following standards and as required in the referenced handbooks:

a.) For grades up to 4 percent, seeding in combination with mulch, erosion blanket, or an equivalent control measure shall be applied. Sod or erosion blanket or mat shall be applied to the bottom of the channel;

b.) For grades of 4 to 8 percent, sod or an equivalent control measure shall be applied in the channel; and

c.) For grades greater than 8 percent, rock, riprap, or an equivalent control measure shall be applied over filter fabric or other type of soil protection, or the grade shall be effectively reduced using drop structures.

43.018 - Land disturbance activities in stream channels shall be avoided, where possible, or as regulated in Article III. If disturbance activities are unavoidable, the following requirements shall be met.

a.) Construction vehicles shall be kept out of the stream channel to the maximum extent practicable. Where construction crossings are necessary, temporary crossings shall be constructed of non-erosive material, such as riprap or gravel;

b.) The time and area of disturbance of stream channels shall be kept to a minimum. The stream channel, including bed and banks, shall be stabilized within 48 hours after channel disturbance is completed, interrupted, or stopped; and

c.) Whenever channel relocation is necessary, the new channel shall be constructed under dry conditions and fully stabilized before flow is diverted, incorporating meanders, pool and riffle sequence, and riparian planting.

43.019 - Storm sewer inlets and culverts shall be protected by sediment traps or filter barriers meeting accepted design standards and specifications.

43.020 - Soil storage piles containing more than 10 cubic yards of material shall not be located with a downslope drainage length of less than 50 feet to a roadway, drainage channel, or abandoned mine. Filter barriers, including straw bales, filter fence, or equivalent, shall be installed immediately surrounding the perimeter of the pile.

43.021 - If dewatering devices are used, discharge locations shall be protected from erosion. All pumped discharges shall be routed through appropriately designed sediment traps or basins, or equivalent and shall not be deposited into an abandoned mine.

43.022 - Each site shall have graveled (or equivalent) entrance roads, access drives, and parking areas of sufficient length and width to prevent sediment from being tracked onto public or private roadways. Any sediment reaching a public or private road shall be removed by shoveling or street cleaning (not flushing) before the end of each workday and transported to a controlled sediment disposal area.

Section 44 - Maintenance of Control Measures: All soil erosion and sediment control measures necessary to meet the requirements of this ordinance shall be maintained by the applicant or subsequent land owner during the period of land disturbance and development of the site in a satisfactory manner to ensure adequate performance. The applicant or contractor responsible for maintaining the soil erosion and sediment control practices shall inspect all such practices at least once every 7 days or within 24 hours of a precipitation event equal to or exceeding 0.5" of rainfall.

Article V - Long Term Maintenance Responsibility:

Section 50 - Long Term Maintenance Responsibility: Maintenance of stormwater drainage, and soil erosion and sediment control facilities located on private property shall be the responsibility of the owner of that property. Before an appropriate permit is obtained from the Village, the applicant shall execute a maintenance agreement with the Village guaranteeing that the applicant and all future owners of the property will maintain its stormwater drainage and soil erosion and sediment control system. Such agreement shall be recorded with the Recorder of Deeds of the County. The maintenance agreement shall include a schedule for regular maintenance of each aspect of the property's stormwater drainage and soil erosion and sediment control system and shall provide for access to the system for inspection by authorized personnel of the Village. The maintenance agreement shall also stipulate that if the appropriate personnel of the Village, notify the property owner in writing of maintenance problems which require correction, the property owner shall begin such corrections within twenty four (24) hours and shall not extend beyond seven (7) calendar days of such notification. If the corrections are not made within this time period the Village may have the necessary work completed and assess the cost to the property owner. The Village shall require a bond to be filed by the property owner for maintenance of the stormwater drainage and soil erosion and sediment control system.

Article VI - Inspections:

Section 60 - Inspections: The Rock Island County SWCD shall make inspections as hereinafter required and shall either approve that portion of the work completed or shall notify the permittee wherein the work fails to comply with the site development or erosion and sediment control plan as approved. The Rock Island County SWCD will notify the Village of permittees failure to comply with ordinance regulations. Plans for grading, stripping, excavating, and filling work bearing the stamp of approval of the Village and Rock Island County SWCD shall be maintained at the site during progress of the work. In order to obtain inspections and to ensure compliance with the approved erosion and sediment control plan, the grading or building permit, and this Ordinance, the permittee shall notify the Village and the Rock Island County SWCD within two (2) working days of the completion of the construction stages specified below:

a.) Upon completion of installation of sediment and runoff control measures (including perimeter controls and diversions), prior to proceeding with any other earth disturbance or grading;

b.) After stripping and clearing;

c.) After rough grading;

d.) After final grading;

e.) After seeding and landscaping deadlines; and

f.) After final stabilization and landscaping, prior to removal of temporary sediment controls.

If stripping, clearing, grading and/or landscaping are to be done in phases or areas, the permittee shall give notice and request inspection at the completion of each of the above work stages in each phase or area. If an inspection is not made and notification of the results given within five (5) working days after notice is received by the Village from the permittee, the permittee may continue work at his/her own risk, without presuming acceptance by the Village. Notification of the results of the inspection shall be given in writing at the site. A duplicate copy shall be kept by the enforcing agency of the Village and/or the Rock Island County SWCD.

Section 61 - Special Precautions: If at any stage of the grading of any development site the Rock Island County SWCD determines by inspection that the nature of the site is such that further work authorized by an existing permit is likely to imperil any property, public way, stream, lake, wetland, or drainage structure, the Village shall require, as a condition of allowing the work to be done, that such reasonable special precautions to be taken as is considered advisable to avoid the likelihood of such peril. "Special precautions" may include, but shall not be limited to, a more level exposed slope, construction of additional drainage facilities, berms, terracing, compaction, or cribbing, installation of plant materials for erosion control, and recommendations of a registered soils engineer and/or engineering geologist which may be made requirements for further

work.

61.01 - Where it appears that storm damage may result because the grading on any development site is not complete, work shall be stopped and the permittee required to install temporary structures or take such other measures as may be required to protect adjoining property or the public safety. On large developments or where unusual site conditions prevail, the Zoning Officer shall specify the time of starting grading and time of completion or may require that the operations be conducted in specific stages so as to ensure completion of protective measures or devices prior to the advent of seasonal rains.

Section 62 - Amendment of Plans: Major amendments to stormwater drainage and detention or erosion and sediment control plans shall be submitted to the Zoning Officer and the Rock Island County Soil and Water Conservation District. Plan amendments shall be processed and approved or disapproved in the same manner as the original plans. Field modification of a minor nature may be authorized by the Zoning Officer and/or Rock Island County Soil and Water Conservation District, by written authorization to the permittee.

Article VII - Permitting:

Section 70 - Application for Permit: Application for a development permit shall be made by the owner of the property or his authorized agent to the Zoning Officer on a form furnished for that purpose. Each application shall bear the name(s) and address(es) of the owner or developer of the site, the contractor(s) and of any consulting firm retained by the applicant together with the name of the applicant's principal contact at such firm. Each application shall include certification that any land clearing, construction, or development involving the movement of earth shall be in accordance with the plans approved upon issuance of the permit.

Section 70.01 – Application Fee: All applications for a development permit shall be accompanied with an application fee as set forth in Exhibit A, attached hereto and incorporated herein. In addition, the applicant shall be responsible for reimbursing the Village for any additional cost necessary for review, inspection, and approval of this project including, but not limited to the engineering services of the Village Engineer. The Zoning Officer shall require a $500.00 deposit to cover these additional costs.

Section 71 - Bond Required: The applicant for a development permit shall be required to file with the Village a faithful performance bond or bonds, letter of credit, or other improvement security satisfactory to the Village Attorney, in an amount deemed sufficient by the Zoning Officer, and for such period as specified by the Village. These faithful performance bond or bonds, letter of credit, or other improvement security would be used to cover engineering and inspection costs, and the cost of failure or repair of improvements installed on the site.

Section 72 - Review and Approval: Each application for an erosion and sediment control plan shall be reviewed and acted upon according to the following procedures:

a.) As a condition of this ordinance, the Village shall require the applicant, or

designated agent, to consult with the Rock Island County Soil and Water Conservation District (RISWCD) on soil erosion and sediment control plans. The applicant shall submit all required items to the RISWCD the same day that the application is made to the Village.

The RISWCD shall:

1. Review the applicant's soil erosion and sediment control plans and provide written evaluation to the Village regarding the adequacy (effectiveness) to address the provisions of this ordinance. The RISWCD shall retain the services of a professional trained in the implementation of soil erosion and sediment control practices to perform the services outlined in this section. The RISWCD will assess a fee as set forth in Exhibit B, attached hereto, and incorporated herein to be paid by the applicant for performing these services;

2. Attend a pre-construction meeting with the applicant or designated agent to review implementation of erosion and sediment control plans;

3. Conduct onsite inspections during the active construction phases of land development projects to determine whether site development is in compliance with the approved erosion and sediment control plans, and determine adjustments needed to the approved plans. After construction has been completed, determine whether permanent site stabilization has been achieved and identify operation and maintenance needs;

4. Prepare correspondence as needed regarding the effectiveness (or corrective measures needed) or adequacy of soil erosion and sediment control measures, and

5. Consult with land developers, consultants, and contractors concerning the design criteria, installation and maintenance procedures and other information regarding conservation practices recommended under the provisions of this ordinance.

The Village of Carbon Cliff shall:

1. After review of the application and required submissions if it is found to be in conformance with the provisions of this ordinance, approve the erosion and sediment control plan;

2. Approve the erosion and sediment control plan subject to such reasonable conditions as may be necessary to secure substantially the objectives of this ordinance, and issue the approval subject to these conditions; or

3. Disapprove the erosion and sediment control plan, indicating the deficiencies and the procedure for submitting a revised application and/or submission.

b.) No approval for an erosion and sediment control plan shall be issued for an intended development site unless one or more of the following have been obtained:

1. The development, including but not limited to subdivisions and planned unit development, has been approved by the Village where applicable; or

2. Such permit is accompanied by or combined with a valid building permit issued by the Village Building Official; or

3. The proposed earth moving is coordinated with any overall development program previously approved by the Village for the area in which the site is situated; and

4. All relevant federal and state permits including, but not limited to: NPDES, 404, 401, NRI's, etc. have been received for the portion of the site subject to soil disturbance, and

5. Applicant is successful in the appeals process.

72.01 - Failure of the Zoning Officer to act on an original or revised application within thirty (30) days of receipt shall authorize the applicant to proceed in accordance with the plans as filed and in compliance with the regulations contained herein, unless such time is extended by agreement between the Zoning Officer and the applicant. Pending preparation and approval of a revised plan, development activities shall be allowed to proceed in accordance with conditions established by the Zoning Officer.

Section 73 - Expiration of Permit: Every development permit shall expire and become null and void if the work authorized by such permit has not been commenced within one hundred and eighty (180) days, or if not completed by a date which shall be specified in the permit; except that the Zoning Officer may, if the permittee presents satisfactory evidence that unusual difficulties have prevented work being commenced or completed within the specified time limits, grant a reasonable extension of time if written application is made before the expiration date of the permit. The Zoning Officer may require modification of the erosion control plan to prevent any increase in erosion or off-site sediment runoff resulting from any extension.

Section 74 – Scope of Appeals:

74.01 - An appeal may be taken to the Board of Appeals by the applicant, any person or agency which received notice of the filing of the application, or by any person, firm, corporation, office, department, board or bureau aggrieved by decision of the Zoning Officer. Such appeal shall be taken within such time as shall be prescribed by the Board of Appeals by general rule by filing with the Zoning Officer a notice of appeal specifying the grounds thereof. The Zoning Officer shall forthwith transmit to the Board of Appeals all of the papers constituting a record upon which the Section appealed from was taken.

