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February 20, 1995

The Meadville Tribune
Business Office
947 Federal Court
Meadville, Pennsylvania 16335
Attn: Linda Stafford

Office of Recorder of Deeds
Crawford County Courthouse
Meadville, Pennsylvania 16335

Re: Summerhill Township Storm Water Management Ordinance

Pursuant to the Second Class Township Code, enclosed please find a copy of the Summerhill Township Storm Water Management Ordinance which is being advertised for adoption by the Supervisors by summary form in the Tribune. The Second Class Township Code requires that a complete copy of the Ordinance be available for inspection at the designated County office and the newspaper in which the Legal Notice is published for review by interested citizens. Accordingly, please accept this request to retain this copy of the Ordinance for inspection by citizens if requested. It is expected that the Ordinance will be adopted at the Township meeting scheduled for Thursday, March 2, 1995.

Thank you for your assistance and cooperation in this matter.

Very truly yours,

CULBERTSON, WEISS, SCHETROMA and SCHUG, P.C.

By: _____

Alan R. Shaddinger

ARS/tb/trib

Enclosure 1

cc: Summerhill Township Board of Supervisors
R. D. #2, Box 152
Conneautville, Pennsylvania 16406

Attention: Mary Ann Goodrich, Secretary

95 FEB 21 11:41 AM
OFFICE OF RECORDER OF DEEDS

**SUMMERHILL TOWNSHIP
CRAWFORD COUNTY, PENNSYLVANIA
ORDINANCE NO. 1995 - _____**

**STORM WATER MANAGEMENT ORDINANCE
TO REGULATE ACTIVITIES AFFECTING STORM WATER RUNOFF
IN DESIGNATED WATERSHEDS,
REQUIRING PLAN SUBMISSION AND APPROVAL, AND PROVIDING FOR
ENFORCEMENT INCLUDING CIVIL PENALTIES FOR VIOLATION**

Be It Enacted and Ordained, by the Board of Supervisors of Summerhill Township, Crawford County, Pennsylvania, and it is hereby enacted and ordained by the authority of the same as follows:

**ARTICLE I
GENERAL PROVISIONS**

Section 101. Title. The title of this Ordinance is the Summerhill Township Storm Water Management Ordinance.

Section 102. Purpose. These regulations are adopted and implemented to satisfy the Pennsylvania Storm Water Management Act (Act 167 of 1978, as amended) planning requirements and the requirements of the Conneaut Outlet Watershed Act 167 Storm Water Management Plan adopted in 1994, to achieve the following general purposes and objectives:

To control accelerated and/or redirected runoff and erosion and sedimentation problems at their source by regulating activities which cause such problems.

To utilize and preserve the desirable existing natural drainage systems and to preserve the flood-carrying capacity of streams.

To encourage natural infiltration of rainfall to preserve groundwater supplies and stream flows.

To provide for adequate maintenance of all permanent storm water management structures in the municipality.

Section 103. Applicability. It has been determined that the following activities involving alteration or development of land within the Storm Water Management Districts identified in this ordinance, affect storm water runoff characteristics and accordingly are subject to regulation under this ordinance, depending on the extent of their impact on the land:

Subdivision

Land Development

Earth moving or disturbance involving 1.5 or more acres

Construction of new buildings or additions to existing buildings.

Construction of new or additional impervious or semi-impervious surfaces (driveways, parking lots, etc.)

Diversion or piping of any natural or man-made channel or watercourse

Installation, replacement or substantial repair of storm water systems or appurtenances

Mining operations and oil and gas drilling operations

Other activities which may affect or alter existing runoff rates and/or patterns so as to affect downstream persons or properties.

Section 104. Storm Water Management Districts. The following storm water management districts located within the Township are subject to regulation under this Ordinance:

- A. Conneaut Outlet Watershed as designated in the Conneaut Outlet Watershed Act 167 Storm Water Management Plan adopted in 1994. The locations and boundaries of this watershed and subareas are shown on the Watershed Release Rate Percentage Maps prepared by Chester Environmental Inc., which map is part of the Conneaut Outlet Watershed Storm Water Management Plan adopted by the Crawford County Commissioners July 15, 1993, and is included and made a part of this Ordinance.

Section 105. General Storm Water Planning Requirements. Within the Storm Water Management Districts designated in Section 104 of this ordinance, no final subdivision/land development plan shall be approved, no permit authorizing construction or development shall be issued, and no earth moving or land disturbance activity shall be initiated until the final storm water management plan for the development site is approved in accordance with the provisions of this ordinance.

Section 106. Exemptions to Storm Water Planning Requirements.

- A. *General Exemptions.* The following activities are specifically exempt from the plan preparation requirements of this Ordinance unless the Township determines that the activity is likely to, has, or will negatively impact the purposes and objectives set forth in Section 102. For example, where an activity occurs on very steep terrain or where an activity is the latest in a series of incremental developments expected to cause substantial storm water impacts, the Township may require that these activities be subject to the plan requirements of this ordinance even though the activities otherwise qualify for exemption under this

section. Upon making such determination, the Township shall give notice in writing to the landowner and the developer, if known, and direct the landowner and any developer to immediately cease and desist all activity and affirmatively comply with the formal plan, submission and approval procedures of this ordinance.

1. Land disturbances affecting less than 1.5 acres of ground surface.
2. Land disturbances of less than 1.5 acres involving development relating to uses and structures accessory to existing one and two family residential dwellings.
3. Developments involving the construction of a single or two family residential dwelling and related accessory buildings on a separate parcel of land where the total impervious or semi-impervious land surface resulting from the development is less than 7500 square feet and land disturbance affects less than 1.5 acres of ground surface.
4. Land developments involving the construction of a structure utilized for agricultural purposes on an existing farm where the total impervious or semi-impervious land surface resulting from the development is less than 7500 square feet, and the land disturbance affects less than 1.5 acres of ground surface.
5. Agricultural activities except for the construction of new buildings and impervious areas unless otherwise exempted.
6. Forest management operations which are following the Department of Environmental Resources' management practices contained in its publication "Soil Erosion and Sedimentation Control Guidelines for Forestry" and are operating under an erosion and sedimentation control plan reviewed and approved by the Crawford Conservation District.
7. Subdivisions which are certified to be solely for purposes other than building or development.

B. *Exemptions for Small Developments.* "Small developments" as defined herein shall be eligible for simplified storm water plan submission requirements if, at the time of application, the Township determines that the subdivision/land development shall not include a new public or private road and qualifies as a "small development" which is defined to include:

1. Residential subdivisions and land developments involving no more than two lots where each lot is a minimum of 20,000 square feet, where the

development will involve construction of less than 7,500 square feet of impervious or semi-impervious surface, and where the disturbed area of land at any one time shall be no greater than 1.5 acres.

2. Land developments (excluding residential subdivisions referred to above) involving the construction of only one commercial, industrial or any other non-residential building and including an individual apartment building of 3 or more dwelling units where the development involves less than 7,500 square feet of impervious or semi-impervious surface and where the total area of disturbed land is less than 1.5 acres.

