

**LAWRENCE TOWNSHIP
Combined Planning/Zoning Board**

Agenda

**Wed., March 10, 2021 at 7:00 P.M.
357 Main Street, Cedarville, NJ**

1. Pledge of Allegiance.

2. Open Public Meetings Act Statement of Conformance:

“This meeting is being conducted in accordance with the Open Public Meetings Act of 1975, was advertised, posted and made available to the public as required by Statute. The Secretary is directed to include a statement in the minutes of this meeting.”

3. Roll Call

Alfred Humeny, Chairman	(12/31/21)
Steven Miletta, Vice-Chairman	(12/31/23)
G. Erwin Sheppard	(12/31/21)
John Knoop, II	(12/31/23)
Anthony Lamanteer	(12/31/21)
John Roesley, Jr.	(12/31/22)
Veronica Sergiacomi	(12/31/23)
John Tisa	(12/31/23)
Joseph Miletta	(12/31/20)
George Ripper, Alt. #1	(12/31/21)
Delbert Peterson, Alt. #2	(12/31/21)
Fran Hancock, Alt. #3	(12/31/22)
Greg Yacabell, Alt. #4	(12/31/22)

4. Minutes of the Previous Meeting: Approve minutes of Feb. 10, 2021 meeting

5. Correspondence:

6. Resolutions: Resolutions 2021-01-2021-05; Ordinance Adopting Appendix D: Model Stormwater Control

7. Applications:

8. Other Business:

9. Public Comment:

The Planning Board welcomes participation of interested organizations and individuals during regular as well as special meetings. However, in order for the Board to conduct the business of the Township in the most productive manner possible, public comment on specific agenda items, questions, comments at the end of regular meetings or during special meetings may be limited to five (5) minutes per person. If you wish to address the Board, please step up to the front of the room at the appropriate time and state your name and address.

10. Adjournment.

Kathy Rodman

From: Nathan VanEmbden <nve@nvanembden.com>
Sent: Tuesday, March 02, 2021 10:36 AM
To: Kathy Rodman
Subject: GoToMeeting Invitation - Lawrence Twp Planning Board Meeting March

Lawrence Twp Planning Board Meeting March
Wed, Mar 10, 2021 7:00 PM - 10:00 PM (EST)

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Lawrence Township Planning/Zoning Board Minutes
Wednesday, Feb. 10, 2021

This meeting was held virtually, due to the current pandemic at GoToMeeting.

THOSE PRESENT: Al Humeny, Chairman	Erwin Sheppard
Steve Miletta, Vice Chairman	Veronica Sergiacomi
Joe Miletta	John Tisa
Tony Lamanteer, Zoning Off.	John Roesly, Jr.
Fran Hancock	George Ripper
John Knoop	Stephen Nardelli, Eng.
Greg Yacabell	Kathy Rodman, Sec.
Nathan VanEmbden, Sol.	Tiffany Cuiello, Planner

THOSE ABSENT: Delbert Peterson

The Lawrence Township Planning/Zoning Board held their monthly meeting virtually, via GoToMeeting on Wednesday, Feb. 10, 2021 at 7:00 P.M. This meeting was held in accordance with the Open Public Meeting Act and was conducted by the Chairman, Al Humeny.

The first order of business was to approve the minutes of the Jan. 13, 2021 meeting. Chairman Humeny inquired if it would be ok for all of the motions would be made by him and seconded by the Vice Chairman Steve Miletta. All in attendance were in favor of this so Al made the motion to approve the minutes of the Jan. 13, 2021 meeting and it was seconded by Steve, the minutes were approved.

Next was the discussion of the model Ordinance for the Planning Board to review of the Stormwater Management Plan so that they could recommend it to be adopted by the Township Committee. Erwin would like Nathan to draw up a Resolution to give to the Township Committee sooner rather than later, the Stormwater Management Plan is supposed to be adopted by March 2, 2021, Erwin said if Nathan can draw up something adopted by the Planning Board to be given to the Township Committee, than possibly it could be done by the end of March. Al then asked if there was anyone from the public who would like to have any input on this matter, and there was not. Nathan will work on the Resolution so that the Township can move forward in adopting the Stormwater Management Plan. Al made the motion to move forward and Steve seconded, all in attendance were in favor, there were no objections.

Next order of business was the minor subdivision of James Dzierwinski. This is for Block 130 Lot 4 located on Snyder Avenue. Mr. Dzierwinski's father owns the land, which is 2 acres and they plan to subdivide into two 1 acre lots and Mr. Dzierwinski will sign over 1 lot to his son, James, Jr. Al asked Stephen, our Engineer to give an overview of his review and Stephen said the lots will be conforming to the current Zoning requirements and explained that Snyder Avenue is a gravel road that is maintained by the Township. Al asked if there were any problems with getting emergency equipment back in that area and John Tisa, who is a fire company member said they go on calls in that area and have no

problems with getting their equipment in. Al asked if George Ripper, who is the Supervisor of the Lawrence twp. Road Dept. had anything to add, and George said that Snyder is a lot like many of the township roads in that area. No variances were needed for this subdivision. Al made the motion to approve the subdivision and Steve seconded it. All in attendance were in favor, it was a unanimous vote with no objections, the minor subdivision was granted.