74.02 - The Factors to be considered on appeal shall include, but need not be limited to, the effects of the proposed development activities on the surface water flow to tributary and downstream lands, any comprehensive watershed management plans, or the use of any retention facilities; possible saturation of fill and unsupported cuts by water, both natural and domestic; runoff surface waters that produce erosion and silting of drainageways; nature and type of soil or rock which when disturbed by the proposed development activities may create earth movement and produce slopes that cannot be landscaped; and excessive and unnecessary scarring of the natural landscape through grading or removal of vegetation.

74.03 – Findings on Appeal:

74.031 – An appeal shall stay all proceedings in furtherance of the action appealed from unless the Zoning Officer certifies to the Board of Appeals, after the notice of the appeal has been filed with him, that by reason of facts stated in the certificate a stay would, in his opinion, cause imminent peril to life or property.

74.032 – The Board of Appeals shall select a reasonable time and place for the hearing of the appeal, give due notice thereof to the parties, and shall render a written decision on the appeal without unreasonable delay. The Board of Appeals may affirm or may, upon the concurring vote of four (4) members, reverse wholly or in part or modify the order, requirement, decision, or determination that, in its opinion, ought to be done. To that end, the Board of Appeals shall have all the powers of the officer from whom the appeal is taken. The Zoning Officer shall maintain records of all actions of the Board of Appeals relative to appeals.

Section 75 - Retention of Plans: Plans, specifications, and reports for all site developments shall be retained in original form or on microfilm by the Zoning Officer.

Section 76 – Amendments:

76.01 – This ordinance may be amended, provided that in all amendments adopted under the authority of this Section, due allowance shall be made for existing conditions, the conservation of property values, and the direction of building development to the best advantages of the entire community.

76.02 – Initiations of Amendments: Amendments may be proposed by the Village Board, Plan Commission, Village President, Zoning Official or the Rock Island County SWCD.

76.03 – Application for Amendment: An application for an amendment shall be filed with the Zoning Officer in such form and accompanied by such information as required by the Zoning Officer. Such application shall be forwarded to the Plan Commission with the request to hold a public hearing on said application for amendment.

76.04 – Hearing on Application: The Plan Commission shall hold a public hearing on each application for an amendment at such time and place as shall be established by the Plan Commission. The hearing shall be conducted and a record of such proceedings shall be preserved

in such manner, as the Plan Commission shall, by rule, prescribe from time to time.

76.05 – Notice of Hearing: Notice of time and place of such hearing shall be published at least once in one or more newspapers of general circulation in the Village of Carbon Cliff not less than fifteen (15) nor more than thirty (30) days before such hearing. Supplemental or additional notices may be published or distributed as the Plan Commission may, by rule, prescribe from time to time.

76.06 – Findings of Fact and Recommendation of the Plan Commission:

76.061 – Within forty-five (45) days after the close of the hearing on a proposed amendment, the Plan Commission shall make written findings of fact and shall submit same together with its recommendations to the Village Board.

76.062 – The Plan Commission shall not recommend the adoption of a proposed amendment unless it finds that the adoption of such amendment is in the public interest.

76.07 – Action by Village Board:

76.071 – The Village Board shall not act upon a proposed amendment to this Ordinance until it shall have received a written report and recommendation from the Plan Commission on the proposed amendment.

76.072 – The Village Board may grant or deny any amendment.

76.073 – The Village Board may request specific changes to a proposed amendment to this Ordinance once it has received a written report and recommendation from the Plan Commission on the proposed amendment. However, before the proposed amendment with the Village Board's specific changes, can be adopted by the Village Board; the proposed amendment with the specific changes must be forwarded to the Plan Commission for another Public Hearing, Findings of Fact, and written recommendation.

76.074 – A proposed amendment or a proposed amendment with specific changes that doesn't receive a written recommendation from the Plan Commission, shall not be adopted except by a concurrence of two-thirds (2/3) of the Village Trustees then holding office.

76.08 – Effect of Denial of Amendment: No application for an amendment that has been denied wholly or in part by the Village Board shall be resubmitted for a period of one (1) year from the date of said denial except on the grounds of new evidence or proof of change of conditions found to be valid by the Plan Commission.

Article VIII - Enforcement:

Section 80 - Stop-Work Order; Revocation of Permit: In the event any person holding a development permit pursuant to this ordinance violates the terms of the permit, or carries on-site

development in such a manner as to materially adversely affect the health, welfare, environment, or safety of persons residing or working in the neighborhood of the development site or so as to be materially detrimental to the public welfare or injurious to property or improvements in the neighborhood, the Zoning Officer shall suspend or revoke the development permit.

80.01 - Suspension of a permit shall be by a written stop-work order issued by the Zoning Officer and delivered to the permittee or his agent or the person performing the work. The stop-work order shall be effective immediately, shall state the specific violations cited, and shall state the conditions under which work may be resumed. A stop-work order shall remain in effect until appealed by the permittee to the Board of Appeals at which time the conditions of Article VII, Section 74 can be met or until the specific violations cited are corrected to the satisfaction of the zoning officer.

80.02 - No development permit shall be revoked until a hearing is held by the Board of Appeals. Written notice of such hearing shall be served on the permittee, either personally or by certified mail return receipt requested, and shall state:

a.) The reasons for revocation, in clear and concise language; and

b.) The time, date and place where such hearing will be held.

Such notice shall be served on the permittee at least five (5) days prior to the date set for the hearing. At such hearing, the permittee shall be given an opportunity to be heard and may call witnesses and present evidence on his behalf. At the conclusion of the hearing the Board of Appeals shall determine whether the permit shall be revoked.

Section 81 – Fees: The fee for variances and appeals shall be Seventy-five ($75.) dollars.

Section 82 - Violations and Penalties: 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 ordinance. Any person violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor, and each day during which any violation of any of the provisions of this ordinance 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 less than Seventy Five dollar ($75.00), and nor more than Seven Hundred Fifty dollars ($750.00) 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 ordinance shall be required to restore the site to the condition existing prior to commission of the violation, or to bear the expense of such restoration.

Appendix A
Desirable Trees Native to Northwestern Illinois

Ash, Blue, *Fraxinus quadrangulata*
Ash, Green, *Fraxinus pennsylvanica*
Ash, White, *Fraxinus americana*
Birch, River or Red, *Betula nigra*
Coffeetree, Kentucky, *Gymnocladus diocia*
Hackberry, Common, *Celtis occidentalis*
Hickory, Shagbark, *Carya ovata*
Ironwood (Hophornbeam), *Ostrya virginiana*
Larch, American (Tamarack), *Larix laricina*
Linden, American (Basswood), *Tilia americana*
Maple, Black, *Acer nigrum*
Maple, Red or Swamp, *Acer rubrum*
Maple, Sugar or Rock, *Acer saccharum*
Oak, Black, *Quercus velutina*
Oak, Bur, *Quercus macrocarpa*
Oak, Chinkapin, *Quercus muehlenbergii*
Oak, Pin or Swamp, *Quercus palustris*
Oak, Red, *Quercus rubra*
Oak, Swamp White, *Quercus bicolor*
Pecan, *Carya illinoensis*
Redbud, *Cercis canadensis*
Arborvitae, White Cedar, *Thuja occidentalis*
Juniper, Eastern Redcedar, *Juniperus virginiana*
Pine, Easter White, *Pinus strobus*

Appendix B

Desirable Trees Native to Areas South of Carbon Cliff, Illinois. Additional planting is encouraged.

Baldcypress, *Taxodium distichum*
Beech, European, *Fagus sylvatica* (except)
Buckeye, Red, *Aesculus pavia*
Dogwood, Flowering, *Cornus florida*
Hickory, Shellbark, *Carya laciniosa* (for wet areas)
Persimmon, Common, *Diospyros virginiana*
Sassafras, Common, *Sassafras albidum*
Sourgum (Black Tupelo), *Nyssa sylvatica*
Sweetgum, *Liquidambar styraciflua*
Tuliptree, *Liriodendron tulipifera*

EXHIBIT A

VILLAGE OF CARBON CLIFF
(309) 792-8235

FOR OFFICE USE ONLY	Carbon Cliff Application No.:
ets technical standards_____	Does not meet technical standards_____
Date Application received:_____	Date all Information received: _____ Reviewed by:_____
Fee Paid:	Check No.:

	APPLICANT (Owner/Developer)	Erosion Control Consultant/Engineer
Name		
Address **City/State/Zip**		
Phone		
Relationship to project		

Job site contact person:_____

Contact person phone number:(_____)_-_____-_____ **Fax number:**(_____) -_____-_____

Village/Municipal contact person:_____ **Phone #**(_____)-_____-_____

Township, range, & section:_____

osed land use:_____ **Acreage of land disturbance:**_____

Pre-construction meeting date (if known):_____ **Construction start date:**_____

Total number of phases_____ **Phase number** _____

The applicant agrees to the following conditions:

1. Submit all required information listed on the following page for each phase of development, regarding the soil erosion and sediment control (SE/SC) plan.
2. Upon submittal of this application, pay the applicable fee, based on the attached fee schedule, in accordance with total acres of disturbance to the original topography and/or vegetation.
3. Notify representatives from the Village of Carbon Cliff, Rock Island County Soil and Water Conservation District (SWCD) and the Natural Resources Conservation Service, (NRCS) of the pre-construction meeting to review implementation of the SE/SC plan.
4. Allow a Village of Carbon Cliff, Rock Island County SWCD, or NRCS representative the right to conduct on-site investigations throughout all active construction phases to determine whether all necessary SE/SC practices have been installed and are functioning properly.
5. Upon commencement of earthwork or construction, document SE/SC site inspections with all information being accurate and complete.
6. Comply with the Village of Carbon Cliff and Rock Island County SWCD's written and verbal recommendations regarding::
   A. The SE/SC plan and corrections or changes made thereto.
   B. Installation and maintenance requirements of the SE/SC practices on-site.
7. If any changes occur to the plans, schedules, etc., the applicant shall be responsible for notifying the Village of Carbon Cliff and the Rock Island County Soil and Water Conservation District.

Upon receipt of all required information, the SE/SC plan will be reviewed within 15 working days and all involved parties will be notified whether or not the plan meets technical standards.

Applicant's Signature:_____ **Date:**_____

P ed December 7, 2001

Narrative Checklist

The soil erosion and sediment control plan cannot be reviewed until all of the following information is submitted for each upcoming active construction phase:

_____**Project description** - Briefly describes the nature and purpose of the land disturbing activity, and the area (acres) to be disturbed.

_____**Existing site conditions**- A description of the existing topography , vegetation, drainageways, subsurface drain tile, buildings, roads and utilities.

_____**Adjacent areas**- A description of neighboring areas such as streams, lakes, residential areas, roads, etc. which might be affected by the land disturbance. Describe any adjacent or neighboring activities that may affect the soil erosion and sediment control plan.

_____**Off-site areas**- Will any other areas be disturbed? Describe any off-site land disturbing activities.

_____**Soils**- Provide a brief description of the soils on the site at the exposed soil horizon such as soil name, mapping unit, erodibility, permeability, texture, structure and depth to seasonal high groundwater. (this information is available from the local Soil and Water Conservation District).

_____**Critical areas**- A description of areas on the site which have potentially serious problems, e.g. steep or long slopes, channels, intermittent streams, and side hill seeps.

_____ **Soil erosion and sediment control measures**- A description of the methods which will be used to control erosion and sedimentation on the site. Control methods should meet the standards in section 4 of the Illinois Urban Manual.

_____**Permanent stabilization**- A brief description including specifications of how the site will be stabilized after construction is completed.

_____**Stormwater runoff calculations**- Will the development site cause an increase in peak runoff rates? Will the increase in runoff cause soil erosion or channel degradation downstream? Describe the strategy to control stormwater runoff.

_____**Calculations**- Detailed calculations for the design of temporary sediment basins, permanent stormwater detention basins, diversions, channels, etc.. Include pre and post development runoff.

_____**Detail drawings**- Include detail drawings form the Illinois Urban Manual. Any structural practices used that are not referenced to the Illinois Urban Manual or local handbooks should be explained and illustrated with detail drawings.