- C. *Requirements for Small Developments.* Applications for small developments as defined in this subsection shall include a plan which describes the type and location of proposed structures, and other impervious and semi-impervious surface areas and their dimensions, on-site storm water management techniques or the proposed connection to an existing storm sewer system. The plan should show accurately site boundaries, contours at reasonable intervals (which can be scaled on the plan from USGS 7.5 minute topographic quadrangle base maps), locations of watershed and/or subarea boundaries, and locations of existing drainage facilities or structures located on the site. The municipality reserves the right to require that the plan be prepared by a registered professional engineer, surveyor or landscape architect.

The Township and Municipal Engineer or other designated qualified professional shall review and approve the proposed provisions for storm water management for small developments in accordance with the general standards contained in Section 201 of this ordinance, the facilities design criteria contained in Section 203 of this ordinance and erosion and sedimentation control requirements contained in Section 204 of this ordinance.

If the Township and Municipal Engineer or other designated qualified professional shall determine that the planned small development meets the general criteria referred to above and otherwise is unlikely to have an adverse impact on the storm water objectives for the Storm Water Management District, the plan shall be approved without further proceedings as required by Article III of this ordinance.

The Township or Municipal Engineer or other designated qualified professional may require reasonable modifications and conditions to the plan to meet the general criteria and objectives referred to above, in order to obtain approval under this section. In the event, the small development cannot be approved in accordance of this provision for small developments, the plan shall be subject to the plan requirements for all other non-exempt land developments.

Section 107. Prohibited Activities. It shall be unlawful for any person to engage in any development or land disturbance activity in a manner contrary to or in violation of any provision of this Ordinance or any storm water plan approved by the Township pursuant to this Ordinance.

Section 108. Liability Disclaimer.

1. Neither the granting of any approval under the storm water management provisions of this ordinance, nor the compliance with the provisions of this ordinance, or with any condition imposed by a municipal official hereunder, shall relieve any person from any responsibility for damage to persons or property resulting therefrom, or as otherwise imposed by law, nor impose any liability upon the municipality for damages to persons or property.
2. The granting of a permit which includes any storm water management facilities shall not constitute a representation, guarantee or warranty of any kind by the municipality, or by an official or employee thereof, proposed, and shall create no liability upon or cause of action against such public body, official or employee for any damage that may result pursuant thereto.

**ARTICLE II
STORM WATER MANAGEMENT REQUIREMENTS**

Section 201. General Storm Water Management Performance Standards. The following provisions shall be considered the performance standards against which all storm water control measures shall be evaluated

- A. Any landowner and any person engaged in the alteration or development of land which may affect storm water runoff characteristics shall implement such measures as are reasonably necessary to prevent injury to health, safety or property. Such measures shall include such actions as are required:
 1. To assure that the maximum rate of storm water runoff is no greater after development than prior to development activities; or
 2. To manage the quantity, velocity and direction of resulting storm water runoff in a manner which adequately protects health and property from possible injury.
- B. The storm water management plan for the site must consider all the storm water runoff flowing over the site.
- C. No discharge of toxic materials shall be permitted into any storm water collection system.

Section 202. Specific Watershed Storm Water Management Performance Standards for Conneaut Outlet Watershed.

- A. *General Standards.* The storm water performance standards contained in this section are intended to implement the standards and criteria contained in the Conneaut Outlet Storm Water Management Plan, adopted and approved in accordance with the Pennsylvania Storm Water Management Act. If there is any discrepancy between the provisions of this section and the standards and criteria of the plan, or if the watershed plan is subsequently amended, then the standards/criteria of the current watershed plan shall govern.

- B. *Storm Frequencies.* Storm water management facilities on all development sites shall control the peak storm water discharge for the 2-, 10-, 25- and 100-year storm frequencies. The SCS 24-hour, Type II Rainfall Distribution shall be used for analyzing storm water runoff for both pre- and post-development conditions. The 24-hour total rainfall for these storm frequencies in the watershed are:

<u>Storm Frequency</u>	<u>Rainfall Depth</u> (inches)
2-year	2.5
10-year	3.6
25-year	4.4
100-year	5.7

- C. *Calculation Methods.*
 1. Development Sites: For the purpose of computing peak flow rates and runoff hydrographs from development sites, calculations shall be performed using one of the following: the Penn State Runoff Model, SCS Technical Release (TR) 55 Urban Hydrology for Small Watersheds, or SCS Technical Release (TR) 20.

 2. Storm Water Collection and Conveyance Facilities: For the purposes of designing storm sewers, open swales and other storm water runoff collection and conveyance facilities, any of the above listed methods and/or the Rational Method shall be applied. Rainfall intensities for design should be obtained from the Pennsylvania Department of Transportation rainfall charts.

 3. Pre-development Conditions: Pre-development conditions shall be assumed to be those which existed on the site prior to the start of the proposed land alteration and/or development, Hydrologic conditions for

all areas with pervious cover (i.e., fields, woods, lawn areas, pastures, cropland, etc.) shall be presumed to be in "good condition, and the lowest recommended SCS runoff curve number (CN) shall be applied for all pervious land uses within the respective range for each land use and hydrologic soil group. These presumptions are not conclusive.

4. Routing of hydrographs through detention/retention facilities for the purpose of the design of those facilities shall be accomplished using the Modified Plus Method or other approved reservoir routing method.

D. *Release Rate Percentage Determination.*

The release rate percentage defines the percentage of the pre-development peak rate of runoff that can be discharged from an outfall on the site after development. It applies uniformly to all land development or alterations within a subarea. Listings of release rate percentages by watershed and subarea are provided in Appendix A for watersheds for which an Act 167 Storm Water Management Plan has been adopted. Subareas are delineated on the associated Watershed Release Rate Percentage Maps. In the absence of an approved Act 167 Storm Water Management Plan, a uniform release rate percentage of 100% shall be applied.

E. *Calculation Procedure.*

1. Compute the pre- and post-development runoff hydrographs for each storm water outfall on the development site using the prescribed calculation method for the 2-, 10-, 25- and 100-year storms. Apply no on-site detention for storm water management but include any techniques to minimize impervious surfaces and/or increase the time of concentration for storm water runoff flowing from the development site. If the post-development peak runoff rate and the runoff volume are less than or equal to the pre-development peak runoff rate and volume, then additional storm water control shall not be required at that outfall. If the post-development peak runoff rate and volume are greater than the pre-development peak runoff rate and volume, then storm water detention will be required and the capacity of the detention facility must be calculated in the manner prescribed below.
2. Multiply the applicable subarea release rate percentage by the pre-development rate of runoff from the development site to determine the maximum allowable release rate from any detention facility for the four prescribed storm events.

3. Design the outlet control facilities and size the volume of the detention facility using the calculated post-development hydrography and accepted hydrography routing procedures in consideration of the maximum allowable release rate.