The next order of business was discussion of a letter sent to the Planning Board from the Township Committee in reference to the old public works garage being offered for sale at a public auction. The Township Committee would like the Board to consider changing the zoning on this parcel from a P-Public Zoning District to a VR-Village Residential Zoning District, which is in line with the zoning of the surrounding properties. There was much discussion about how to re-zone this property. In the end, Tiffany suggested that it be included in the Master Plan Re-exam as an item to be re-zoned or re-developed due to the fact that it has been used as a garage and that way anyone wishing to purchase it could possibly use it according to the Master Plan.

Next was discussion of the Master Plan Re-examination. Tiffany advised that Parts 1 & 2 were included in the draft that was given to members. Tiffany advised that Part 3 includes the update of bonding for site plans and update for State Plan Centers. She recommends that we keep the designation Cedarville Village Center. Part 4 the recommendations were:

1. Flag lots-to ensure that property was developed without stems to back, we revise the Ordinance to make them a Conditional Use and as such they would have to come to the Board.
2. Fencing – our current ordinance states that fences should be 1 foot off of property line. Tiffany suggests we amend to state that property owner wishing to erect a fence needs a fence permit and they would have to provide a survey, plot plan or sketch to the surrounding property owners, with proof that they notified them of such and come to the zoning office for the permit. There was quite a bit of discussion about this, some members did not feel that a person wishing to put up a fence should have to produce a survey, since that can be quite costly. It was decided that if a property owner is putting up a fence within 5 foot of the property line, then they would need to notify the neighbors, and a plot plan or sketch would suffice.
3. Agriculture Employee Housing would be located in Agricultural Zones only. If it is a Conditional Use, they need to come in to the Planning Board.
4. Air bnb's – This was brought up a few meetings ago, when we had a rental property owner inquire if they could use their rental as an Air bnb . The Construction Office has heard nothing else in reference to this and if the Township sees the need, they could create an Ordinance for them to be licensed for short term rentals.
5. Renewable Energy – Discussions about solar and community Solar, these types of projects will have to come to the board for a variance.
6. Industrial Zoning was discussed.

The next item brought up was Public Charging Stations for electric vehicles for which the township has not seen a large volume of need for. This can be addressed if the issue becomes more prominent.

At this point it was a motion was made by John Tisa and seconded by Steve Miletta to open to the public and there was no public comment. It was then closed to the public with a motion by Al and seconded by Steve Miletta.

It was then that Al made the motion to have the Re-examination of the Master Plan as Tiffany has proposed approved by the Planning Board and sent to the Township Committee for adoption and the motion was seconded by Steve Miletta. All in attendance were in favor, except Veronica, who had left the meeting before this motion was made.

A motion was made by Al Humeny and seconded by Steve Miletta to adjourn the meeting due to no further business at 8:50 p.m.

Respectfully submitted,

Kathy Rodman
Planning/Zoning Board Secretary

KLR

**LAWRENCE TOWNSHIP COMBINED
PLANNING/ZONING BOARD
CUMBERLAND COUNTY
NEW JERSEY**

RESOLUTION NO. 2021-01

WHEREAS, on March 3, 2020 the New Jersey Department of Environmental Protection (NJDEP) provided Model Stormwater Management Ordinances to be adopted by municipalities no later than March 3, 2021; and

WHEREAS, the Township of Lawrence Combined Planning/ Zoning Board met virtually on February 10, 2021 at its regularly scheduled and advertised meeting and reviewed the model ordinance and made the following recommendations to the Township Committee for their review and approval; and

WHEREAS, the Township of Lawrence Combined Planning/ Zoning Board Solicitor and the Township Engineer, Fralinger Engineering, provided guidance to the Combined Planning/ Zoning Board who are now making the following recommendations to the Township Committee subject to the following to either be included or excluded by the Township Committee as part of the adoption of Appendix D: Model Stormwater Management Ordinance for Municipalities; and

WHEREAS, the Model Ordinance includes a section on penalties, where it is entirely optional for a municipality to include this section when adopting these model ordinances. Subject to this municipality adopting the Ordinance the municipality may adopt penalties to be assessed and said penalty provision, if applied, is found on page D-35 of the Model Ordinance; and

Prepared by:

Nathan Van Embden, Esquire
21 E. Main Street, PO Box 428
Millville, NJ 08332

WHEREAS, in the event Lawrence Township Committee does not adopt the penalties this provision will remain blank; and

WHEREAS, the Township Committee shall more clearly define the term “major development” that would align with the definition of *N.J.A.C. 7:8-1.2* which is recommended for consistency. Subject to the Township Committee’s approval Lawrence Township may adopt the definition of “major development” found on page D-6 of the Model Ordinance which is the minimum standard requirement if implemented by the Township which may encourage development verses the stricter definition found under *N.J.A.C. 7:8-1.2*; and

WHEREAS, if Lawrence Township has already adopted *N.J.A.C. 7:8-1.2* for their stormwater management program, Lawrence Township will comply with the State of New Jersey recommendation to not go back to the minimum standard more fully defined on page D-6 of Appendix D; and

WHEREAS, the Township Clerk will assign ordinance numbers to each page of the Model Ordinance, page D-1 through D-35 to be consistent with Lawrence Township Stormwater Management Ordinance presently being codified; and said numbers assigned to this Appendix will be consistent with codification of the Lawrence Township Ordinance specifically as to stormwater management section of said Ordinance;

WHEREAS, upon the adoption of this Resolution Lawrence Township shall publish the notice of public hearing for the adoption of said appendix prior to March 3, 2021, the NJ State required deadline for adoption of said appendix or such later date as the deadline may be extended.