_____**Maintenance** - Provide a schedule of maintenance for all temporary and permanent erosion and sediment control practices to ensure that they perform properly. Identify the parties responsible for maintenance.

Revised August 26, 1997

Site Plan Checklist

The soil erosion and sediment control plan cannot be reviewed until all of the following information is submitted for each upcoming active construction phase:

1. Existing site conditions and natural resources present, including:

_____Site boundaries and adjacent lands which accurately identify site location.
_____Buildings, roads and utilities.
_____Topography, vegetation, drainage patterns, subwatershed delineation, critical erosion areas, and any subsurface drainage tiles.
_____Wetland and floodplain delineation.
_____Location and identification of soil types.
_____Adjacent areas that affect or are affecting the project site, e.g. drainage onto or through the site affecting wetlands, streams, lakes, and drainage areas downstream.
_____Vicinity map.
_____Show areas where trees and vegetation are to be preserved.
_____Map legend, including north arrow and scale on all materials submitted.

2. Final site conditions, including:

_____An accurate depiction of post-construction appearance, e.g. roads, buildings, open space.
_____Locations, dimensions, cross sections and elevations of all (temporary and permanent) stormwater management facilities (including sediment basins), plus inlet and outlet locations.
_____Surface flow direction, including sheet flow and concentrated flow direction.
_____Post-construction topography, final contours should be easily distinguished (2 foot contour is preferred) including subwatershed delineations.

3. A complete soil erosion and sediment control plan, including:

_____Location and detailed drawings of all permanent and temporary soil erosion and sediment control practices.
_____A schedule outlining the installation of the practices with the responsible parties identified.
_____Inspection, and maintenance schedules with responsible parties identified.
_____Seeding information: rates, species, dates, fertilization, temporary or permanent.
_____Location and dimension of all temporary soil and aggregate stockpiles.

4. Locations, dimension & phase timeline of all land disturbing activities, including:

_____Designate construction limits, areas that will be disturbed and areas of wetland fill.
_____Describe grading and building schedule and phasing timeline.

EXHIBIT B

DEVELOPMENT APPLICATION FEE SCHEDULE

50 cubic yards (38.2 m^3) or less	$23.50
51 to 100 cubic yards (40 m^3 to 76.5 m^3)	37.00
101 to 1,000 cubic yards (77.2 m^3 to 764.6 m^3)—$37.00 for the first 100 cubic yards (76.5 m^3) plus $17.50 for each additional 100 cubic yards (76.5 m^3) or fraction thereof.	
1,001 to 10,000 cubic yards (765.3 m^3 to 7645.5 m^3)—$194.50 for the first 1,000 cubic yards (764.6 m^3), plus $14.50 for each additional 1,000 cubic yards (764.6 m^3) or fraction thereof.	
10,001 to 100,000 cubic yards (7646.3 m^3 to 76 455 m^3)—$325.00 for the first 10,000 cubic yards (7645.5 m^3), plus $66.00 for each additional 10,000 cubic yards (7645.5 m^3) or fraction thereof.	
100,001 cubic yards (76 456 m^3) or more—$919.00 for the first 100,000 cubic yards (76 455 m^3), plus $36.50 for each additional 10,000 cubic yards (7645.5 m^3) or fraction thereof.	
Other Inspections and Fees:	
1. Inspections outside of normal business hours (minimum charge—two hours)	$50.50 per hour
2. Reinspection fees assessed under provisions of Section 108.8	$50.50 per hour
3. Inspections for which no fee is specifically indicated (minimum charge—one-half hour)	$50.50 per hour

EXHIBIT C

FEE SCHEDULE

Fee is based on acreage of the site

Base Fee: $100 (One acre or less)

*Round acres to nearest whole number

160+ acres = 5$ for each additional acre

Erosion and Sediment Control Program Fee Schedule

Acres	Fee	Acres	Fee	Acres	Fee	Acre	Fee	Acre	Fee	Acre	Fee	Acre	Fee	Acre	Fee
1	100	21	984	41	2142	61	2502	81	2856	101	3096	121	3330	141	3450
2	100	22	1044	42	2160	62	2520	82	2868	102	3108	122	3338	142	3456
3	400	23	1102	43	2176	63	2538	83	2880	103	3120	123	3342	143	3462
4	400	24	1164	44	2196	64	2558	84	2892	104	3132	124	3348	144	3466
5	400	25	1224	45	2214	65	2574	85	2904	105	3144	125	3354	145	3474
6	400	26	1284	46	2232	66	2592	86	2916	106	3156	126	3360	146	3480
7	400	27	1344	47	2250	67	2610	87	2926	107	3168	127	3368	147	3486
8	400	28	1404	48	2268	68	2628	88	2940	108	3180	128	3372	148	3492
9	400	29	1464	49	2286	69	2646	89	2952	109	3192	129	3378	149	3498
10	400	30	1524	50	2304	70	2664	90	2964	110	3204	130	3364	150	3504
11	420	31	1584	51	2322	71	2682	91	2976	111	3216	131	3390	151	3510
12	564	32	1644	52	2340	72	2700	92	2988	112	3228	132	3396	152	3516
13	624	33	1704	53	2358	73	2718	93	3000	113	3240	133	3402	153	3522
14	684	34	1764	54	2376	74	2736	94	3012	114	3252	134	3408	154	3528
15	744	35	1824	55	2394	75	2754	95	3024	115	3264	135	3414	155	3534
16	804	36	1884	56	2412	76	2772	96	3036	116	3276	136	3420	156	3540
17	864	37	1944	57	2430	77	2790	97	3046	117	3288	137	3426	157	3546
18	924	38	2004	58	2448	78	2808	98	3060	118	3300	138	3432	158	3552
19	974	39	2064	59	2466	79	2825	99	3072	119	3312	139	3438	159	3558
20	1024	40	2124	60	2464	80	2843	100	3084	120	3324	140	3444	160	3564

Appendix D

Ordinance 2003-43 RICSWCD USDA NRCS

Village of Carbon Cliff

ORDINANCE NO. 03-43

AN ORDINANCE AUTHORIZING THE EXECUTION OF A MEMORANDUM OF UNDERSTANDING BETWEEN THE VILLAGE OF CARBON CLIFF, ROCK ISLAND COUNTY, ILLINOIS AND COUNTY OF ROCK ISLAND SOIL & WATER CONSERVATION DISTRICT AND THE UNITED STATES DEPARTMENT OF AGRICULTURE-NATURAL RESOURCES CONSERVATION SERVICE.

ADOPTED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF CARBON CLIFF, ILLINOIS, ON THE 16TH DAY OF DECEMBER, 2003.

Village of Carbon Cliff

ORDINANCE NO. 03-42

AN ORDINANCE AUTHORIZING THE EXECUTION OF A MEMORANDUM OF UNDERSTANDING BETWEEN THE VILLAGE OF CARBON CLIFF, ROCK ISLAND COUNTY, ILLINOIS AND COUNTY OF ROCK ISLAND SOIL & WATER CONSERVATION DISTRICT AND THE UNITED STATES DEPARTMENT OF AGRICULTURE-NATURAL RESOURCES CONSERVATION SERVICE.

BE IT ORDAINED by the President and Board of Trustees of the Village of Carbon Cliff that:

SECTION ONE: The President of the Board of Trustees, Village of Carbon Cliff, is hereby authorized and directed to enter into and execute on behalf of the Village, A Memorandum of Understanding Between The Village Of Carbon Cliff, Rock Island County, Illinois And County Of Rock Island Soil & Water Conservation District And The United States Department Of Agriculture-Natural Resources Conservation Services, attached hereto as Exhibit "A", and incorporated herein by reference.

SECTION TWO: This Ordinance shall be in full force and effect from and after its passage and approval as required by law.

ADOPTED by the Board of Trustees of the Village of Carbon Cliff this 16th day of December, 2003.

	AYES	**NAYS**	**ABSENT**
Don Brewer	X	_____	_____
Mark Gast	X	_____	_____
Myron James	X	_____	_____
Alma Neels	X	_____	_____
Jessie Sanders	_____	_____	X
Richard Wienandt	_____	_____	_____
	AYES: _____	**NAYS:** _____	**ABSENT:** X

APPROVED by the President of the Board of Trustees, Village of Carbon Cliff, this 16th day of December, 2003.

_____
Kenneth A. Williams, Village President
Village of Carbon Cliff

ATTEST:

_____
Karen L. Hopkins, Village Clerk

(SEAL)

MEMORANDUM OF UNDERSTANDING BETWEEN THE VILLAGE OF CARBON CLIFF, ROCK ISLAND COUNTY, ILLINOIS AND COUNTY OF ROCK ISLAND SOIL & WATER CONSERVATION DISTRICT AND THE UNITED STATES DEPARTMENT OF AGRICULTURE-NATURAL RESOURCES CONSERVATION SERVICE

This Memorandum of Understanding is made and entered into by and between the following parties:

1. Village of Carbon Cliff, Rock Island County, Illinois, (hereinafter referred to as "Village"), 106 1st Avenue PO Box 426 Carbon Cliff, IL 61239.

2. Rock Island County Soil & Water Conservation District, (hereinafter referred to as RICSWCD"), 3020 East 1st Avenue Milan, IL 61264.

3. United States of America, acting by and through the Natural Resources Conservation Service, an agency of the United States Department of Agriculture (hereinafter referred to as "NRCS"), 3020 East 1st Avenue Milan, IL 61264.

I. PURPOSE

Landowners and occupiers, natural resource agencies, and other government entities all benefit from well-planned and implemented measures intended to protect soil, water and other natural resources. The above-mentioned parties all share a common objective of assisting the general public as well as other local, state and federal units of government in the understanding, development and wise use of natural resources in Rock Island County, Illinois.

It is agreed that soil, water, and other natural resources must be protected from degradation and depletion that often result from land-disturbing development activities when runoff and erosion are not properly controlled. Such adverse effects on these natural resources can be detrimental to the health, safety and general welfare of the public. The parties of this agreement mutually agree to exercise, in a coordinated manner, their respective authorities to carry out educational, incentive and regulatory programs to serve the public interest in natural resource conservation.

This Memorandum of Understanding (MOU) will establish a framework to increase cooperation and coordination between the RICSWCD, NRCS and the Village. This framework is designed to improve services to landowners and users through coordinated government actions, avoid duplication of effort and enhance other benefits to the public. This MOU is intended to address soil erosion and sediment control provisions contained within the Village of Carbon Cliff Stormwater Drainage and Detention Soil Erosion and Sediment Control Code For The Village Of Carbon Cliff, Illinois, and Village of Carbon Cliff Subdivision Ordinance.

II. AUTHORITY

A. The authority for the County to address items covered by this agreement and to enter into this agreement is included in the following:

1. Illinois Municipal Code, 65ILCS 5/1-1-1 et.seq.

B. The authority for the RICSWCD to address items covered by this agreement is included in the following:

1. Illinois Soil and Water Conservation Districts Act (70 ILCS 405/1-405/43).

C. The authority for the NRCS that address items covered by this agreement is included in the following:

1. Soil Conservation and Domestic Allotment Act (16 U.S.C. Section 590), as amended and supplemented, Public Law 74-46.

2. Soil Information Assistance for Community Planning and Resource Development (42 U.S.C. 3271-3274).

3. Clean Water Act (33 U.S.C. 1251 et.seq. as amended and supplemented, Public Law 92-500).

III. BACKGROUND

The Village enforces certain ordinances within areas of their jurisdiction.

The RICSWCD is a locally organized and operated governmental agency created by state law for the express purpose of promoting the protection, maintenance, improvement and wise use of soil, water and other natural resources within their boundaries. To accomplish this, the RICSWCD works cooperatively with individuals, groups and units of government. Technical assistance and education programs are utilized to increase awareness of natural resources, provide solutions to problems and identify better ways of managing these resources. The RICSWCD is also responsible for the development and implementation of an erosion and sediment control program. The intent of this program is to apply conservation systems to reduce soil losses from erosion to acceptable levels using a voluntary, rather than regulatory approach.