F. *No Harm Evaluation.*

1. An applicant may seek to exceed the otherwise applicable sub-basin release rate percentage by performing a "No Harm Evaluation". This evaluation requires an independent engineering analysis to demonstrate that other reasonable options exist to prevent the occurrence of increased storm water runoff discharge rates and/or velocities from increasing flood evaluations and accelerating erosion at all downstream points in the watershed.
2. A "No Harm Evaluation" will be considered only in instances where the discharge to a stream channel from the development occurs directly to French Creek, or through a properly sized and designed regional storm water detention facility.
3. The analysis for the "No Harm Evaluation" shall be prepared by a registered engineer who is experience in hydrology and hydraulics. The Penn State Runoff Model (PSRM) is the hydrologic model required for this analysis. Use of this model will produce results from a "No Harm Evaluation" analysis that can be compared to the results of the watershed study. The "No Harm Evaluation" shall be completed using the following procedure:
 - a. Develop the runoff hydrography(s) for the design storms of the site and areas tributary to it using the PSRM and the land use of the development for both pre-and post-development conditions.
 - b. Develop the runoff hydrography(s) for the proposed site using the PSRM. If no management of controls are proposed, this would be equivalent to the runoff hydrography under post-development conditions. If some management or controls are proposed, then the runoff hydrography under post-development conditions would be modified to reflect their effect on the rate, volume and timing discharges.
 - c. Subtract the runoff hydrography ordinates under pre-development conditions from the discharge hydrography ordinates, maintaining the time scales of both hydrographs for one-to-one correspondence.

- d. Obtain the PSRM used during the development of the Act 167 Storm Water Management Plan for existing conditions from the Crawford County Planning Commission.
- e. Locate the sub-basin(s) in which the proposed development is located and into which the discharge hydrography enters. If more than one sub-basin receives this incremental flow, divide the flow accordingly.
- f. Add the incremental increase computed in Step (c) to the runoff hydrography(s) for the sub-basin(s) identified in Step (e).
- g. Route the adjusted runoff hydrography through the watershed PSRM and note any increase in peak flows which would occur in downstream sub-basins. If no increase is noted, then the "NO Harm" has been demonstrated on the watershed level. If no increase is observed in peak flows, the increased potential for erosion and/or sedimentation adjacent to the development site and in downstream channels shall be evaluated. If no increased potential can be demonstrated by appropriate technical means, then the "No Harm" exemption may be requested.
- h. If an increase in peak flow is observed in any of the downstream sub-basins or increased potential for erosion and/or sedimentation is indicated, the "No Harm" exemption shall not be granted.

Section 203. Design Criteria for Storm Water Management Controls.

A. *General Criteria.*

1. Applicants may select runoff control techniques, or a combination of techniques, which are most suitable to control storm water runoff from the development site. All controls must be subject to approval of the Municipal Engineer. The Municipal Engineer shall request specific information on design and/or operating features of the proposed storm water controls as necessary to determine their suitability and adequacy in terms of the standards of this ordinance.
2. The applicant should consider the effect of the proposed storm water management techniques on any special soil conditions or geological hazards which may exist on the development site, the Municipal Engineer may require in-depth studies by a competent geo-technical engineer. Not all storm water control methods may be advisable or allowable at a particular development site.

3. The storm water management practices to be used in developing a storm water management plan for a particular site shall be selected according to the following order of preference:
 - a. infiltration of runoff on-site
 - b. flow attenuation by use of open vegetated swales and natural depressions
 - c. storm water detention/retention structures
4. Infiltration practices shall be used to the extent practicable to reduce volume increases and promote groundwater recharge. A combination of successive practices may be used to achieve the applicable minimum control requirements. Justification shall be provided by the applicant for rejecting each of the preferred practices based on actual site conditions.

B. *Criteria for Infiltration Systems.*

1. Infiltration systems shall be sized and designed based upon local soil and ground water conditions.
2. Infiltration systems greater than three (3) feet deep shall be located at least ten (10) feet from basement walls.
3. Infiltration systems shall not be used to handle runoff from commercial or industrial working or parking areas. This prohibition shall not extend to roof areas which are demonstrated to be suitably protected from the effects of the commercial/industrial activities.
4. Infiltration systems may not receive runoff until the entire drainage area to the system has received final stabilization.
5. The storm water infiltration facility design shall provide an overflow system with measures to provide a non-erosive velocity of flow along its length and at the outfall.

C. *Criteria for Flow Attenuation Facilities.*

1. If flow attenuation facilities are employed to assist in the control of peak rates of discharge, their effects must be quantified using the SCS Technical Release (TR) 55 Urban Hydrology for Small Watersheds. The effects of the flow attenuation facilities on travel time should be reflected in the TR-55 calculations as outlined in the TR-55 manuals.

2. Flow attenuation facilities such as swales and natural depressions should be properly graded to insure positive drainage and avoid prolonged ponding of water.
3. Swales shall be properly vegetatively stabilized or otherwise lined to prevent erosion.
4. The design of swales shall be in accordance with the recommendations contained in the Commonwealth of Pennsylvania Erosion and Sediment Pollution Control Program Manual.

D. *Criteria for Storm Water Detention Facilities.*

1. If detention facilities are utilized for the development site, the facilities shall be designed such that post-development peak runoff rates from the developed site are controlled to those rates defined by the subarea release rate percentage for the 2-, 10-, 25 and 100-year storm frequencies.
2. All detention facilities shall be equipped with outlet structures to provide discharge control for the four (4) designated storm frequencies. Provisions shall also be made to safely pass the post-development 100-year storm runoff without damaging (i.e. impairing the continued function of) the facilities.
3. Any storm water management facilities utilizing dams and water obstructions and encroachments shall obtain necessary permits as may be required under applicable Pennsylvania Department of Environmental Resources Dam Safety and Waterway Management Rules and Regulations and shall meet the design and safety requirements of said regulations.
4. Shared-storage facilities, which provide detention of runoff for more than one development site within a single subarea may be considered and are encouraged. Such facilities shall meet the criteria contained in this section. In addition, runoff from the development sites involved shall be conveyed to the facility in a manner that avoids adverse impacts (such as flooding or erosion) to channels and properties located between the development site and the shared-storage facilities. The rights and obligations of all parties to a shared-storage facility shall be set forth in writing and be recorded in the Recorder's Office of Crawford County, Pennsylvania.
5. Where detention facilities will be utilized, multiple use facilities, such as wetlands, lakes, ball fields or similar recreational/open space uses are encouraged wherever feasible, subject to the approval of the Township and

compliance with the applicable governmental regulations for such facilities.

6. Other considerations which should be incorporated into the design of the detention facilities include:
 - a. Inflow and outflow structures shall be designed and installed to prevent erosion and bottoms of impoundment type structures should be protected from soil erosion.
 - b. Standpipes shall be constructed of reinforced concrete or cast-in-place, pre-cast or block and shall be provided with debris gates.
 - c. Control and removal of debris both in the storage structure and in all inlet or outlet devices shall be a design consideration.
 - d. Inflow and outflow structures, pumping stations, and other structures shall be designed and protected to minimize safety hazards.
 - e. An emergency spillway or overflow shall be provided that is capable of passing the peak flow generated by a 100 year, 24 hour post-development storm following construction.
 - f. The water depth at the perimeter of a storage pond should be limited to that which is safe for children. This is especially necessary if bank slopes are steep or if ponds are full and recirculating in dry periods. Restriction of access (fence, walls, etc.) may be necessary depending on the location of the facility. Unless otherwise approved, the maximum planned water depth shall not exceed four (4) feet.
 - g. The facility shall be designed with a minimum freeboard of one (1) foot between the peak emergency spillway design flow elevation and the top of the embankment.
 - h. Side slope of storage ponds shall not exceed a ratio of two to one (2:1) horizontal to vertical dimension.
 - i. All embankments shall be designed according to sound engineering practice for such structures and must meet the approval of the municipality.