THEREFORE, BE IT RESOLVED this ____ day of _____, 2021 confirming action taken by the Lawrence Township Combined Planning/ Zoning Board on February 10, 2021, the Combined Planning/ Zoning Board of Lawrence Township recommends to the

Lawrence Township Committee that a public hearing to be held by the Township Committee for the adoption of revisions to the Lawrence Township, Cumberland County Stormwater Control Ordinance to reflect amendments to the stormwater management rules at *N.J.A.C. 7:8* adopted on March 2, 2020 by the State of New Jersey, Department of Environmental Protection.

ROLL CALL

Motion to Approve:

Seconded:

MEMBER	YEA	NAY	ABSENT	ABSTAINED	EXCUSED
Chairman Alfred Humeny					
Vice-Chairman Steven Miletta					
G. Erwin Sheppard					
John Knoop, III					
Anthony Lamanteer					
John Roesly, Jr.					
Veronica Sergiacomi					
John Tisa					
Joseph Miletta					
George Ripper, Alt. #1					
Delbert Peterson, Alt. #2					
Fran Hancock, Alt. #3					
Gregory Yacabell, Alt. #4					

AND BE IT FURTHER RESOLVED that a copy of this Resolution be forwarded to the applicant and to all who request a copy for a reasonable fee. In addition, a copy of this Resolution shall be filed in the Office of the Clerk of the Township of Lawrence, Cumberland County, New Jersey

By: _____ By: _____
Kathy Rodman, Board Secretary Alfred Humeny, Chairman

Dated:

CERTIFICATION

The foregoing is a true copy of a Resolution adopted by the Combined Planning/Zoning Board of the Township of Lawrence at a meeting of February 10, 2021 memorializing action taken by the Board at the regular meeting of the Board held on February 10, 2021.

Kathy Rodman, Board Secretary

**LAWRENCE TOWNSHIP COMBINED
PLANNING/ZONING BOARD
CUMBERLAND COUNTY
NEW JERSEY**

RESOLUTION NO. 2021-02

WHEREAS, James E. Dzierwinski of 1775 Roosevelt Boulevard, Vineland, New Jersey has applied to the Township of Lawrence Combined Planning/Zoning Board for Preliminary Subdivision Approval to subdivide lot 4 into two buildable residential lots; said property located at Block 130, Lot 4 and more commonly known on the Township of Lawrence Tax Map as Synder Avenue, Lawrence Township, New Jersey with said property being located in the R-1 Medium Density Residential Zone consisting of 2.099 acres; and

WHEREAS, this application was heard by the Township of Lawrence Combined Planning/Zoning Board at its regular meeting of February 10, 2021; and

WHEREAS, the Board at that meeting considered the merits of the application as well as the testimony and evidence presented as follows:

1. James Dzierwinski was sworn and testified.
2. Mr. Dzierwinski proposes to subdivide an existing lot into two conforming lots of 1.099 acres and 1.00 acres, respectively.
3. Exhibits which were submitted by the applicant for consideration in support of its application included:
 - (a) Development Application Form dated January 14, 2021;
 - (b) Lawrence Township Developmental Regulations Ordinance Checklist Schedule "A" General Requirements dated January 14, 2021 consisting of two pages;

Prepared by:

Nathan Van Embden, Esquire
21 E. Main Street, PO Box 428
Millville, NJ 08332

- (c) Lawrence Township Developmental Regulations Ordinance Checklist Schedule "D"- Land Subdivision dated January 14, 2021 consisting of three pages;
- (d) Cumberland County Planning Board Review Report dated February 4, 2021 consisting of one page;
- (e) Minor Subdivision Plan prepared by Michael R. Vargo of Vargo Associates dated December 23, 2020; and
- (f) Engineering Review Letter prepared Stephen J. Nardelli, PE, PP, CME, Vice President of Fralinger Engineering, P.A. Township Engineer dated February 5, 2021.

4. The meeting was opened to the public at which time no member of the general public came forward either for or against the application and the public portion of the meeting was closed; and

WHEREAS, the Board, after having considered the presentation of the applicant, finds the following:

- 1. The applicant, James Dzierwinski, has the authority to make this application.
- 2. The purpose of this application is to allow the applicant to subdivide Lot 4 into two buildable residential lots.
- 3. The proposed lots comply with the R11 Zone requirements.
- 4. The proposed lots will front along Synder Avenue and Grant Avenue with proposed Lot 4A having frontage of 291.03 along Synder Avenue and proposed Lot 4 having frontage of 233.97 along Synder avenue and 195.83 along Grant Avenue.