The mission of the NRCS is to provide leadership and administer programs to help people conserve, improve, and sustain our natural resources and environment. The NRCS, an agency within the US Department of Agriculture, is responsible for a national program of conserving and developing land and water resources, with primary objectives of reducing soil erosion to acceptable limits, improving and maintaining water quality, and promoting conservation programs by providing technical assistance to individuals, groups and units of government, in cooperation with soil and water conservation districts, watershed groups, resource conservation and development groups and other federal, state, and local agencies and departments.

IV. RESPONSIBILITIES

The Village agrees to:

1. The Village agrees as a special condition of a Village authorization, require the permittee to consult with the RICSWCD on soil erosion and sedimentation control plans.

2. The Village agrees to request RICSWCD to request to undertake the following:

    a. Review permittee's soil erosion and sedimentation control plans for the project and provide written evaluations of their adequacy (effectiveness) to address noted concerns.

    b. Request the RICSWCD to attend a pre-construction meeting with the permittee to review implementation of the erosion and sedimentation control plans.

    c. Review and comment on permittee's erosion inspection reports and proposed corrective measures, if applicable, and

    d. Conduct on-site inspections during the active construction phase(s) of land development projects to determine whether site development is in compliance with the approved plan and Village permit requirements (as those requirements relate to erosion and sedimentation control) and determine adjustments needed to the approved plan. After construction has been completed, determine whether permanent site stabilization has been achieved and identify operation and maintenance needs.

The RICSWCD agrees to:

1. Utilize appropriate and accepted technical references to provide standards and specifications for structural and vegetative measures that are recommended to address recognized natural resource related concerns.

2. Conduct on-site investigations and provide natural resource information to the Village for potential permitting decisions.

3. Review erosion and sedimentation control plans on Village permits or authorizations and provide an assessment of the adequacy of such plans.

4. Attend a pre-construction meeting with the permittee to review implementation of the erosion and sedimentation control plan(s).

5. Conduct on-site inspections during the active construction phase(s) of land development projects to determine whether site development is in compliance with the approved plan and Village ordinances (as those requirements relate to erosion and sedimentation control) and determine adjustments needed to the approved plan. After construction has been completed, determine whether permanent site stabilization has been achieved and identify operation and maintenance needs.

6. Prepare correspondence as needed to the permittee regarding the effectiveness (or corrective measures needed) or adequacy of erosion and sedimentation control measures.

7. Consult with land developers, consultants and contractors concerning the design criteria, installation and maintenance procedures and other information regarding conservation practices recommended under the provisions of this agreement.

8. Assume administrative responsibilities for RICSWCD employees or officials involved in carrying out the provisions of this agreement.

The NRCS agrees to:

1. As needed and requested, assist the County and the RICSWCD in carrying out the provisions as outlined in this agreement. The assistance will follow NRCS and/or RICSWCD workload priorities as outlined in the Field Office Annual Plan of Operation.

2. Provide planning and technical assistance training to the Village staff and RICSWCD staff in resource management, including but not limited to storm water management, erosion and sediment control and other natural resource related concerns.

3. Provide technical reference materials routinely used by NRCS and the RICSWCD to the Village as needed or requested, and within capabilities.

4. Assume administrative responsibilities for NRCS employees involved in carrying out the provisions of this agreement.

The Village, the RICSWCD and NRCS mutually agree:

1. That the Village retains the right of final decision in regard to soil, water and other natural resources, as well as any issues, opinions, findings, or actions resulting from this MOU.

2. To conduct cooperative programs in compliance with the non-discrimination provisions as contained in the Titles VI and VII of the Civil Rights Act of 1964, as amended, the Civil Rights Restoration Act of 1987 (Public Law 100-259 and other non-discrimination statutes, namely Section 504 of the Rehabilitation Act of 1973, Title IX of the Education Amendments of 1972, the Age Discrimination Act of 1975, and in accordance with regulations of the Secretary of Agriculture (7CFR-15, Subparts A and B) which provide that no person in the United States shall, on the grounds of race, color, national origin, age, sex, religion, marital status, or handicap be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving federal financial assistance from the Department of Agriculture or any agency thereof.

3. That except as provided herein or mutually agreed upon, no charges or fees for labor, equipment, wages or materials will be billed to the NRCS, Village or RICSWCD for the purposes of carrying out the intent of this MOU.

4. That this MOU shall become effective on the date of the last signature affixed hereto. This MOU may be modified or terminated at any time by mutual consent of the parties hereto. This MOU may be terminated by any party by sending thirty (30) days written notice by first class mail to the other parties at their main offices. Following the issuance and receipt of a request for amendment or a notice of termination, a meeting of the officially designated representative of all parties will be called.

5. That no party to this MOU shall assign this MOU, nor any interest arising herein, to any other party without the prior written consent of all parties involved.

6. That nothing herein contained is intended or should be construed as in any manner creating or establishing a relationship of copartners between parties, or as constituting the NRCS or RICSWCD (including its officers, employees, and agents), the agent, representative, or employee of the Village for any purpose, or in any manner whatsoever. Likewise, nothing contained herein is intended, or should be construed as constituting the Village (including its officers, employees and agents) the agent, representative, or employee of the RICSWCD or NRCS, for any purpose, or in any manner, whatsoever. The RICSWCD, NRCS and Village are, and shall remain, independent parties with respect to all services performed under this MOU.

7. That the provisions of this MOU are servable. If any paragraph, section, subdivision, sentence, clause or phrase of this MOU is for any reason held to be contrary to law or contrary to any rule or regulation having the force and effect of law, such decision shall not affect the remaining portions of this MOU. However, upon the occurrence of such an event, any party may terminate this MOU forthwith upon the delivery of written notices of termination to the other parties, as provided in paragraph 4 above.

8. That it is understood and agreed that the entire agreement of the parties is contained herein and that this MOU supersedes all oral agreements and negotiations between the parties relating to the subject matter hereof as well as any previous agreements presently in effect between the parties relating to the subject matter hereof.

9. That this MOU will be reviewed by all parties at least annually. Any problem with or suggested modification to this MOU will be brought to the attention of the appropriate responsible official for solving through existing policy and procedure of the specific parties to this MOU.

10. Each of the parties acknowledges the working nature of this MOU. Each party agrees to cooperate and consult with the other parties in an effort to speedily and amicably resolve any unforeseen difficulties or problems not covered by this MOU.

11. Either party, as mutually agreed upon, will provide or arrange for such additional services, facilities, equipment, materials and arrangements as may be required to achieve common objectives.

V. ADOPTION

The foregoing MOU has been adopted by resolution of each of the parties thereto, duly recorded in the official proceedings of each, and as attested by the signatures affixed below.

Village of Carbon Cliff, Rock Island County, Illinois:

SIGNATURE _____

TITLE _____

DATE _____

Rock Island County Soil and Water Conservation District:

SIGNATURE _____

TITLE _____

DATE _____

U.S. Department of Agriculture, Natural Resources Conservation Service:

SIGNATURE _____

TITLE _____

DATE _____

Appendix E

Ordinance 2012-28 Requirements for Development in Steep Slope and Ravine Areas

Village of Carbon Cliff

ORDINANCE NO. 12 – 28

AN ORDINANCE AMENDING THE VILLAGE OF CARBON CLIFF ZONING CODE ESTABLISHING REQUIREMENTS FOR DEVELOPMENT IN STEEP SLOPE AND RAVINE AREAS

WHEREAS, the Village of Carbon Cliff (the "Village") is a home-rule municipality in accordance with the constitution of the State of Illinois of 1970; and,

WHEREAS, the Village has the authority to adopt ordinances and to promulgate rules and regulations that pertain to its government and affairs that protect the health, safety and welfare of its citizens; and,

WHEREAS, steep slopes and ravines are a distinctive natural resource, that erosion can have an adverse impact upon adjacent sloped areas, support unique natural systems, effect property values and natural ecosystems and regulations are necessary; and,

WHEREAS, in exercise of its home-rule authority, the Village, through its President and Board of Trustees, has found and determined that regulations for development in steep slope and ravine areas is in the best interest of the public health, safety and welfare of its citizens.

WHEREAS, the Planning Commission considered a text amendment to add requirements for development in steep slope and ravine areas; and,

WHEREAS, a public hearing was held on June 7, 2012 at 6:00 p.m. before the Planning Commission pursuant to proper notice and in compliance with the laws of the State of Illinois and ordinances of the Village; and,

WHEREAS, the Planning Commission submitted a report of its findings and recommended approval of the text amendment; and,

WHEREAS, the Village Board of Trustees accepts and adopts the findings and recommendations of the Planning Commission concerning the proposed text amendment.

NOW, THEREFORE, BE IT ORDAINED by the President and Board of Trustees of the Village of Carbon Cliff, Rock Island County, Illinois, as follows:

Section 1. That Article III of the Zoning Ordinance of the Village of Carbon Cliff is hereby amended by adding the following new Section 39 to read as follows.

"Section 39 **DEVELOPMENTS IN STEEP SLOPE AND RAVINE AREAS**

39.01 Purpose.

39.011 Carbon Cliff's ravines and steep slopes are a distinctive natural resource which imparts a unique and substantial character to the area. It is important to understand that these steep sloped areas are interdependent - erosion, slope failures, and loss of vegetation along one portion of a slope can have an adverse impact upon adjacent sloped areas. Ravines also potentially support unique natural systems not found elsewhere. Because these ravine areas may be affected in ways that create conditions which jeopardize property values and the natural ecosystem, appropriate controls are necessary. It is the intent of this Section that all land use and development controlled by this Section:

(a) Protect people and property from the potentially hazardous geological and hydrological conditions characteristic of ravine and steep slope areas;

(b) Recognize and further maintain stable ecological relationships and minimize environmental degradation of the forested Rock River ravine areas, and reduce sedimentation and pollution of the Rock River, drainage ways, wetlands, streams, ponds and lakes;

(c) Recognize that land modification and construction should not contribute to erosion, slope destabilization, or water quality degradation;

(d) Utilize building and development techniques within the criteria stipulated in this Section.

39.012 This Section provides for the reasonable use of steep slope and ravine areas and related lands while protecting the public health, safety, and welfare by:

(a) Determining whether certain types of soil conditions exist (such as loose or easily eroded or rocky soils) and ensuring the utilization of appropriate site planning principles and engineering technology to result in stable slopes during and subsequent to development;

(b) Minimizing stormwater runoff, soil erosion, and destabilized slopes by minimizing grading, encouraging the preservation of appropriate vegetation and, where necessary, requiring revegetation;

(c) Permitting intensity of development compatible with the natural characteristics of steep slope terrain, such as degree of slope, soil stability, and existing natural and man-made drainage patterns;

(d) Preserving the scenic quality of the ravine environment through the retention of dominant steep slopes in their natural state;

(e) Establishing development setbacks and zones where limited construction and modification activities are allowed;

(f) Reducing the physical impact of tableland development by encouraging innovative site and architectural design, minimizing grading and requiring restoration of graded areas; and

(g) Prohibiting development in steeply sloped terrain.

39.02 Definitions. For purposes of this chapter, the following definitions shall apply:

39.021 *Bottom, or toe, of slope.* The line formed by the base of a steep slope.

39.022 *Construction Activities.* Any activity that involves the construction or demolition of any structure of any nature whatsoever or the disturbance, excavation or placement of soil in sufficient quantities to change soil contour at any location by a depth of more than six inches, or removal of any protected tree.

39.023 *Critical Root Zone.* The area one foot outside the general leaf canopy of a tree.

39.024 *Desirable Species.* Any species of tree belonging to any of the following genera:

Scientific Name	Common Name
Acer saccharum	Sugar Maple
Carya cordiformis	Bitternut Hickory
Celtis occidentalis	Hackberry
Juglans nigra	Black Walnut
Ostrya virginiana	Eastern Hop Hornbeam
Prunus serotina	Black Cherry
Quercus alba	White Oak
Quercus rubra	Red Oak
Tilia americana	American Basswood
Ulmus americana	American Elm
Ulmus rubra	Slippery Elm

39.025 *Diameter breast height or "DBH".* The diameter of a tree measured at four and one-half feet (4-1/2') above the highest point of the existing grade at the base of the tree.