- j. Landscaping shall be provided for the facility which harmonizes with the surrounding area.
- k. The facility shall be located to facilitate maintenance, considering the frequency and type of equipment that will be required.
- l. All detention facilities shall be provided with an avenue for access for maintenance purposes.

E. *Criteria for Collection/Conveyance Facilities.*

1. All storm water runoff collection or conveyance facilities, whether storm sewers or other open or closed channels, shall be designed in accordance with the following basic standards:
 - a. Storm water collection/conveyance facilities shall be designed to convey the runoff from the calculated 10-year storm for the local vicinity as shown on the Pennsylvania Department of Transportation's rainfall charts. A copy of the Field Manual of Pennsylvania Department of Transportation Storm Intensity - Duration - Frequency Charts which contains this information shall be available from the Township.
 - b. Culverts carrying a stream under or through an embankment or fill shall be designed and constructed in accordance with the applicable regulations of the Pennsylvania Department of Environmental Resources' Dam Safety and Waterway Management Rules and Regulations.
 - c. Required design of streets and grading in relation to storm drainage shall be such that runoff from roofs, driveways and other impervious surfaces shall be towards the street or other approved storm drainage system and will be collected in the storm sewers or street drainage system or other storm water collection system as approved by the Municipal Engineer.
 - d. All sites shall be graded to provide drainage away from and around the structure in order to prevent any potential flooding damage.
 - e. Lots located on the high side of streets shall extend roof and french drains to the curb line storm sewer (if applicable). Low side lots shall extend roof and french drains to a storm water collection/conveyance/control system or natural watercourse in

accordance with the approved storm water management plan for the development site.

- f. Storm sewers or swales shall be required to be installed along both sides of the streets in all new subdivisions.
 - g. Open channel drainage between or across lots carrying storm water from public rights-of-way or storm sewers shall not be permitted. Such drainage shall be contained in approved storm sewers. Open channel drainage shall be permitted in natural streams or stream beds provided adequate provisions for erosion control are made where necessary.
 - h. Collection/conveyance facilities should not be installed parallel and close to the top or bottom of a major embankment to avoid the possibility of failing or causing the embankment to fail.
 - i. Where drainage swales or open channels are used, they shall be suitably lined to prevent erosion and designed to avoid excessive velocities.
2. Wherever storm sewers are proposed to be utilized, they shall comply with the following criteria:
- a. Storm sewers shall be located according to the specifications of the Municipal Engineer.
 - b. The design of storm sewer layout, including the handling of abrupt changes in direction shall be as approved by the Municipal Engineer.
 - c. Where practical, storm sewers should be designed to traverse under seeded and planted areas. If constructed within ten (10) feet of road paving, walks or other surfaced areas, drains shall have a narrow trench and maximum compaction of back fill to prevent settlement of the superimposed surface or development.
 - d. Storm sewers should be installed after completion of excavation and fill in the area to be traversed, unless the drain is installed in the original ground with a minimum of three (3) feet cover and/or adequate protection during the fill construction.
 - e. Storm sewers shall be designed: (1) with cradle when traversing fill areas of indeterminate stability, (2) with anchors when gradient

exceeds twenty (20) percent, and (3) with encasement or special back fill requirements when traversing under a paved area.

- f. Storm sewers shall be designed to adequately handle the anticipated storm water flow and be economical to construct and maintain. The minimum pipe size shall be twelve (12) inches in diameter and a minimum grade of 0.5 percent.
- g. Drain pipe, trenching, bedding and back filling requirements shall conform to the requirements of the Township and/or applicable PENNDOT Specifications.
- h. Pipe within a municipal right-of-way shall be reinforced concrete pipe with a minimum diameter of 12 inches.
- i. Storm inlets and structures shall be designed to be adequate, safe, self-cleaning and unobtrusive. Inlets shall be constructed of pre-cast concrete of a design approved by the Municipal Engineer. A 2' x 2' pre-cast inlet shall be permitted where pipe diameter is 12' or less and where no more than 2 pipes are inserted into the inlet. The size and design of larger inlets shall be as approved by the Municipal Engineer.
- j. Appropriate grates shall be designed for all catch basins, storm water inlets and other entrance appurtenances.
- k. Manholes shall not be more than 300 feet apart where pipe sizes of 24 inches or less are used and not more than 450 feet apart where larger sizes are installed. When approved by the Municipal Engineer, inlets may be substituted for manholes.
- l. Manholes shall be designed so that the top shall be at finished grade and sloped to conform to the slope of the finished grade. Top castings of structures located in roads or parking areas shall be machined or installed to preclude "rattling".
- m. Where proposed sewer connects with an existing storm sewer system, the applicant shall demonstrate the sufficient capacity exists in the downstream system to handle the additional flow.
- n. Storm sewer outfalls shall be equipped with energy dissipation devices to prevent erosion and conform with applicable requirements and regulations of the Pennsylvania Department of Environmental Resources for stream encroachments.

Section 204. Erosion and Sedimentation Controls.

- A.** Erosion/sedimentation plan shall be provided in accordance with applicable Pennsylvania Erosion/Sedimentation Regulations and the standards and guidelines of the County Conservation District.
- B.** Proposed erosion/sedimentation measures shall be submitted with the storm water management plan for the site.

Section 205. Maintenance of Storm Water Management Controls.

A. *Maintenance Responsibilities.*

- 1.** The storm water management plan for the site shall contain an operation and maintenance plan prepared by the developer and approved by the Municipal Engineer or other designated qualified professional. The operation and maintenance plan shall outline required routine maintenance actions and schedules necessary to insure proper operation of the facilities.
- 2.** The storm water management plan for the site shall establish responsibilities for the continuing operation and maintenance of all proposed storm water control facilities, consistent with the following standards:
 - a.** If a land development/alteration consists of structures or lots which are to be separately owned and in which streets, sewers and other public improvements are to be dedicated to the Township, storm water control facilities should also be dedicated to the Township for future maintenance in accordance with the terms of this Ordinance.
 - b.** If a development site is to be maintained in single ownership or if sewers and other improvements are to be privately owned and maintained, then the ownership and maintenance of storm water control facilities should be the responsibility of the owner or private management entity.
- 3.** The Township, upon recommendation of the Municipal Engineer or other designated qualified professional, shall make the final determination on the continuing maintenance responsibilities prior to final approval of the storm water management plan. The Township reserves the right to accept the ownership and operating responsibility for any or all of the storm water management controls.