WHEREAS, the Township of Lawrence Combined Planning/Zoning Board by an affirmative vote of 8-0 approved the applicant's request for Preliminary and Final Subdivision Approval for subdividing existing Lot 4 into two buildable residential lots; and

WHEREAS, this Resolution is intended to memorialize the foregoing decision of the Township of Lawrence Combined Planning/Zoning Board of February 10, 2021.

NOW, THEREFORE, BE IT RESOLVED by the Township of Lawrence Combined Planning/Zoning Board this 10th day of March 2021 that the application of **James Dzierwinski** for Preliminary and Final Subdivision Approval, as applied for by the applicant, is hereby granted and approved subject to the following terms and conditions:

- 1.. The applicant shall comply with the terms and conditions of the Engineering Review Letter prepared by Stephen J. Nardelli, P.E., P.P. C.M.E. of Fralinger Engineering, Township Engineer, dated February 4, 2021 .
2. The applicant must obtain and comply with any and all other necessary state, county, federal, municipal and other governmental approvals and regulations including, but not limited to, the Cumberland County Planning Board, if applicable.
3. Should the applicant shall seek a building permit, that permit shall reflect the approval of the Lawrence Township Combined Planning/Zoning Board by attaching a copy of this Resolution and making it a part of the permit and all findings and representations of the applicant are incorporated into the approval as if set forth at length herein.
4. The applicant shall comply with all representations they have made to the Board, both in writing and orally at the meeting, whether expressed in this Resolution or not.

ROLL CALL

Motion to Approve:

Seconded:

MEMBER	YEA	NAY	ABSENT	ABSTAINED	EXCUSED
Chairman Alfred Humeny					
Vice-Chairman Steven Miletta					
G. Erwin Sheppard					
John Knoop, III					
Anthony Lamanteer					
John Roesly, Jr.					
Veronica Sergiacomi					
John Tisa					
Joseph Miletta					
George Ripper, Alt. #1					
Delbert Peterson, Alt. #2					
Fran Hancock, Alt. #3					
Gregory Yacabell, Alt. #4					

AND BE IT FURTHER RESOLVED that a copy of this Resolution be forwarded to the applicant and to all who request a copy for a reasonable fee. In addition, a copy of this Resolution shall be filed in the Office of the Clerk of the Township of Lawrence, Cumberland County, New Jersey

By: _____
Kathy Rodman, Board Secretary

By: _____
Alfred Humeny, Chairman

Dated:

CERTIFICATION

The foregoing is a true copy of a Resolution adopted by the Combined Planning/Zoning Board of the Township of Lawrence at a meeting of March 10, 2021 memorializing action taken by the Board at the regular meeting of the Board held on February 10, 2021.

Kathy Rodman, Board Secretary

**TOWNSHIP OF LAWRENCE
COMBINED PLANNING/ZONING BOARD
CUMBERLAND COUNTY, N.J.**

SPECIAL RESOLUTION NO. 2021-03

**SCHEDULE OF PLANNING/ZONING BOARD MEETINGS 2021
DESIGNATION OF OFFICIAL NEWSPAPER**

WHEREAS, NJSA 10:4-18 requires that every public body give notice concerning the schedule of regular meetings of the Lawrence Township Combined Planning/Zoning Board during the succeeding Board calendar year and the time and date of each meeting.

NOW, THEREFORE, BE IT RESOLVED on this 10th day of March 2021 by the Planning/ Zoning Board of the Township of Lawrence, County of Cumberland and State of New Jersey, as follows:

1. The allegations of the preamble are incorporated herein by this reference.
2. Regular meetings of the Lawrence Township Combined Planning/ Zoning Board shall be held on the 2nd Wednesday of each month unless otherwise indicated in accordance with the following schedule:

2021 MEETING SCHEDULE

February 10, 2021	7:00 p.m.
March 10, 2021	7:00 p.m.
April 14, 2021	7:00 p.m.
May 12, 2021	7:00 p.m.
June 9, 2021	7:00 p.m.
July 14, 2021	7:00 p.m.
August 11, 2021	7:00 p.m.
September 8, 2021	7:00 p.m.
October 13, 2021	7:00 p.m.
November 10, 2021	7:00 p.m.
December 8, 2021	7:00 p.m.
January 12, 2022	7:00 p.m.

Prepared by:

Nathan Van Embden, Esquire
21 E. Main Street, PO Box 428
Millville, NJ 08332

3. Unless otherwise indicated, all regular meetings of the Lawrence Township Combined Planning/Zoning Board shall be held on the dates indicated at the Municipal Building located at 357 Main Street, Cedarville, New Jersey at 7:00 p.m. All hearings are to be terminated by 11:00 p.m. Meetings shall be open to the public unless the matter in discussion involves one or more matters set forth at NJSA 10:4-12(b). In the event that such matter is discussed, the public shall be excluded from that portion of the meeting pursuant to resolution which shall be adopted in accordance with NJSA 10:4-13. At the conclusion of the closed session, the meeting shall be reopened to the public.