39.026 *Director.* The Village of Carbon Cliff Director of Community and Administrative Services.

39.027 *Drainage line.* A pipe, tile, ditch or other similar manmade means of accomplishing the removal of surface and/or subsurface water.

39.028 *Erosion.* The process whereby soils are transferred from place to place by the movement of wind or water.

39.029 *Earthmoving.* Any activity that involves stripping of vegetation or movement of soil that might change the direction, rate, or volume of surface water runoff.

39.0210 *Landing*. A landing, for purposes of this Chapter, is defined as an intermediate platform on a flight of stairs, greater than 10 square feet, constructed for the purpose of allowing a change in stair direction down the Steep Slope Zone and/or to break up a sequence of 10 or more stair steps.

39.0211 *Protected tree.* Any living tree of a desirable species having a diameter of eight inches (8") DBH or larger or having an aggregate diameter of fifteen inches (15") DBH or larger.

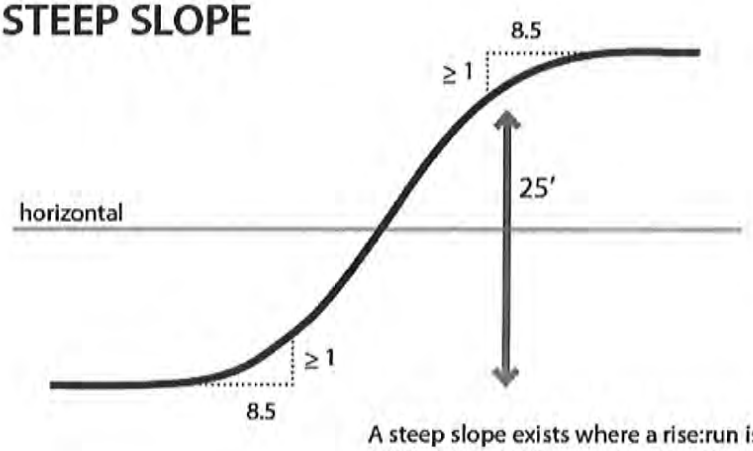
39.0212 *Ravine.* A narrow, steep sided valley or gorge worn by the flow of running water in a regularly or intermittently flowing waterway.

39.0213 *Remove or removal.* The actual physical removal of a tree, or the effective removal through intentional damaging, poisoning, or other direct or indirect intentional action resulting in, or likely to result in, the death of a tree.

39.0214 *Restoration.* The re-establishment of the grade, slope, stability, vegetation, or drainage systems of disturbed property in a Steep Slope Zone by bringing the property back to substantially the same condition as existed prior to disturbance.

39.0215 *Steep slope.* Land with a slope which equals or exceeds a vertical rise of one foot for a horizontal run of 8.5 feet (an 8.5:1 or 12% slope) for a vertical height of 25 feet or more.

STEEP SLOPE

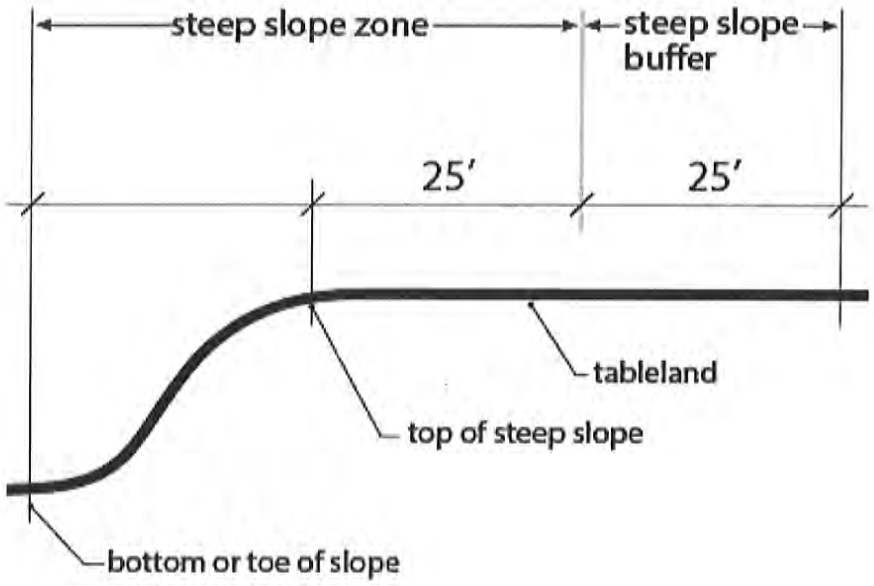


A steep slope exists where a rise:run is (1:8.5 or 12%) or greater for a vertical height of at least 25 feet.

[Illustration not to scale]

39.0216 *Steep Slope Buffer.* All land which lies between the edge of a Steep Slope Zone and a line twenty-five (25) feet beyond the Steep Slope Zone into the adjoining tableland.

39.0217 *Steep Slope Zone.* All land which lies between the bottom of a steep slope and a line twenty-five (25) feet beyond the top of a steep slope into the adjoining tableland.



39.0218 *Tableland.* An elevated region with a low relief surface and with at least one border defined by one or more steep slopes.

39.0219 *Top of steep slope.* The line formed by the upper limit of land of 12% slope or greater.

39.0220 *Tree.* A self-supporting, woody plant, together with its root system, having a well defined stem or trunk or a multi-stemmed trunk system, a more or less well defined crown, and a mature height of at least fifteen feet. "Tree" shall not include trees in containers or nursery stock trees maintained for resale.

39.0221 *Undesirable species.* Are those species of tree considered by arborists to be invasive, nonnative, and/or shallow-rooted, including, but not limited to, buckthorn, Norway maple, mulberry, box elder, black locust, Chinese elm, Siberian elm, tree of heaven and willow.

39.03 Determination of Presence. This Section shall apply to the area designated as Conservation Overlay on the Village Comprehensive Plan Future Land Use Map, as updated from time to time, along the John Deere Expressway / IL State Route 5. Steep slopes are to be determined by using the following sources and/or methods in the order indicated below. If the first sources are unavailable, as determined by the Director, the succeeding source may be used. The area of steep slopes shall be measured (in square feet or acres) and graphically delineated on a topographic plan. When using sources with less than a 2-foot contour interval, the Director may require a Steep Slope Zone edge that is more than 25 feet from the mapped top of steep slope.

(a) A topographic survey prepared by and certified by an Illinois registered land surveyor, at the petitioner's expense, at a contour interval of not less than 2 feet;

(b) Topographic or other relevant maps on file with the Village of Carbon Cliff;

(c) U.S.G.S. 7.5-minute topographic quadrangle maps.

39.04 Limitation on Construction in and Development of Steep Slope Zones. Except as authorized in this Chapter, no earth moving or construction activities may be undertaken or continue in a Steep Slope Zone or Steep Slope Buffer. Steep Slope Zones shall remain vegetated in an undisturbed natural state or using appropriate native vegetation except for the activities provided herein. Any Steep Slope Zone or Buffer disturbed for any reason including the

commencement of any authorized or unauthorized construction activities shall be restored by planting appropriate native vegetation. Whenever construction activities occur upon property abutting a Steep Slope Zone or Buffer, erosion control measures prescribed by this chapter and by the Stormwater Drainage and Detention, Soil Erosion and Sediment Control Code shall be installed and maintained during any construction activities. Furthermore, whenever construction activities occur upon property abutting a Steep Slope Zone, temporary fencing shall be erected along the top edge of the Steep Slope Zone and no soil, waste, construction materials, or any other materials shall be stored or disposed of within the steep slope zone.

39.05 Maintenance and Management of Property in a Steep Slope Zone.

39.051 Owners or occupiers of real estate within or adjacent to a Steep Slope Zone shall not discharge concentrated storm water runoff to the Steep Slope Zone. Upon approval by the Director, necessary storm or other drainage lines, including sump pump discharges may discharge to the base of the steep slope.

39.052 Private or public drainage lines shall not discharge or leak water onto the surface of a Steep Slope Zone. Private drainage lines which leak water onto the surface of a Steep Slope shall be repaired within thirty (30) days of notification by the Village.

39.053 Lawn waste, grass clippings, leaves, dump, fill, refuse, or other natural or man-made fill or debris that may damage underlying vegetation or prevent re-vegetation shall not be placed in a Steep Slope Zone and if placed shall be promptly removed. However, naturally fallen trees which are not impeding the free flow of water need not be removed.

39.054 All governmental entities, private property owners, and all other private entities having authorized access to Steep Slopes and engaged in the maintenance, repair, or construction of utilities or other structures within a Steep Slope Zone, or engaged in any modifications to a Steep Slope, shall adhere to the applicable provisions of this Section.

39.06 Subdivision of Property within the Overlay District.

39.061 All standards, submittals and requirements of the Village Subdivision Ordinance shall apply.

39.062 All applications for subdivision or replats after the effective date of this Section shall include:

(a) A map showing the boundaries of any Steep Slope Zone and Buffer located on or within 75 feet of the parcel.

(b) A map showing the location of any proposed conservation or other easements.

(c) A stormwater engineering plan meeting the standards and requirements of Sections 39.09 and 30.10.

39.063 In connection with the approval and recording of a plat of subdivision, the Village shall require covenants of record to be placed as necessary to require the long-term maintenance of drainage lines and other measures designed to reduce erosion and stabilize the slope.

39.064 The Village Board may allow flexibility in setbacks and minimum lot size to meet the intent of this Section in accordance with the provisions of the Village Subdivision Ordinance.

39.07 Structures and Activities Authorized within a Steep Slope Zone. The following construction activities are permitted within a Steep Slope Zone subject to prior issuance of a building permit and subject to conformance with the standards established in this chapter and elsewhere in the Village Code:

39.071 Small scale erosion control structures such as check dams and rip rap not exceeding a height of three feet.

39.072 Retaining Walls. Provided a building permit has been issued by the Director in accordance with the terms of this Section, retaining walls and other structures which are necessary for slope stabilization may be constructed in the Steep Slope Zone in the manner approved by the Director. The design of all retaining walls and stabilizing structures shall be certified by a licensed professional civil or structural engineer.

39.073 Legal non-conforming structures may be maintained or rebuilt subject to the provisions of the Zoning Ordinance Article XIII Non-Conforming Buildings, Structures, and Uses of Land pertaining to nonconforming buildings and uses provided that the rebuilt or maintained structure does not extend beyond the previous footprint within the Steep Slope Zone and the applicant has been issued a building permit within one year after the date on which the structure was damaged or demolished.

39.074 Mechanical or electrical lifts, bridges, walkways, steps, landings, and/or fences which do not obstruct the flow of water, and utility service lines. Stairs constructed in the Steep Slope Zone shall be no greater than five feet in width. Landings constructed in the Steep Slope Zone shall be no larger than five feet by ten feet. No fence shall be constructed across the channel of a ravine and, when constructed within a ravine, such fence shall be set back at least 10 feet from the bottom or toe of the ravine slope.

39.075 Emergency action to remediate an unstable or insecure slope which poses an imminent threat to the health, safety, or welfare of the public or nearby property, provided that the remedial action involves the least possible disruption of the natural features of the site and conforms as nearly as possible with the standards and policies of this Chapter.

39.076 Native landscape maintenance or routine arboreal activities, including the removal of diseased, dead or damaged trees of any species, and/or the removal of undesirable trees provided such activities are carried out in conformance with the vegetation and revegetation standards contained herein.

39.077 Public improvements and infrastructure constructed by the Village or other units of federal, state or local government.