- B. *Maintenance Agreement for Privately Owned Storm Water Facilities.*** Before a storm water management plan which involves privately owned storm water facilities can be finally approved, the property owner(s) shall provide the Township with a storm water facilities maintenance agreement in a form acceptable to the Township, properly executed and proper for recording with the County Office of the Recorder of Deeds, and which meets the following minimum requirements:
1. The agreement shall adequately provide for perpetual maintenance by the landowner(s), or some other legal entity properly organized and existing, and their successors.
 2. The agreement shall require maintenance in accord with the approved maintenance schedule, and shall require that the facilities be maintained in a safe and good working condition.
 3. The agreement shall convey to the Township such easements, licenses, and rights-of-way as may be necessary and appropriate to assure access for periodic Township inspections and maintenance if necessary for preserving the public health, safety and welfare.
 4. The agreement shall require that any changes relating to the person or persons required to provide maintenance shall be reported to the Township within 10 days of the changes.
 5. The agreement shall provide that if the person responsible for maintenance fails to maintain the storm water facilities as required, after due notice by the Township to correct the problem(s), the Township may perform the necessary maintenance work or corrective work and the responsible person or property owner shall promptly reimburse the Township for all costs. The agreement shall also provide that the Township may collect such costs by any lawful means including municipal liens.
 6. Other items may be included in the agreement where determined necessary to guarantee the satisfactory maintenance of all facilities. The maintenance agreement shall be subject to the review and approval of the Township and its solicitor.
- C. *Storm Water Maintenance Fund.*** In the event the Municipal Engineer determines that regular and routine maintenance of the storm water system is required to prevent a public nuisance or hazard, the Township, upon the Municipal Engineer's recommendation, may impose the following as a condition to approval of the Plan:

1. Persons installing storm water storage facilities shall be required to pay a specified amount to the Township Storm Water Maintenance Fund to help defray costs of periodic inspections and maintenance expenses. The amount of the deposit shall be determined as follows:
 - a. If the storage facility is to be privately owned and maintained, the deposit shall cover the cost of periodic inspections performed by the Township for a period of ten (10) years, as estimated by the Municipal Engineer. After that period of time, any Township inspections will be performed at its expense.
 - b. If the storage facility is to be owned and maintained by the Township, the deposit shall cover the estimated costs for maintenance and inspections for ten (10) years. The Municipal Engineer will establish the estimated costs utilizing information submitted by the applicant. This amount shall be in addition to any amount posted pursuant to Section 606.B.5. of this Ordinance.
 - c. The amount of the deposit to the fund shall be converted to present worth of the annual series values. The Municipal Engineer shall determine the present worth equivalents which shall be subject to the approval of the governing body.
2. If a storage facility is proposed that also serves as a recreation facility (*e.g.*, ball field, lake), the Municipality may reduce or waive the amount of the maintenance fund deposit based upon the value of the land for public recreation purposes.

ARTICLE III
STORM WATER MANAGEMENT PLAN PROCESS REQUIREMENTS

Section 301. Storm Water Plan Requirements.

- A. *General Format.* Storm water plan drawings shall be drawn to a scale of not less than 1 inch = 50 feet. All sheets shall contain a title block with: Name and address of applicant and engineer, scale, north arrow, legend and date of preparation. Note that these storm water plan requirements are not required where a proposed activity qualifies as a small development.
- B. *Existing and Proposed Features.* The plan shall show the following:
 1. Watershed location - Provide a key map showing the location of the development site within the watershed(s) and watershed subarea(s). On

all site drawings, show the boundaries of the watershed(s) and subarea(s) as they are located on the development site and identify watershed names(s) and subarea number(s).

2. Floodplain boundaries - Identify 100-year floodplains on the development site (as appropriate) based on the Township Flood Insurance Study maps.
 3. Natural features - Show all bodies of water (natural or artificial), watercourses (permanent and intermittent), swales, wetlands and other natural drainage courses on the development site, or which will be affected by runoff from the development.
 4. Soils - Provide an overlay showing soil types and boundaries within the development site (consult the Soil Survey of Crawford County, 1979, available at the County Planning Office, the Crawford Conservation District and other locations).
 5. Contours - Show existing and revised contours at intervals of two (2) feet; in areas with slopes greater than fifteen (15) percent, five (5) foot contour intervals may be used. USGS data may be used for this data if approved by the Municipal Engineer.
 6. Land cover - Show existing and final land cover classifications as necessary to support and illustrate the runoff calculations performed.
 7. Drainage area delineations - Show the boundaries of the drainage areas employed in the runoff calculations performed.
 8. Storm water management controls - Show any existing storm water management or drainage controls and/or structures, such as sanitary and storm sewers, swales, culverts, etc. which are located on the development site, or which are located off-site but will be affected by runoff from the development.
- C. *Professional Certification.* The storm water management plan for the site (including all calculations) must be prepared and sealed by a registered professional engineer, surveyor or landscape architect with training and expertise in hydrology and hydraulics. Documentation of qualifications may be required by the Township.
- D. *Runoff Calculations.* Calculations for determining pre- and post- development discharge rates and for designing proposed storm water control facilities must be submitted with the storm water management plan. All calculations shall be prepared using the methods and data described by this ordinance.

- E. *Storm Water Controls.*** All proposed storm water runoff control measures must be shown on the plan including methods for collecting, conveying and storing storm water runoff on-site, which are to be used both during and after construction. Erosion and sedimentation controls shall be shown in accordance with applicable governmental and County Conservation District requirements. The plan shall provide information on the exact type, location, sizing, design and construction of all proposed facilities and relationship to existing watershed drainage system.
1. If the development is to be constructed in stages, the applicant must demonstrate that the storm water facilities will be installed to manage storm water runoff safely during each stage of development.
 2. A schedule for the installation of all temporary and permanent storm water control measures and devices shall be submitted.
 3. If appropriate, a justification should be submitted as to why any preferred storm water management techniques, as listed in Section 203, are not proposed for use.
- F. *Easements, Rights-of-Way, Deed Restrictions.*** All existing and proposed easements and rights-of-way for drainage and/or access to storm water control facilities shall be shown and the proposed owner identified. Any areas subject to special deed restrictions relating to or affecting storm water management on the development site shall likewise be shown.
- G. *Other Permits/Approvals.*** A list of any approvals/permits relative to storm water management that will be required from other governmental agencies (e.g., an obstructions permit from Pennsylvania DER) and anticipated dates of submission/receipt should be included with storm water plan submission. Copies of permit applications may be requested by the Township where they may be helpful for the plan review.
- H. *Maintenance Program.*** The application shall contain a proposed maintenance plan for all storm water control facilities in accordance with the following:
1. Identify the proposed ownership entity (e.g., municipality, property owner, private corporation, homeowner's association, or other entity).
 2. Include a maintenance program for all facilities, outlining the type of maintenance activities, probable frequencies, personnel and equipment requirements and estimated annual maintenance costs.

3. Identify method of financing continuing operation and maintenance if the facility is to be owned and controlled by other than the Township or governmental agency.
 4. Submit any legal agreements required to implement the maintenance program and copies of the maintenance agreement as required by this ordinance.
- I. *Financial Guarantees.* Submit financial guarantees in accordance with the provisions of this ordinance or the Township Subdivision and Land Development Ordinance, as applicable.