4. In the event of the necessity for holding a meeting of the Township of Lawrence Combined Planning/Zoning Board in addition to the meeting schedule set forth in Paragraph 2 of this Resolution, the Board Secretary shall give written advance notice of at least forty-eight (48) hours giving the date, time, location and, to the extent known, the agenda of any regular/special or rescheduled meeting. This notice shall state whether formal action may or may not be taken. Such notice shall be:

- A. Prominently posted on the bulletin board in the Township of Lawrence Municipal Building, 357 Main Street, Cedarville, New Jersey;
- B. Mailed, telephoned, telegraphed, e-mailed or hand delivered to The Daily Journal and The Press of Atlantic City which are hereby designated as the official newspapers of the Lawrence Township Combined Planning/Zoning Board;
- C. Filed with the Township Clerk's Office.

5. The Board Secretary shall either post a copy of this Resolution or a copy of the scheduled meetings for the current year on the bulletin board in the Municipal Building and, in addition, shall publish same in the official newspaper of the Lawrence Township Combined Planning/Zoning Board as stated in Paragraph 4B above.

LAWRENCE TOWNSHIP COMBINED PLANNING/ZONING
BOARD

By: _____

Alfred Humeny, Chairman

Kathy Rodman, Board Secretary

ROLL CALL

Motion to Approve:

Seconded:

MEMBER	YEA	NAY	ABSENT	ABSTAINED	EXCUSED
Chairman Alfred Humeny					
Vice-Chairman Steven Miletta					
Elmer Skip Bowman, Mayor					
Erwin Shepard, Deputy Mayor					
John Knoop, III					
Anthony Lamanteer					
John Roesly					
Veronica Sergiacomi					
John Tisa					
Fran Hancock, Alt.					
George Ripper, Alt.					
Delbert Peterson, Alt.					
Gregory Yacabell, Alt.					

AND BE IT FURTHER RESOLVED that a copy of this Resolution be forwarded to the applicant and to all who request a copy for a reasonable fee. In addition, a copy of this Resolution shall be filed in the Office of the Clerk of the Township of Lawrence, Cumberland County, New Jersey

By: _____
Kathy Rodman, Board Secretary

By: _____
Alfred Humeny, Chairman

Dated:

CERTIFICATION

The foregoing is a true copy of a Resolution adopted by the Combined Planning/
Zoning Board of the Township of Lawrence at a meeting of January 13, 2021
memorializing action taken by the Board at the regular meeting of March 10, 2021.

Kathy Rodman, Board Secretary

**TOWNSHIP OF LAWRENCE
COMBINED PLANNING/ZONING BOARD
CUMBERLAND COUNTY, N.J.**

SPECIAL RESOLUTION NO. 2021-04

APPOINTMENT OF PROFESSIONALS 2021-2022

WHEREAS, pursuant to the New Jersey Land Use Law, specifically NJSA 40:55D-24 , a Municipality's Planning Board is granted the power to employ, contract for, and fix the compensation for professionals, experts and other service providers as it deems necessary for the effective completion of their appointed duties, and

WHEREAS, the Township of Lawrence Combined Planning/Zoning Board has determined that the effective completion of their appointed duties requires that they retain the services of administrative personnel, engineers and legal counsel to assist the Board as needed during the forthcoming year, and

WHEREAS, the Board had the opportunity to consider its needs for the calendar year 2019-2020 and to review the professional services of certain persons and have considered them to be necessary and of sufficient expertise to provide guidance to the Planning Board during the forthcoming year.

NOW, THEREFORE, BE IT ND RESOLVED on this 13th day of January 2021 by the Combined Planning/Zoning Board of the Township of Lawrence that the Chairperson of the Board is hereby authorized and approved to enter into negotiations and contracts for the employment of the following persons for the positions set forth below for the calendar year 2021-2022.

Kathy Rodman, Board Secretary

Stephen J. Nardelli, P.E., P.P., Board Engineer

Nathan Van Embden, Esquire, Board Solicitor

ROLL CALL

Motion to Approve:

Seconded:

MEMBER	YEA	NAY	ABSENT	ABSTAINED	EXCUSED
Chairman Alfred Humeny					
Vice-Chairman Steven Miletta					
G. Erwin Sheppard					
John Knoop, III					
Anthony Lamanteer					
John Roesly, Jr.					
Veronica Sergiacomi					
John Tisa					
Joseph Miletta					
George Ripper, Alt. #1					
Delbert Peterson, Alt. #2					
Fran Hancock, Alt. #3					
Gregory Yacabell, Alt. #4					

AND BE IT FURTHER RESOLVED that a copy of this Resolution be forwarded to the applicant and to all who request a copy for a reasonable fee. In addition, a copy of this Resolution shall be filed in the Office of the Clerk of the Township of Lawrence, Cumberland County, New Jersey

By: _____
Kathy Rodman, Board Secretary

By _____
Alfred Humeny, Chairman

Dated:

CERTIFICATION

The foregoing is a true copy of a Resolution adopted by the Combined
Zoning/Planning Board of the Township of Lawrence at a meeting of January 8, 2020
memorializing action taken by the Board at that meeting.