39.078 Construction, demolition, or earth moving activities within a Steep Slope Zone other than those specifically authorized by subsections 39.071 through 39.077 immediately above shall require a special use authorized by the Village Board in accordance with Article XV Administration and Enforcement Section 159 Special Uses and Other Powers of the Board of Appeals. Every application for a special use to undertake construction, demolition, or earth moving activities within a Steep Slope Zone shall include the submission of a report prepared by a licensed professional civil/structural engineer trained and experienced in the practice of geotechnical engineering. The report shall cover affected portions of the Steep Slope Zone where construction is proposed. The report shall include the following:

39.0781 Soil Types and Subsurface Materials Investigation. Every application for a building permit within a Steep Slope shall be accompanied by a Soil Types and Subsurface Materials Investigation report prepared by a licensed professional civil engineer or structural engineer, trained and experienced in the practice of geotechnical engineering. Investigation shall at a minimum consist of:

(a) A thorough subsurface investigation using techniques such as borings, test pits, in situ tests, laboratory tests or other procedures performed to a depth sufficient to determine foundation conditions for the proposed construction; and

(b) A description of the soil and subsurface materials found on the subject site to a depth extending below any proposed excavation as well as the engineering properties of the subsurface soil materials.

39.0782 Geotechnical Characteristics. A discussion of geotechnical characteristics which shall at a minimum include the following:

(a) Foundation. All proposed structures shall have foundations designed in a manner consistent with sound engineering and geotechnical principles.

(b) Consideration in the design of all proposed structures shall be given to the effect of undercutting at the base of steep slopes caused by wave action, storm water flow, and erosion and/or channel changes.

(c) Additional Report and Subsoil Investigation. The report shall be prepared by a licensed professional civil engineer or structural engineer, trained and experienced in the practice of geotechnical engineering, and shall include the following:

i. A description of the stability of surface patterns of water flow as well as indication of the presence or absence of

permeable zones in underlying soils and susceptibility of slope instability due to changes in the water table.

ii. A description of any existing or anticipated problems from undercutting at the base of Steep Slopes caused by wave action, ravine, flows, or channel changes.

iii. An opinion that the soil types, soil stability, subsurface hydrology, and external influences affecting the site will not cause any significant hazards for the proposed use; or if they may cause such hazards, an opinion that such hazards can be overcome, together with a reasonably detailed description of how it is proposed to overcome such hazards.

39.0783 Earth Moving Plan. An earth moving plan which complies with the provisions of Section 39.07 of this chapter which plan shall at a minimum include the following:

(a) A topographic survey, showing property contours at one foot intervals for tableland and five (5) foot intervals for Steep Slopes, including special notes and details of the existing terrain;

(b) Proposed earth moving details, including the dimensions, elevations, and contours of any proposed earth moving and the placement of excavated materials;

(c) A description of the methods to be employed in disposing of soil and other material removed, including the location of the disposal site.

(d) A time-table for commencement and completion of each stage of the project; and

(e) A provision requiring where appropriate the placement of a temporary construction

perimeter fence on the tableland at the top edge of Steep Slope Zone until construction is completed.

(f) Means and Methods of Construction. A written description of the proposed means and methods of accomplishing such work, which means and methods shall be carefully selected to minimize slope damage and erosion. In the case of any proposed structure, the means and methods shall include plans and specifications for construction including, without limitation, a foundation plan which takes into account the conditions identified through the soil types and subsurface materials investigation. Upon approval of a building permit for the structure by the Director, such written description shall be the enforceable means and method of construction.

39.0784 Hydrological Control Plan. A plan for intercepting and containing drainage at the site and from any structure which plan complies with Section 39.092 of this chapter.

39.0785 Vegetation Plan. A vegetation plan which complies with the provisions of Section 39.093 of this chapter prepared or approved in writing by a landscape professional trained and experienced in both the characteristics of plant material and proper procedures for installation, which plan shall at a minimum include the following:

(a) An inventory describing the existing floral and tree cover of the site, including identification of undesirable species and protected trees showing those areas where the vegetation will be removed as part of the proposed development;

(b) A description of proposed revegetation of disturbed areas, specifying the materials to be used;

(c) A written description detailing methods of slope stabilization and revegetation, together with the rationale for selecting the plant materials and planting techniques proposed to be used; and

(d) A maintenance guideline, instructing owners of the site of necessary actions to be taken following construction and/or earth moving in order to maintain plantings in good and serviceable health.

39.08 Structures and Activities Authorized within a Steep Slope Buffer. The following construction activities are permitted within a Steep Slope Buffer subject to prior issuance of a building permit and subject to conformance with the standards established in this chapter and elsewhere in the Village Code:

39.081 Legal non-conforming structures may be maintained or rebuilt subject to the provisions of Article XIII Non-Conforming Buildings, Structures, and Uses of Land of the Zoning Ordinance pertaining to nonconforming buildings and uses provided that the rebuilt or maintained structure does not extend beyond the previous footprint and the applicant has been issued a building permit within one year after the date on which the structure was damaged or demolished.

39.082 Walkways, pathways, and/or fences which do not obstruct the flow of water, and utility service lines.

39.083 Decks and patios having a total ground cover area not exceeding 300 square feet may be permitted within the Steep Slope Buffer. Accessory structures other than decks and patios may not be located in the Steep Slope Buffer except upon the granting of a variance in accordance with Article XV Administration and Enforcement Section 157 Variances of the Zoning Ordinance.

39.084 Swimming pools and associated decks and patios are not allowed within ten (10) feet of the Steep Slope Zone. At or above grade pool decks and patios may extend into this 10 foot setback, but in no case shall these structures encroach upon or extend into the Steep Slope Zone.

39.085 Native landscape maintenance or routine arboreal activities, including the removal of diseased, dead or damaged trees of any species, and/or the removal of undesirable trees provided such activities are carried out in conformance with the vegetation and revegetation standards contained herein.

39.086 Turf grass lawns and ornamental plantings, provided that non-native vegetation shall not be permitted to spread into the Steep Slope Zone.

39.087 Approved stormwater runoff infiltration and detention practices including pervious or porous pavement, permeable paving blocks, bioswales, vegetated swales, filter strips, and rain gardens, or other infiltration measures as approved by the Village Engineer. These practices shall not be allowed within ten feet of the Steep Slope Zone.

39.088 Interceptor Ditches. When sound professional engineering practice dictates or when required by the Director, interceptor ditches may be used to prevent discharge of surface runoff to the Steep Slope Zone. All interceptor ditches shall be located outside of Steep Slope Zones in order that soil shall not become saturated. Intercepted water shall be conveyed in a pipe or other approved manner to a municipal storm sewer system, if available, or to the bottom of a slope in a manner designed to prevent or minimize erosion.

39.089 Irrigation systems that do not extend to within ten (10) feet of the Steep Slope Zone.

39.0810 Public improvements and infrastructure constructed by the Village or other units of federal, state or local government.

39.0811 Construction, demolition, or earth moving activities within a Steep Slope Buffer other than those specifically authorized by subsections 39.081 through 39.0810 immediately above shall require a special use authorized by the Village Board in accordance with Article XV Administration and Enforcement Section 159 Special Uses and Other Powers of the Board of Appeals. Every application for a special use to undertake construction activities within a Steep Slope Buffer, and any earth moving activities within the Steep Slope Buffer, shall include the submission of a report covering affected portions of the Steep Slope Zone or Buffer where construction is proposed. The report shall include the following:

39.08111 Earth Moving Plan. An earth moving plan which complies with the provisions of Section 39.08 of this chapter which plan shall at a minimum include the following:

(a) A topographic survey, showing property contours at one foot intervals for tableland, including special notes and details of the existing terrain;

(b) Proposed earth moving details, including the dimensions, elevations, and contours of any proposed earth moving and the placement of excavated materials;

(c) A description of the methods to be employed in disposing of soil and other material removed, including the location of the disposal site.

(d) A time-table for commencement and completion of each stage of the project; and

(e) A provision requiring where appropriate the placement of a temporary construction perimeter fence on the tableland at the top edge of Steep Slope Buffer until construction is completed.

39.08112 Hydrological Control Plan. A plan for intercepting and containing drainage at the site and from any structure which plan complies with Section 39.092 of this chapter.

39.08113 Vegetation Plan. A vegetation plan which complies with the provisions of Section 39.093 of this chapter prepared or approved in writing by a landscape professional trained and experienced in both the characteristics of plant material and proper procedures for installation, which plan shall at a minimum include the following:

(a) An inventory describing the existing floral and tree cover of the site, including identification of undesirable species and protected trees showing those areas where the vegetation will be removed as part of the proposed development;

(b) A description of proposed revegetation of disturbed areas, specifying the methods and materials to be used together with the rationale for selecting the plant materials and planting techniques; and

(c) A maintenance guideline, instructing owners of the site of necessary actions to be taken following construction and/or earth moving in order to maintain plantings in good and serviceable health.

39.09 Development Standards within the Overlay District. Construction, earth moving, plat, or replat shall occur in accordance with the following standards.

39.091 Planning and Design

39.0911 Development shall be planned and designed to recognize and fit the natural topography, soils, geology, hydrology and other existing conditions on the proposed site.

39.0912 Development shall be oriented so that earth moving, landscaping and other site preparation is minimized.

39.0913 All attempts shall be made to minimize impervious surface area.

39.0914 Structures shall be designed and located so that significant structural weight is not oriented toward the top edge of Steep Slopes and does not jeopardize slope stability.

39.092 Hydrological Controls.

39.0921 Natural Channels. Natural drainage ways and on site depressional storage shall be preserved to the maximum extent possible. Smaller depressional areas may be incorporated into development as rain gardens, bioswales, and other measures that retain runoff.

39.0922 Controlled Run-Off. Concentrated run-off from impervious surfaces, lawns, sump pumps, and roof and footing drains, shall be conveyed away from a steep slope to a municipal storm sewer system if available, or through grassed swales, infiltration trenches or other sound professional engineering practices designed to infiltrate stormwater runoff and minimize erosion, as listed below. Such infiltration measures shall not be allowed within ten feet of the Steep Slope Zone. If infiltration is not deemed appropriate, concentrated runoff from

impervious surfaces shall be collected and conveyed in drainage lines discharging to a storm sewer system or to the bottom of slope. In no case shall roof, footing, sump, storm sewers, or other drainage discharges be allowed on or within the Steep Slope Zone. Drainage plans shall be designed to prevent erosion as deemed appropriate by the Soil Types, Subsurface Materials, and Geotechnical investigation required by this Section. All discharges to the bottom of slope shall be provided energy dissipation to prevent erosion and/or down cutting of the ravine bottom.

39.0923 Stormwater Standards.

(a) All development sites shall adhere to provisions in the Stormwater Drainage and Detention, Soil Erosion and Sediment Control Code, except as otherwise noted in this Section.

(b) The drainage system shall be designed to control the peak rate of discharge from the property for the 2 year, 24 hour and 100 year, 24 hour events to 0.04 cfs/acre and 0.15 cfs/acre, respectively but shall not exceed a rate which will cause an increase in flooding or channel instability downstream when considered in aggregate with other developed properties and downstream drainage capacities.

(c) Concentrated stormwater discharge for all storm events less than the 1-year frequency shall not be allowed to discharge into ravines and, where feasible, shall be infiltrated on site subject to conformance with the standards established in this chapter and elsewhere in the Village Code.

(d) Development that falls below the thresholds for stormwater detention requirements but that increases impervious cover by more than 400 square feet shall be required to meet the 1-year infiltration rate requirements of Section 39.0923 (c).

(e) Development that results in an increase in impervious cover of less than 400 square

feet is not required to provide detention or infiltration but shall meet the setback and controlled runoff standards of section 39.0922.

39.0924 Stormwater Infiltration Practices. It shall be demonstrated by calculation that the infiltration practice has sufficient capacity to store and infiltrate the design event within a period of 48 hours after cessation of rainfall runoff. The design soil infiltration capacity of the least permeable layer between the bottom of the practice and ten feet below the practice shall be based on field or lab testing of the site soils.