Section 302. Plan Submission and Review.

A. *Pre-Plan Submission Phase.*

1. Before submitting the storm water management plan, developers are urged to consult with the Township and other governmental agencies to determine the regulatory requirements applicable to the development, on the requirements of safely managing storm water runoff from the development site in a manner consistent with the Township ordinances and applicable watershed storm water management plan requirements. These agencies may also be helpful in providing necessary data for the storm water management plan.
2. Developers are encouraged to submit a sketch plan with a narrative description of the proposed storm water management controls for general guidance and discussion with the governmental agencies.
3. This phase is not mandatory. Any review comments provided by the Township or other agencies are advisory only and shall not constitute any legally binding action on the part of the Township.

- B. *Storm Water Management Plan Submissions for Approval Under Subdivision and Land Development Ordinance.* If the Township has in effect a subdivision and land development ordinance adopted in accordance with the Pennsylvania Municipalities Planning Code, the storm water management plan shall be submitted for review and approval as applicable in accordance with the requirements of the subdivision and land development ordinance and in conjunction with the subdivision and land development plans being submitted for review and approval. The Plan shall be subject to the Preliminary and Final Plan review stage requirements of the subdivision and land development ordinance to the extent not inconsistent with the provisions of this Ordinance. The Township

shall then review and take action with respect to the storm water management plan in accordance with the provisions and requirements of the subdivision and land development ordinance.

C. *Storm Water Management Plan Submissions for Approval Where No Subdivision and Land Development Ordinance.* If the Township does not have in effect a subdivision and land development ordinance, then the storm water management plan shall be submitted for review and Township action in the following manner:

1. Three (3) copies of the storm water management plan, together with applicable fees, shall be submitted to the Township. The Township Secretary shall immediately distribute one copy to the Municipal Engineer, and one copy to the Crawford County Planning Commission.
2. The Crawford County Planning Office shall review the storm water plan for consistency with the Storm Water Management Performance Standards and for compliance with municipal zoning and subdivision and land development regulations.
3. The Municipal Engineer shall review the storm water management plan to determine whether the plan complies with the requirements of this Ordinance and other applicable regulations.
4. Within Sixty (60) days from the date of submission, the Municipal Engineer and Crawford County Planning Office shall forward, by letter, their review comments which shall list any deficiencies in the plans and recommend approval or disapproval. Deficient plans may be revised by the developer and submitted consistent with this ordinance.
5. Within Forty (40) days of the date that the Municipal Engineer certifies that no deficiencies exist and reports his recommendation, or within Forty (40) days of the date that developer specifically makes a written request for action by the Township Supervisors on the plan, which request may be made after the initial 60 day period for review, the Township Supervisors shall, at a public meeting, review the plan, comments and recommendation, and take action to approve or disapprove the plan, or approve the plan with modifications or conditions. The Township Supervisors' action shall be consistent with the requirements of this Ordinance and shall not be contrary to the recommendations of the Municipal Engineer or Planning Office unless good cause or unreasonable hardship is established and documented in a written decision.
6. Any approval or disapproval of the storm water management plan by the Township shall be considered final unless within 30 days of the issuance

of said determination, an application is filed with the Township requesting reconsideration, in which event, the Supervisors shall reconsider the plan and take such further action as may be appropriate.

7. No final approval of any subdivision or land development shall be given and no permits issued by the Township for any activity or development on the site unless the storm water plan for said activity has been finally approved.

Section 303. Status of the Storm Water Plan after Final Approval.

- A. Upon final storm water management plan approval and receipt of all necessary permits, the applicant may commence to install or implement the approved storm water management controls.
- B. If site development or building construction does not begin within two years of the date of final approval of the storm water management plan, then before construction can begin, the applicant shall resubmit the storm water management plan to verify that no condition has changed within the watershed that would affect the feasibility or effectiveness of the previously approved storm water management controls. Further, if for any reason steady and consistent development activities are suspended for two years or more, then the same requirement for resubmission of the storm water management plan shall apply.
- C. Any documents which are required to be recorded in the County Office of the Recorder of Deeds shall be recorded within 180 days after the date of final approval, or sooner if necessary.

Section 304. Storm Water Plan Modifications.

- A. If a request for a substantial plan modification is initiated before construction begins, the storm water plan must be resubmitted and reviewed according to the procedures contained in Section 302 above.
- B. If the request for a plan modification is initiated after construction is underway, the Municipal Engineer or other designated qualified professional shall have the authority to approve or disapprove the modification based on field inspection provided: (1) the requested changes in storm water controls do not result in any modifications to other approved municipal land use/development requirements (e.g., building setbacks, yards, etc.) and (2) the performance standards in this Ordinance are met. Notification of the action of the Municipal Engineer or other designated qualified professional shall be sent to the Township which may issue

a stay of the plan modification within five (5) days and require the developer to resubmit the plan modification for full storm water plan review in accordance with Section 302 above.

Section 305. Inspections of Storm Water Management Controls.

- A.** The Municipal Engineer or the Township's designated qualified representative shall inspect the construction of the temporary and permanent storm water management system for the development site. The developer shall notify the Municipal Engineer or designated representative 48 hours in advance of the completion of the following key development phases:
1. Completion of preliminary site preparation including stripping of vegetation, stockpiling of topsoil and construction of temporary storm water management and erosion control facilities.
 2. Completion of rough grading but prior to placing topsoil, permanent drainage or other site development improvements and ground covers.
 3. During construction of the permanent storm water facilities at such times as specified by the Municipal Engineer.
 4. Completion of permanent storm water management facilities including established ground covers and plantings.
 5. Completion of final grading, vegetative control measures or other site restoration work done in accordance with the approved plan and permits.
- B.** No work shall commence on any subsequent phase until the preceding one has been inspected and approved. If there are deficiencies in any phase, the Municipal Engineer or designated representative shall issue a written description of the required corrections and stipulate the time by which they must be made.
- C.** If during construction, the contractor or developer identifies site conditions such as subsurface soil conditions, alterations in surface or subsurface drainage which could affect the feasibility of the approved storm water facilities, the Municipal Engineer or designated representative shall be notified within 24 hours of the discovery of such conditions for a field inspection. The Municipal Engineer or designated representative shall determine if the conditions require a storm water plan modification.
- D.** In cases where storm water facilities are to be installed in areas of landslide-prone soils or other special site conditions exist, the municipality may require special precautions such as soil tests and core borings, full-time inspectors and/or similar

measures. All costs of any such special measures shall be borne by the developer.

- E. These inspection requirements may be modified as appropriate by the Municipal Engineer or designated representative with approval of the Township Supervisors.

Section 306. Financial Guarantees and Dedication of Public Improvements.