Kathy Rodman, Board Secretary

**TOWNSHIP OF LAWRENCE
COMBINED PLANNING/ZONING BOARD
CUMBERLAND COUNTY, N.J.**

SPECIAL RESOLUTION NO. 2021-05

APPOINTMENT OF CHAIRPERSON AND VICE CHAIRPERSON

WHEREAS, pursuant to NJSA 40:55D-1 et seq, municipalities are authorized to establish and appoint a Planning Board to act in accordance with the powers set forth within the Municipal Land Use Law; and

WHEREAS, pursuant to the Township of Lawrence General Ordinance regarding land use procedures, the Combined Planning/Zoning Board shall elect a Chairperson and Vice-Chairperson from its members at its annual Reorganization Meeting held on January 13, 2021 or as necessary during the course of the year; and

WHEREAS, after appropriate nominations, discussion and voting, the Combined Planning/Zoning Board has considered the appropriate appointments for the positions set forth above.

NOW, THEREFORE, BE IT RESOLVED, by the Combined Planning/Zoning Board of the Township of Lawrence that the following persons are appointed to the positions set forth below for the calendar year 2021-2022.

Alfred Humeny, Chairperson

Steven Miletta, Vice Chairperson

ROLL CALL

Motion to Approve:

Seconded:

MEMBER	YEA	NAY	ABSENT	ABSTAINED	EXCUSED
Chairman Alfred Humeny					
Vice-Chairman Steven Miletta					
G. Erwin Sheppard					
John Knoop, III					
Anthony Lamanteer					
John Roesly, Jr.					
Veronica Sergiacomi					
John Tisa					
Joseph Miletta					
George Ripper, Alt. #1					
Delbert Peterson, Alt. #2					
Fran Hancock, Alt. #3					
Gregory Yacabell, Alt. #4					

AND BE IT FURTHER RESOLVED that a copy of this Resolution be forwarded to the applicant and to all who request a copy for a reasonable fee. In addition, a copy of this Resolution shall be filed in the Office of the Clerk of the Township of Lawrence, Cumberland County, New Jersey

By: _____
Kathy Rodman, Board Secretary

By _____
Alfred Humeny, Chairman

Dated:

CERTIFICATION

The foregoing is a true copy of a Resolution adopted by the Combined
Zoning/Planning Board of the Township of Lawrence at a meeting of March 10, 2021
memorializing action taken by the Board at that meeting.

Kathy Rodman, Board Secretary

**Ordinance Adopting Appendix D: Model Stormwater Control
Ordinance for Municipalities for the Township of Lawrence County
of Cumberland, State of New Jersey
by the Lawrence Township Committee**

WHEREAS, the Lawrence Township Committee is authorized to adopt reasonable rules and regulations governing the management of stormwater runoff; and

WHEREAS, the Lawrence Township Committee has received the recommendation of the State of New Jersey, Department of Environmental Protection and the further recommendation of the Combined Planning and Zoning Board of Lawrence Township to adopt such ordinance in a form amended and modified by the Lawrence Township Combined Planning Board; and

WHEREAS, the Lawrence Township Committee deems it reasonable and necessary to act and adopt the amended Appendix D: Model Stormwater Control Ordinance.

NOW, THEREFORE, BE IT ORDAINED BY THE LAWRENCE TOWNSHIP COMMITTEE, OF CUMBERLAND COUNTY , STATE OF NEW JERSEY as follows:

1. The annexed Appendix D: Model Stormwater Control Ordinance as modified by the Lawrence Township Combined Planning and Zoning Board is adopted by the Township Committee.
2. Omission of additional penalties for noncompliance with these revisions to the Ordinance shall not impact the existing penalties of record. The denial of building permits and continuing certificates of occupancy will continue to be the consequence of failure to abide by this Ordinance.

3. The Board adopts the minimum requirements for definitions of “major development” pursuant to *N.J.A.C. 7:8-1.2*.

WHEREAS, upon adoption of this Resolution, Lawrence Township shall publish the Notice of Public Hearing for the adoption of said appendix prior to March 3, 2021, the New Jersey State deadline for adoption of said appendix or such later date that the deadline may be extended.

THEREFORE, BE IT RESOLVED, this _____ day of _____, 2021 confirming action taken by the Lawrence Township Combined Planning Board on February 10, 2021, the Combined Planning Board of Lawrence Township recommends to the Lawrence Township Committee that a public hearing to be held by the Township Committee for the adoption of revisions to the Lawrence Township, Cumberland County Stormwater Control Ordinance to reflect the amendments to the stormwater management rules *at N.J.A.C. 7:8* adopted on March 2, 2020 by the State of New Jersey, Department of Environmental Protection.

ATTESTED:

Ruth Dawson, Township Clerk

G. Erwin Sheppard, Mayor

LAWRENCE TOWNSHIP ORDINANCE ADOPTING UPDATED STORMWATER CONTROL ORDINANCE

https://www.njstormwater.org/bmp_manual2.htm.