39.0925 Discharge Point Stabilization in Steep Slopes. Natural drainage ways shall be stabilized by use of deep-rooted, native vegetation, rip-rap, erosion control blanket, or other means consistent with sound professional engineering practice, to a distance below / downstream of drainage and culvert discharge points sufficient to convey the discharge while minimizing channel erosion and in such a manner as to dissipate the energy of the discharge. The distance to which the armoring should extend will depend on discharge flow rates, the steepness of the ravine bottom profile, the width of the ravine bottom, and the soils of the ravine bottom and in no case shall be less than 25 feet. Outfalls may also be eliminated in favor of level spreaders or other practices that distribute rather than concentrate flow as approved by the Village Engineer. Level spreaders shall be located outside the Steep Slope Zone.

39.0926 Early Completion. The overall drainage system shall be completed and made operational at the earliest possible time during construction.

39.0927 Impact on Adjacent Property. The natural or usual flow of surface or subsurface water shall not be altered or obstructed by grade changes in any way that may adversely affect the property of another by either contributing to pooling or collection of waters or to the concentration or intensification of surface water discharge. However, construction which might otherwise be prohibited hereinabove

may be allowed by the Director if such waters are properly drained by a pipe or other approved manner to a municipal storm sewer system, if available, or to the bottom of the ravine or steep slope.

39.093 Vegetation and Revegetation.

39.0931 Natural Vegetation. Every effort shall be made to maintain natural vegetation in an undisturbed and natural state in a Steep Slope Zone except as permitted by this Chapter.

39.0932 Smallest Area. When construction activities are authorized in a Steep Slope Zone or Buffer, the smallest practical area of bare soil shall be exposed for as short a duration as practical. Unless sound professional engineering practice dictates or when required by the Director, erosion control blanket and temporary vegetation, or other acceptable cover shall be used to protect areas of bare soil exposed during construction and to prevent airborne or waterborne transportation of soil.

39.0933 Revegetation. A mixed planting of native perennial and woody species with deep root systems shall be used to landscape areas in a Steep Slope Zone disturbed by construction, demolition, and/or earth moving. Areas in a Steep Slope Buffer disturbed by construction, demolition, and/or earth moving may be stabilized using a cover crop or other stabilizing vegetation.

39.0934 Tree protection

(a) It shall be unlawful to remove any Protected Tree from a Steep Slope Zone without the approval of the Director. Such cases may be approved where sufficient proof has been provided by a certified arborist or a landscape professional trained and experienced in ravine and/or steep slope vegetation management that the existing canopy in the Steep Slope Zone is too dense to permit the growth of understory vegetation on the slope.

(b) Approved tree removal shall include a description of procedures that will be used to prevent soil erosion in the area from which the tree or tree stump is to be removed. Such procedures shall include replacement of soil and replanting of plant species that will secure the soil and prevent soil erosion.

(c) The Critical Root Zone of Protected Trees is one foot outside the general leaf canopy and shall be protected from damage during all construction operations. No construction activities, including the placement of topsoil, shall be permitted within the Critical Root Zone. In addition, all roadways, parking areas, and storage areas shall be located outside any Critical Root Zone.

(d) All required protection measures including construction fencing or approved equivalent shall be installed prior to the commencement of any site development activity and shall remain in place and in working, functional order until all site development activities have ceased or the surrounding area has been stabilized.

39.0935 Cultivation of vegetables, turf lawn, or ornamental plants is allowed within the Steep Slope Buffer. Turf lawn and other non-native vegetation shall not be permitted to spread into the Steep Slope Zone.

39.094 Earth Moving

39.0941 Minimum Alterations. Earth moving within 100 feet of a steep slope zone shall be limited to the minimum required for building foundations, driveways, drainage control structures, and immediate yard areas. Alterations of grade shall not be made except as provided for in the Stormwater Drainage and Detention, Soil Erosion and Sediment Control Code.

39.0942 Erosion Control. All earth moving shall be accomplished in a manner which will create the lowest possible potential for airborne or waterborne soil erosion.

39.0943 Soil Fill on Steep Sloped Land. All fill in a Steep Slope Zone is prohibited, other than back-fill which is determined by the Director to be necessary for slope stabilization or installation of utilities. All fill shall be benched, placed in maximum 8" lifts, and compacted to a minimum 85 percent of maximum density as determined in ASTM procedure D-1557 or otherwise stabilized in a manner approved by the Director.

39.0944 Soil Fill on Tableland. In conformance with generally accepted engineering standards, all fill on tableland shall be compacted to a minimum 85 percent of maximum density as determined in ASTM procedure D-1557 or equivalent.

39.0945 Excavated Materials. Surplus or unsuitable excavated materials shall not be placed within the Steep Slope Zone or Buffer.

39.0946 Prompt Completion. All earth moving shall be accomplished in the shortest practical period of time. All excess excavated material shall be removed from the Steep Slope Zone and no temporary or permanent storage of material shall be permitted within the Steep Slope Zone. No existing natural vegetation shall be destroyed, removed or disturbed prior to the initiation of construction, demolition, or earth moving activities.

39.095 Wastewater. All wastewater / sanitary flows shall be connected to a municipal sanitary sewer line. No septic systems shall be used in Steep Slope Zones or Steep Slope Buffer.

39.10 Permits. A permit for any construction activity which under the provisions of Section 39.07 and 39.08 requires a special use may be issued only after approval of the special use by the Village Board. Each application for a permit to undertake any construction activities within the Overlay District which does not require a special use shall be made in compliance with the Building Code, the Zoning Code, other applicable Village codes and ordinances, and this chapter. The seal of an Illinois licensed professional civil or structural engineer shall appear on all plans and specifications pursuant to which any permit is issued for any construction activities within a Steep Slope Zone or Buffer which does not require a special use.

39.101 No final plat, replat, or building permit shall be issued within the Overlay District until the applicant has submitted and the Director has approved a written plan consisting of at least the following:

39.1011 A Site Plan showing existing and proposed grading, delineated Steep Slope and Buffer Zones as well as proposed improvements.

39.1012 A description of soil and subsoil conditions in the area where the construction activity will occur.

39.1013 An Earth Moving Plan which details dimensions, elevations and contours of any proposed earth moving activities, describes the placement of excavated materials, describes the methods to be employed in disposing of excess excavated material including the location of the disposal site, a timetable for completion of the project and a description of temporary and permanent erosion control measures, including provisions for the interception and containment of surface and subsurface water in the vicinity of construction.

39.1014 A Stormwater Plan, including calculations, detailing the stormwater management features being used to meet stormwater standards.

39.1015 A Soil Erosion and Sediment Control Plan meeting the standards of this Section and the Village Soil Erosion and Sediment Control ordinance.

39.1016 A Vegetation Plan which describes vegetation to be removed or affected during construction, including in particular any protected trees to be removed and a plan for revegetation of the disturbed area including a description of the plant materials which will be utilized in connection with the restoration.

39.1017 Long Term Management Plan which describes inspection and management activities and a schedule for such activities to maintain the stability and ecological integrity of the Steep Slope Zone and Buffer in accordance with best available scientific information. The Plan shall include estimated annual costs and those parties responsible for conducting maintenance in conformance with Sections 39.102 and 39.104.

39.102 The Village shall require the owners of property or easements containing Steep Slope Zones, or those parties to whom management responsibility has been conveyed for property within Steep Slope Zones in accordance with Section 39.103, to conduct appropriate management activities in accordance with the Long Term Management Plan. The owner or responsible party shall execute a maintenance agreement or covenant with the Village guaranteeing that the applicant, all future owners of the property, and/or the responsible party, will manage and maintain the Steep Slope Zone In conformance with the Long Term Management Plan. Such agreement shall be recorded with the Recorder of Deeds of the County in which the property is located. The maintenance agreement or covenant shall provide an access easement to the Steep Slope Zone for inspection by authorized personnel of the Village. The maintenance agreement or covenant shall also stipulate that if the appropriate personnel of the Village notify the property owner in writing of maintenance problems which require correction, the property owner shall make such corrections within seven (7) calendar days of such notification or as otherwise agreed to between the property owner and the Village. If the corrections are not made within this time period, they shall be considered violations of this Section and the Village after notice to the property owner may have the necessary work completed and assess the cost to the property owner.

39.103 The Village Board shall require the designation of areas within the Steep Slope Zones and ravines to be protected by a conservation easement. The Village Board also may require that landowners convey ownership or management responsibility of areas within Steep Slope Zones and ravines as common open space to be managed by a third party non-owner, homeowners association, conservation / land trust organization, or the Village. In order to facilitate management and maintenance activities, the Village Board may require management agreements with landscaping firms or land conservancies.

39.104 In order to facilitate the management and maintenance of Steep Slope Zones and ravines, an approved management funding mechanism and/or revenue source, such as a homeowner association, Special Service Area, or escrow account, shall be established. In the case of a homeowner association, a backup Special Service Area shall be established to fund the

recommended management and maintenance activities described in Section 39.102 above when not completed by the responsible party or parties as described in Section 39.103 above.

39.11 Limitations. The following provisions shall be imprinted upon any building permit issued for any construction, demolition, or any earth moving activities authorized by the administration of this Section:

39.111 Limited Obligation. Compliance with the procedures of this Section and the issuance of any related permits shall not be construed to impose any legal or moral obligation upon the Jurisdiction or its elected or appointed officials.

39.112 Civil Claims. Compliance with the procedures of this Section and the issuance of related permits shall not relieve the permittee and the property owner from civil liability claims by other property owners.

39.113 Endorsement. Compliance with the procedures of this Section and the issuance of related permits do not imply approval of the need for or the benefit or efficacy of the proposed construction; nor does it constitute any assertion that the proposed construction will not result in damage to the property in question or to adjoining property.

39.114 Closing Certification and Report. A licensed professional civil or structural engineer must inspect all work in the Steep Slope Zone while in progress, and provide certification and a written report stating that all construction is in accordance with the approved plan and specifications for the project prior to the Village's final inspection, acceptance and closing of the project.

39.12 Appeals.

39.121 Any interpretation of this Section by the Director may be appealed to the appropriate entity. The appropriate entity shall consider each appeal application at a public meeting within thirty (30) days of the Director receiving the application. Within thirty (30) days after the public meeting, the appropriate entity shall uphold, modify or overrule the decision of the Director.

39.122 Appeals are subject to external and extensive internal review to help ensure that decisions are based on the best available data and conform to contemporary scientific principles.

39.13 Variations. It is the intent of this Chapter to encourage well designed buildings and accessory structures which do not interfere with the Steep Slope Zone or Buffer. There may be instances where strict application of the provisions of this Chapter may deprive a person of the reasonable use of land. Variations from the required standards set forth in this Chapter may be granted by the Zoning Board of Appeals, which shall approve or disprove the variance depending upon investigation and findings that the proposed variation meets the standards set forth in this Chapter to preserve the Steep Slope.

39.14 Reimbursement of Engineering Fees. Should any representative of the Village deem it necessary to obtain the services of a professional engineer to review or verify the calculations or conclusions submitted to the Village in connection with any application for a permit to undertake construction activities within a Steep Slope Zone or Buffer, to conduct inspections while an applicant engages in construction activities after issuance of a permit, or to undertake any other reasonably necessary investigations or activities, the applicant for such permit shall reimburse the Village for the reasonable cost of such services. By submitting an application to undertake construction activities within a Steep Slope Zone or Buffer, the applicant shall be taken to have agreed to pay any such fees. The Director shall refuse to issue a permit for any construction activities within a Steep Slope Zone or Buffer until all actual or estimated engineering fees due under the provisions of this section have been paid in full. The Director shall refuse to issue a certificate of occupancy for any improvements until all engineering fees due under the provisions of this section have been paid in full. The Director may as a condition to commencing the process of considering an application for a special use under the provisions of Section 6 (I) require advance payment of the estimated cost of such engineering fees.