- A. If the Township has in effect a subdivision and land development ordinance in accordance with the Pennsylvania Municipalities Planning Code, financial security for storm water facilities being dedicated to the Township shall be provided for in accordance with the requirements of the subdivision and land development ordinance.
- B. If the Township does not have in effect a subdivision and land development ordinance or provisions therein governing the provision of financial security for public improvements, then the developer shall provide financial security for storm water facilities to be dedicated to the Township as public improvements in accordance with the following requirements:
 - 1. *Financial Security Required.* Prior to commencement of any work governed by the storm water management plan, developer shall provide the Township with financial security in a form and amount acceptable to the Township and consistent with the applicable provisions of the Pennsylvania Municipalities Planning Code governing the provision of financial security for public improvements for subdivisions and land developments, to provide the Township with adequate security for the completion of storm water facilities to be dedicated for public use.
 - 2. *Release of Security.* The security shall be returned or released to developer upon written certification by the Municipal Engineer or the designated representative that the storm water improvements and facilities have been installed and completed in accordance with the approved plans and specifications. The procedures for requesting and obtaining a release of the security shall be in the manner prescribed by the applicable provisions of the Pennsylvania Municipalities Planning Code governing the Release of Security for subdivisions and land developments.
 - 3. *Default of Completion Guarantee.* If improvements are not installed in accordance with the approved final plan, the Township may enforce any corporate bond or other security by appropriate legal and equitable remedies. If proceeds of such bond or other security are insufficient to pay the cost of installing or making repairs or corrections to all the

improvements covered by said security, the Township may at its option install all or part of such improvements in all or part of the development and complete the remainder of the improvements and collect the costs thereof from the security provided or in any other manner permitted by law including a municipal lien. All proceeds, whether resulting from the security or from any legal or equitable action brought against the developer, or both, shall be used solely for the installation of the improvements covered by such security and not for any other municipal purpose.

4. *Dedication of Public Improvements.*
 - a. Upon completion of storm water management facilities and other required improvements in the development in accordance with the final approved plan, such improvements shall be deemed private until such time as they have been offered for dedication to the Township and accepted by separate resolution or until they have been condemned for use as a public facility.
 - b. Prior to acceptance of any improvements or facilities, the Municipal Engineer shall inspect to ensure that they are constructed in accordance with the approved plans and specifications and that they are functioning properly. In the case of any storm water control facility, it must be free of sediment and debris.
 - c. The developer shall submit as-built plans for all facilities proposed for dedication.
5. *Construction Integrity Guarantee.* Prior to acceptance of any improvements or facilities, the Township may require the developer to provide financial security to secure the structural integrity and functioning of the storm water improvements. The security shall: (1) be in the form of a bond, cash, certified check or other security acceptable to the Township, (2) be for a term of 18 months, and (3) be in an amount equal to 15 percent of the actual cost of the improvements and facilities so dedicated.

Section 307. Fee Schedule. The Township may adopt by resolution, from time to time, a reasonable schedule of fees to cover the cost of plan reviews, inspections and other activities necessary to administer the provisions of this ordinance. These fees shall be payable to the Township at the time of application for plan approval or at such other time as the Township may provide for in the Resolution.

**ARTICLE IV
ENFORCEMENT**

Section 401. Enforcement Procedures and Remedies.

- A. *Right of Entry.* Upon presentation of proper credentials, duly authorized representatives of the Township may enter at reasonable times upon any property to investigate or ascertain the condition of the subject property in regard to an aspect regulated by this Ordinance.

- B. *Notification.* In the event that the applicant, developer, owner or his/her contractor or agent fail to comply with the requirements of this ordinance or fail to conform to the requirements of the approved storm water management plan or any permit related thereto, a written notice of violation shall be issued. Such notification shall set forth the nature of the violation(s) and establish a time limit for correction of the violation(s). Upon failure to comply within the time specified, unless otherwise extended by the Township, the applicant, developer, owner or his/her contractor or agent shall be subject to the enforcement remedies of this ordinance.

- C. *Enforcement Remedies.*
 - 1. Any person, who has violated or permitted the violation of the provisions of this Ordinance shall, upon being found liable therefore in a civil enforcement proceeding commenced by the Township, pay a fine of not less than \$50.00 and not more than \$500.00 plus court costs, including reasonable attorney fees incurred by the Township.

 - 2. If the defendant neither pays nor makes timely appeals of the judgment, the Township may enforce the judgment pursuant to applicable rules of civil procedure.

 - 3. Each day that a violation continues shall constitute a separate violation unless the district justice further determines that there was a good faith basis for the person violating the ordinance to have believed that there was no such violation. In such case there shall be deemed to have been only one such violation until the fifth day following the date of the district justice's determination of a violation; thereafter each day that a violation continues shall constitute a separate violation.

 - 4. All judgment, costs and reasonable attorney fees collected for the violation of this Ordinance shall be paid over to the Township.

5. The Court of Common Pleas, upon petition, may grant an order of stay upon cause shown, tolling the per diem fine pending a final adjudication of the violation and judgment.
6. Nothing contained in this section shall be constructed or interpreted to grant to any person or entity other than the Township the right to commence any action for enforcement pursuant to this section.

D. *Additional Remedies.*

1. In addition to other remedies, the Township may institute and maintain appropriate actions at law or in equity to restrain, correct or abate a violation, to prevent unlawful construction, to recover damages and to prevent illegal occupancy of a building or premises.
2. The Township may refuse to issue any permit or grant approval to further improve or develop any property which has been developed in violation of this ordinance.
3. The Township may also seek remedies and penalties under applicable Pennsylvania statutes, or regulations adopted pursuant thereto, including but not limited to the Storm Water Management Act (32 P.S. Section 693.1-693.27) and the Erosion and Sedimentation Regulations (25 Pennsylvania Code, Chapter 102).
4. Any activity conducted in violation of this ordinance or any Pennsylvania approved watershed storm water management plan may be declared a public nuisance by the municipality and may be abated as such.

**ARTICLE V
DEFINITIONS**

Section 501. Definitions.

Act: The Storm Water Management Act (Act of October 4, 1978, P.L. 864 No. 167; 32 P.S. Sections 680.1-680.17, as amended).

Applicant: A landowner or developer who has filed an application for development including his/her heirs, successors and assigns.

Channel: A perceptible natural or artificial waterway which periodically or continuously contains, moving water or which forms a connecting link between two bodies of water. It has a definite bed and banks which confine the water.

Conservation District: The Crawford County Conservation District.

Culvert: A closed conduit for the free passage of surface drainage under a highway, railroad, canal or other embankment.

Design Criteria: (1) Engineering guidelines specifying construction details and materials. (2) Objectives, results, or limits which must be met by a facility, structure, or process in performance of its intended functions.

Design Storm: (see storm frequency)

Detention: The slowing, dampening or attenuating of runoff flows entering the natural drainage pattern or storm drainage system by temporarily holding water on a surface area in a detention basin or within the drainage system.

Detention Pond: A pond or reservoir, usually small, constructed to impound or retard surface runoff temporarily.

Developer: The person, persons, or any corporation, partnership, association, or other entity or any responsible person therein or agent therefor that undertakes the activities associated with changes in land use or with development. The term "developer" is intended to include but not necessarily be limited to the term "subdivider", "owner", and "builder" even though the individuals involved in successive stages of a project may vary.

Development: Any activity, construction, alteration, change in land use or practice that affects storm water runoff characteristics.