LAWRENCE TOWNSHIP ORDINANCE ADOPTING UPDATED STORMWATER CONTROL ORDINANCE

Ordinance #[insert number] – Stormwater Control

Section I. Scope and Purpose:

A. Policy Statement

Flood control, groundwater recharge, and pollutant reduction shall be achieved through the use of stormwater management measures, including green infrastructure Best Management Practices (GI BMPs) and nonstructural stormwater management strategies. GI BMPs and low impact development (LID) should be utilized to meet the goal of maintaining natural hydrology to reduce stormwater runoff volume, reduce erosion, encourage infiltration and groundwater recharge, and reduce pollution. GI BMPs and LID should be developed based upon physical site conditions and the origin, nature and the anticipated quantity, or amount, of potential pollutants. Multiple stormwater management BMPs may be necessary to achieve the established performance standards for water quality, quantity, and groundwater recharge.

B. Purpose

The purpose of this ordinance is to establish minimum stormwater management requirements and controls for “major development,” as defined below in Section II.

C. Applicability

1. This ordinance shall be applicable to the following major developments:
 - a. Non-residential major developments; and
 - b. Aspects of residential major developments that are not pre-empted by the Residential Site Improvement Standards at N.J.A.C. 5:21.
2. This ordinance shall also be applicable to all major developments undertaken by Lawrence Township.

D. Compatibility with Other Permit and Ordinance Requirements

Development approvals issued pursuant to this ordinance are to be considered an integral part of development approvals and do not relieve the applicant of the responsibility to secure required permits or approvals for activities regulated by any other applicable code, rule, act, or ordinance. In their interpretation and application, the provisions of this ordinance shall be held to be the minimum requirements for the promotion of the public health, safety, and general welfare.

This ordinance is not intended to interfere with, abrogate, or annul any other ordinances, rule or regulation, statute, or other provision of law except that, where any provision of this ordinance imposes restrictions different from those imposed by any

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other ordinance, rule or regulation, or other provision of law, the more restrictive provisions or higher standards shall control.

Section II. Definitions:

For the purpose of this ordinance, the following terms, phrases, words and their derivations shall have the meanings stated herein unless their use in the text of this Chapter clearly demonstrates a different meaning. When not inconsistent with the context, words used in the present tense include the future, words used in the plural number include the singular number, and words used in the singular number include the plural number. The word "shall" is always mandatory and not merely directory. The definitions below are the same as or based on the corresponding definitions in the Stormwater Management Rules at N.J.A.C. 7:8-1.2.

"CAFRA Centers, Cores or Nodes" means those areas with boundaries incorporated by reference or revised by the Department in accordance with N.J.A.C. 7:7-13.16.

"CAFRA Planning Map" means the map used by the Department to identify the location of Coastal Planning Areas, CAFRA centers, CAFRA cores, and CAFRA nodes. The CAFRA Planning Map is available on the Department's Geographic Information System (GIS).

"Community basin" means an infiltration system, sand filter designed to infiltrate, standard constructed wetland, or wet pond, established in accordance with N.J.A.C. 7:8-4.2(c)14, that is designed and constructed in accordance with the New Jersey Stormwater Best Management Practices Manual, or an alternate design, approved in accordance with N.J.A.C. 7:8-5.2(g), for an infiltration system, sand filter designed to infiltrate, standard constructed wetland, or wet pond and that complies with the requirements of this chapter.

"Compaction" means the increase in soil bulk density.

"Contributory drainage area" means the area from which stormwater runoff drains to a stormwater management measure, not including the area of the stormwater management measure itself.

"Core" means a pedestrian-oriented area of commercial and civic uses serving the surrounding municipality, generally including housing and access to public transportation.

"County review agency" means an agency designated by the County Commissioners to review municipal stormwater management plans and implementing ordinance(s). The county review agency may either be:

1. A county planning agency or

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2. A county water resource association created under N.J.S.A 58:16A-55.5, if the ordinance or resolution delegates authority to approve, conditionally approve, or disapprove municipal stormwater management plans and implementing ordinances.

“Department” means the Department of Environmental Protection.

“Designated Center” means a State Development and Redevelopment Plan Center as designated by the State Planning Commission such as urban, regional, town, village, or hamlet.

“Design engineer” means a person professionally qualified and duly licensed in New Jersey to perform engineering services that may include, but not necessarily be limited to, development of project requirements, creation and development of project design and preparation of drawings and specifications.

“Development” means the division of a parcel of land into two or more parcels, the construction, reconstruction, conversion, structural alteration, relocation or enlargement of any building or structure, any mining excavation or landfill, and any use or change in the use of any building or other structure, or land or extension of use of land, for which permission is required under the Municipal Land Use Law, N.J.S.A. 40:55D-1 *et seq.*

In the case of development of agricultural land, development means: any activity that requires a State permit, any activity reviewed by the County Agricultural Board (CAB) and the State Agricultural Development Committee (SADC), and municipal review of any activity not exempted by the Right to Farm Act , N.J.S.A 4:1C-1 *et seq.*

“Disturbance” means the placement or reconstruction of impervious surface or motor vehicle surface, or exposure and/or movement of soil or bedrock or clearing, cutting, or removing of vegetation. Milling and repaving is not considered disturbance for the purposes of this definition.