39.15 Security for Completion of Improvements. In order to secure compliance with this chapter, including the completion of construction activities within a Steep Slope Zone or Buffer in accordance with the provisions of any report submitted in support of an application to undertake such activities and/or to secure compliance with the terms of any permit or special use authorized under the provisions of this chapter, either the Village Board or the Director may require the applicant to post security in the form of either a performance bond or a letter of credit. Any such performance bond or letter of credit shall make funds available to the Village in an amount which reasonably approximates the cost of completing any construction activities commenced under the terms of any permit or special use and/or the cost of completing the restoration of the affected property in the event that construction activities are commenced but not completed. In the event that construction activities are commenced but not completed in accordance with any applicable permit or special use, the Village may at its option either complete any authorized construction activities or undertake restoration of the affected property. Should it complete the authorized construction activities or undertake restoration of the affected property, the Village may pay any costs that it incurs by drawing on the performance bond or letter of credit posted with respect to the affected property. A performance bond or letter of credit required under this section shall contain such terms and conditions as the Village Board or the Director deem reasonably necessary to insure the availability of funds in the amount of

the security instrument for the purpose of completing any construction activities or completing any restoration.

39.16 Penalties and Enforcement.

39.161 The developer and the property owner, their agents, employees, contractors, subcontractors, licensees, and invitees are responsible for compliance with the terms of this Chapter.

39.162 The Village of Carbon Cliff is authorized and empowered to enforce the requirements of this Section in accordance with the procedures of this section. An employee or officer of the Village may enter upon any lands at any reasonable time for the purpose of carrying out an inspection to determine whether this chapter or any permit issues are being complied with.

39.163 If, upon inspection or investigation, the Director or his/her designee is of the opinion that any person or entity has violated any provision of this Section, he/she shall with reasonable promptness issue a correction notice to the person. Each such notice shall be in writing and shall describe the nature of the violation, including a reference to the provision within this Section, which has been violated. In addition, the notice shall set a reasonable time for the abatement and correction of the violation.

39.164 In the event any violation of any provision of this Chapter occurs, the property owner shall be responsible for correcting the violation and bringing the property into compliance with the terms of this Chapter. Such compliance may require restoration of the site as closely as possible to its original undisturbed condition, topography, and/or vegetation in order to eliminate the violation.

39.165 The Village shall have the right, but not the obligation, to issue a stop work order for any work that is performed in the Steep Slope Zone or Buffer without all permits that are required pursuant to this Chapter.

39.166 Any person, firm, or corporation violating any provision of this Chapter shall be fined not less than one hundred ($100.00) dollars nor more than seven hundred fifty ($750.00) dollars, and each day a violation continues shall be considered a separate violation. Failure to comply with the terms and conditions of any special use authorized under the provisions of this chapter shall constitute a violation of this chapter. Failure to comply with or implement the provisions of any engineering

report or other plan submitted in support of any application for a permit or special use under this chapter shall constitute a violation of this chapter. Each day that a violation continues shall constitute a separate offense.

39.167 The Village may in its discretion apply to a court of competent jurisdiction for injunctive relief for the purpose of enforcing the provisions of this chapter or for an order upon the parties responsible to re-establish or restore the grade, slope, stability, vegetation, and/or drainage systems of a Steep Slope property in order to eliminate and/or prevent an adverse impact upon any adjacent or subservient property, and for such other and further relief as may be appropriate in the circumstances.

39.17 Conflict with Other Regulations. Where the provisions of this Chapter conflict with other laws, regulations and ordinances, the more restrictive shall apply."

Section 2. Any person, firm, or corporation violating any provision of this ordinance shall be fined not less than one hundred ($100.00) dollars nor more than seven hundred fifty ($750.00) dollars, and each day a violation continues shall be considered a separate violation.

Section 3. This Ordinance shall be in full force and effect upon its passage, approval, and publication in pamphlet form as provided by law.

ADOPTED by the Board of Trustees for the Village of Carbon Cliff, Illinois, this 3rd day of July, 2012, pursuant to a roll call vote as follows:

	AYES	**NAYS**	**ABSENT**
Don Brewer	X		
Mark Gast	X		
Bill Hintz	X		
Wallace Longbons	X		
Alma Neels	X		
Vacant			
	AYES 5	NAYS 0	ABSENT 0

APPROVED by the President of the Board of Trustees of the Village of Carbon Cliff this 6th day of July, 2012.

Kenneth A. Williams
Village President
Village of Carbon Cliff

ATTEST:

Karen L. Hopkins – Village Clerk
Village of Carbon Cliff

(SEAL)

Appendix F

Ordinance 2017-24 Amendment to the Storm Water Drainage and Detention, Soil Erosion and Sediment Control Code

Ordinance No. 2017-24

AN ORDINANCE OF THE VILLAGE OF CARBON CLIFF, ROCK ISLAND COUNTY, ILLINOIS, AMENDING THE STORMWATER DRAINAGE AND DETENTION, SOIL EROSION AND SEDIMENT CONTROL CODE FOR THE VILLAGE OF CARBON CLIFF, ILLINOIS

WHEREAS, the Village of Carbon Cliff, Rock Island County, Illinois (the "Village") is a home-rule municipality pursuant to Article VII, Section 6(a) of the Constitution of the State of Illinois of 1970; and,

WHEREAS, the Village pursuant to its home rule powers has the authority to exercise any power and perform any function pertaining to its government and affairs including the power to regulate for the protection of the public health, safety and welfare; and,

WHEREAS, on December 18, 2001 the Village adopted Ordinance No. 01-62 establishing the Stormwater Drainage and Detention, Soil Erosion and Sediment Control Code For the Village of Carbon Cliff (the "*Stormwater Code*") which sets forth regulations meant to protect the Village from potential damage from changes in stormwater drainage patterns and increased soil erosion; and,

WHEREAS, the President and Board of Trustees of the Village (the "*Corporate Authorities*"), pursuant to Section 76 of the Stormwater Code, proposed to amend the Stormwater Code to include a list of projects to be undertaken within the Village in order to further promote the Stormwater Code's purpose and objectives (the "*Proposed Amendment*"); and,

WHEREAS, in accordance with Section 76 of the Stormwater Code, after due notice, the Plan Commission held a public hearing on the Proposed Amendment on October 16, 2017 and thereafter submitted a report of its findings and recommended the adoption of the Proposed Amendment to the Corporate Authorities; and,

WHEREAS, the Corporate Authorities have found and determined that it is in the best interest of the public health, safety, and welfare of its citizens to accept the Plan Commissions recommendation and to amend the Stormwater Code as set forth below.

NOW, THEREFORE, BE IT ORDAINED by the Village President and Board of Trustees of the Village of Carbon Cliff, Rock Island County, Illinois, as follows:

Section 1. That the preambles of this Ordinance are hereby incorporated into this Section as if set out herein in full.

Section 2. That Section 10 of the Stormwater Code is hereby amended by adding the following language to the end of said section:

The Village believes that the regulations provided for herein and the proposed projects to be undertaken as set forth in Appendix C hereto, are in furtherance of the purposes and objectives of this Section 10.

Section 3. That the Stormwater Code is hereby amended by adding the following Appendix C:

Appendix C
Desirable projects to be undertaken.

Bank stabilization of Argillo Creek west of the Rock River. Completion of this project shall help control the major soil erosion that occurs due to flash flooding and flooding of the creek itself.

Addition of holding ponds for Argillo Creek and other creeks within the Village, including the creeks running through the Merry Oaks and Whispering Oaks Addition and the Cliff Heights Addition. Currently, water enters these creeks at too fast a rate for the creeks to retain the water resulting in overflow of the creek banks, major flash flooding, and soil erosion. The addition of holding ponds will allow the high influx of water into the creeks during heavy storms to occur at a much slower rate allowing water to move downstream rather than over the creek banks.

Establishment of a conservation district for the undeveloped areas on top of the Bluff Area and on the side of the Bluff Area. The conservation district will require implementation of basic storm water practices such as larger lots, smaller paver brick streets and paver brick driveways and sidewalks, and retention of mature trees. Such a district will help prevent soil erosion by working to prevent flash flooding.

Section 4. This Ordinance shall be in full force and effect from and after its passage, approval, and publication in pamphlet form as provided by law.

ADOPTED by the Board of Trustees for the Village of Carbon Cliff, Rock Island County, Illinois, this 17th day of October 2017, pursuant to a roll call vote as follows:

	AYES	**NAYS**	**ABSENT**
Todd Cantrell	X		
Keith Curry	X		
Robert Dreher	X		
Leevon Harris	X		
Alma Neels	X		
Larry Scott	X		
	AYES 6	NAYS 0	ABSENT 0

APPROVED by the President of the Board of Trustees of the Village of Carbon Cliff, Rock Island County, Illinois, this 17th day of October 2017.

Bill Hintz
Village President
Village of Carbon Cliff

ATTEST:

Karen L. Hopkins

Karen L. Hopkins – Village Clerk
Village of Carbon Cliff

VILLAGE OF CARBON CLIFF
CORPORATE
SEAL
INC. 1907
ILLINOIS

Appendix G

Best Management Practices (BMPs) Implementation Schedule

Best		Frequency / Schedule	Implementation Date	Responsible Party
A.1	Distributed Paper Mail	Quarterly	6/1/2026	Village Director / Designee
A.6	Other Public Education	At least twice per year	3/1/2026	Village Director / Designee
B.4	Public Hearing	Annually	6/1/2026	Village Director / Designee
B.7	Other Public Involvement (Access to SWMP)	At least twice per year	Posted on Village Website by 4/12026	Village Director / Designee
C.1	Sewer Map Preparation	Annually	Finalize by 6/1/2026	Village Director / Designee
C.2	Regulatory Control Program	Every 5 Years / As Needed	Finalize Ordinances and Begin Enforcement by 12/31/2026 and Review/Revise by 13/31/2031	Village Director / Designee
C.3	Detection/Elimination Prioritization Plan	Annually / As Needed	6/1/2026	Village Director / Public Works Staff
C.4	Illicit Discharge Tracing Procedures	Annually / As Needed	6/1/2026	Village Director / Public Works Staff
C.5	Illicit Source Removal Procedures	As Needed	6/1/2026	Village Director / Public Works Staff

Best Management Practice (BMP)		Frequency / Schedule	Implementation Date	Responsible Party
C.6	Program Evaluation and Assessment	Annually	Begin 1/1/2027 and Repeat Annually	Village Director / Designee
C.7	Visual Dry Weather Screenings	Annually / As Needed	6/1/2026	Village Director / Public Works Staff
C.9	Public Notification	Year-Round	6/1/2026	Village Director / Designee
C.10	Other Illicit Discharge Controls	Annually / As Needed	3/1/2026	Village Director / Public Works Staff
D.1	Regulatory Control Program	Every 5 Years / As Needed	Complete Ordinace Review and Revision by 12/31/2026	Village Director / Designee
D.2	Erosion and Sediment Control BMPs	As Needed	6/1/2026	Village Director / Designee
D.4	Illicit Discharge Tracing Procedures	As Needed	6/1/2026	Village Director / Retained Third-Party Consultant
D.5	Public Information Handling Procedures	As Needed	6/1/2026	Village Director / Designee
D.6	Site Inspection and Enforcement Procedures	As Needed	6/1/2026	Village Director / Retained Third-Party Consultant

Best Management Practice (BMP)		Frequency / Schedule	Implementation Date	Responsible Party
E.2	Regulatory Control Program	As Needed	3/1/2026	Village Director / Designee
E.3	Long Term O & M Procedures	Annually	3/1/2026	Village Director / Designee
E.4	Pre-Construction Review of BMP Designs	As Needed	3/1/2026	Village Director / Retained Third-Party Consultant
E.5	Site Inspections During Construction	As Needed	3/1/2026	Village Director / Retained Third-Party Consultant
E.6	Post-Construction Inspections	Annually / As Needed	3/1/2026	Village Director / Retained Third-Party Consultant
F.1	Employee Training Program	Annually / As Needed	3/1/2026	Village Director / Designee
F.2	Inspection and Maintenance Program	Annually / As Needed	3/1/2026	Village Director / Designee
F.3	Municipal Operations Storm Water Control	Annually / As Needed	3/1/2026	Village Director / Designee
F.4	Municipal Operations Waste Disposal	Year-Round	3/1/2026	Village Director / Designee

Appendix H

Records