Discharge: The flow or rate of flow from a canal, conduit, channel or other hydraulic structure.

Drainage: (1) In general, the removal of surface water from a given area. Commonly applied to surface water and ground water.

Drainage Area: (1) The area of a drainage basin or watershed, expressed in acres, square miles, or other unit of area. Also called catchment area, watershed, river basin. (2) The area served by a sewer system receiving storm and surface water, or by a watercourse.

Encroachment: Any structure or activity which in any manner changes, expands or diminishes, the course, current or cross section of any watercourse, floodway or body of water.

Erosion: Wearing away of the lands by running water, glaciers, winds and waves.

Erosion Control: The application of measures to reduce erosion of land surfaces.

Forest Management Operations: Activities involving the commercial harvesting of timber, including such associated activities as the construction of haul roads and staging areas.

Ground Cover: Materials covering the ground surface.

Ground Water: Subsurface water occupying the saturation zone, from which wells and springs are fed.

Ground Water Recharge: Replenishment of ground water naturally by precipitation or runoff or artificially by spreading or injection.

Impervious: Not allowing or allowing only with great difficulty the movement of water; impermeable.

Infiltration: (1) The flow or movement of water through the interstices or pores of a soil or other porous medium. (2) The absorption of liquid by the soil.

Land Development: Any of the following activities:

(1) the improvement of one lot or two or more contiguous lots, tracts or parcels, or land for any purpose involving: (a) a group of two or more residential or non-residential buildings, whether proposed initially or cumulatively, or a single non-residential building on a lot or lots regardless of the number of occupants or tenure; or (b) the division or allocation of land or space, whether initially or cumulatively, between or among two or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups or other features;

(2) a subdivision of land;

(3) development in accordance with Section 503, Subsection 1.1 of the "Pennsylvania Municipalities Planning Code" (as amended or replaced from time to time);

(4) any lot improvements regulated under Township Zoning Regulations.

Land Disturbance: Any activity involving the changing, grading, transportation, fill and any other activity which causes land to be exposed to the danger of erosion.

Maintenance: The upkeep necessary for efficient operation of physical properties.

Municipal Engineer: a duly licensed/registered professional engineer retained by the Township or, where appropriate, the Crawford County Conservation District, its engineers and staff.

Natural Storm Water Runoff Regime: A watershed where natural surface configurations, runoff characteristics and defined drainage conveyances have attained the conditions or equilibrium.

Outfall: (1) The point, location or structure where drainage discharges from a sewer, drain or other conduit. (2) The conduit leading to the ultimate discharge point.

Outlet Control Structure: The means of controlling the relationship between the headwater elevation and the discharge, placed at the outlet or downstream end of any structure through which water may flow.

Peak Flow: Maximum flow.

Pennsylvania DER: Pennsylvania Department of Environment Resources.

Pennsylvania Municipalities Planning Code: The Code as reenacted and amended by Act 170 of December 21, 1988, as amended, 53 P.S. § 10101, *et seq.*

Performance Standard: A standard which establishes an end result or outcome which is to be achieved but does not prescribe specific means for achieving it.

Person: any individual, partnership, corporation or other entity.

Planning Commission: Crawford County Planning Commission.

Planning Office: The staff which serves the Crawford County Planning Commission, also called County Planning Office.

Release Rate Percentage: The watershed factor determined by comparing the maximum rate of runoff from a sub-basin to the contributing rate of runoff to the watershed peak rate at specific points of interest. This factor defines the allowable post-development peak discharge rate as a percentage of the peak discharge rate which occurred prior to the development activity.

Retention Pond: A basin, usually enclosed by artificial dikes, that is used to retard storm water runoff by temporarily storing the runoff and releasing it at a predetermined rate.

Return Period: The average interval in years over which an event of a given magnitude can be expected to recur.

Runoff: That part of precipitation which flows over the land.

Runoff Characteristics: The surface components of any watershed which affect the rate, amount, and direction of storm water runoff. These may included but are not limited to: vegetation, soils, slopes, and man-made landscape alterations.

SCS: U.S. Department of Agriculture Soil Conservation Service.

Sediment: Mineral or organic solid material that is being transported

Sedimentation: The process by which mineral or organic matter is accumulated or deposited by moving water, wind or gravity.

Semi-Pervious Surface: A ground surface or ground surface covering which has been modified from its natural state to as to greatly diminish its natural tendency to allow the downward movement of water into the subsurface.

Storage Facility: (See detention pond and retention pond).

Storm Frequency: The average interval in years over which a storm event of a given precipitation volume can be expected to occur.

Storm Sewer: A sewer that carries intercepted surface runoff, street water and other drainage but excludes domestic sewage and industrial waste.

Storm Water: That portion of precipitation which runs over the land.

Storm Water Collection System: Natural or man-made structures that collect and transport storm water through or from a drainage area to the point of final outlet including, but not limited to, any of the following: conduits and appurtenant features, canals, channels, ditches, streams, culverts, streets and pumping stations.

Storm Water Management Plan: A plan for managing storm water runoff adopted by Crawford County as required by the Storm Water Management Act.

Subdivision: The division or re-division of a lot, tract or parcel of land by any means into two or more lots, tracts, parcels or other divisions of land including changes in existing lot lines for the purpose, whether immediate or future, of lease, partition by the court for distribution to heirs or devisee, transfer of ownership or building or lot development: provided, however, that the subdivision by lease of land for agricultural purposes into parcels of more than ten acres, not involving any new street or easement of access or any residential dwelling shall be exempted.

Swale: A low-lying stretch of land which gathers or carries surface water runoff.

Township: Summerhill Township, Crawford County.

Watercourse: Any channel for conveyance of surface water having a defined bed and banks, whether natural or artificial, with perennial or intermittent flow.

Watershed: The entire region or area drained by a river or other body of water whether natural or artificial. A "designated watershed" is an area delineated by the Pennsylvania DER and approved by the Environmental Quality Board for which counties are required to develop watershed storm water management plans.

Watershed Storm Water Management Plan: A plan for managing storm water runoff throughout a designated watershed adopted by Crawford County as required by the Pennsylvania Storm Water Management Act.

ARTICLE VI GENERAL PROVISIONS

Section 601. Repealer.

This ordinance shall repeal all other ordinances, or parts thereof, which are contrary to or conflict with the provisions of this ordinance to the extent necessary to give this ordinance to the extent necessary to give this ordinance full force and effect.

Section 602. Severability.

Should any section or provision of this ordinance be declared invalid by a court of competent jurisdiction, such decision shall not effect the validity of this ordinance as a whole or any other part hereof; the parts or sections remaining shall remain in effect as if the part of the section declared unconstitutional had never been a part of this ordinance.

Section 603. Effective Date.

This Ordinance shall become effective five (5) days after enactment.

Ordained and Enacted into law by the Board of Supervisors of Summerhill Township this
_____ day of March, A.D., 1995.

Summerhill Township Board of Supervisors

By: _____
Chairman

By: _____
Supervisor

By: _____
Supervisor

Attest:

By: _____
Secretary

[seal]