“Drainage area” means a geographic area within which stormwater, sediments, or dissolved materials drain to a particular receiving waterbody or to a particular point along a receiving waterbody.

“Environmentally constrained area” means the following areas where the physical alteration of the land is in some way restricted, either through regulation, easement, deed restriction or ownership such as: wetlands, floodplains, threatened and endangered species sites or designated habitats, and parks and preserves. Habitats of endangered or threatened species are identified using the Department's Landscape Project as approved by the Department's Endangered and Nongame Species Program.

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“Environmentally critical area” means an area or feature which is of significant environmental value, including but not limited to: stream corridors, natural heritage priority sites, habitats of endangered or threatened species, large areas of contiguous open space or upland forest, steep slopes, and well head protection and groundwater recharge areas. Habitats of endangered or threatened species are identified using the Department’s Landscape Project as approved by the Department’s Endangered and Nongame Species Program.

“Empowerment Neighborhoods” means neighborhoods designated by the Urban Coordinating Council “in consultation and conjunction with” the New Jersey Redevelopment Authority pursuant to N.J.S.A 55:19-69.

“Erosion” means the detachment and movement of soil or rock fragments by water, wind, ice, or gravity.

“Green infrastructure” means a stormwater management measure that manages stormwater close to its source by:

1. Treating stormwater runoff through infiltration into subsoil;
2. Treating stormwater runoff through filtration by vegetation or soil; or
3. Storing stormwater runoff for reuse.

“HUC 14” or “hydrologic unit code 14” means an area within which water drains to a particular receiving surface water body, also known as a subwatershed, which is identified by a 14-digit hydrologic unit boundary designation, delineated within New Jersey by the United States Geological Survey.

“Impervious surface” means a surface that has been covered with a layer of material so that it is highly resistant to infiltration by water.

“Infiltration” is the process by which water seeps into the soil from precipitation.

“Lead planning agency” means one or more public entities having stormwater management planning authority designated by the regional stormwater management planning committee pursuant to N.J.A.C. 7:8-3.2, that serves as the primary representative of the committee.

“Major development” means an individual “development,” as well as multiple developments that individually or collectively result in:

1. The disturbance of one or more acres of land since February 2, 2004;
2. The creation of one-quarter acre or more of “regulated impervious surface” since February 2, 2004;
3. The creation of one-quarter acre or more of “regulated motor vehicle surface” since March 2, 2021 *{or the effective date of this ordinance, whichever is*

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earlier); or

4. A combination of 2 and 3 above that totals an area of one-quarter acre or more. The same surface shall not be counted twice when determining if the combination area equals one-quarter acre or more.

Major development includes all developments that are part of a common plan of development or sale (for example, phased residential development) that collectively or individually meet any one or more of paragraphs 1, 2, 3, or 4 above. Projects undertaken by any government agency that otherwise meet the definition of “major development” but which do not require approval under the Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq., are also considered “major development.”

NOTE: The definition of major development above aligns with the definition at N.J.A.C. 7:8-1.2 and is recommended for consistency. Alternatively, a municipality may adopt the following definition, which is the minimum standard required. Municipalities that have already adopted the definition at N.J.A.C. 7:8-1.2 or another definition that goes beyond the minimum requirement should not reduce the stringency of their definition by adopting the minimum standard.

“Major development” means an individual “development,” as well as multiple developments that individually or collectively result in the disturbance of one or more acres of land since February 2, 2004.

Major development includes all developments that are part of a common plan of development or sale (for example, phased residential development) that collectively or individually result in the disturbance of one or more acres of land since February 2, 2004. Projects undertaken by any government agency that otherwise meet the definition of “major development” but which do not require approval under the Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq., are also considered “major development.”

Additionally, individual municipalities may define major development with a smaller area of disturbance, a smaller area of regulated impervious or motor vehicle surface, or both.

“Motor vehicle” means land vehicles propelled other than by muscular power, such as automobiles, motorcycles, autocycles, and low speed vehicles. For the purposes of this definition, motor vehicle does not include farm equipment, snowmobiles, all-terrain vehicles, motorized wheelchairs, go-carts, gas buggies, golf carts, ski-slope grooming machines, or vehicles that run only on rails or tracks.

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“Motor vehicle surface” means any pervious or impervious surface that is intended to be used by “motor vehicles” and/or aircraft, and is directly exposed to precipitation including, but not limited to, driveways, parking areas, parking garages, roads, racetracks, and runways.

“Municipality” means any city, borough, town, township, or village.

“New Jersey Stormwater Best Management Practices (BMP) Manual” or “BMP Manual” means the manual maintained by the Department providing, in part, design specifications, removal rates, calculation methods, and soil testing procedures approved by the Department as being capable of contributing to the achievement of the stormwater management standards specified in this chapter. The BMP Manual is periodically amended by the Department as necessary to provide design specifications on additional best management practices and new information on already included practices reflecting the best available current information regarding the particular practice and the Department’s determination as to the ability of that best management practice to contribute to compliance with the standards contained in this chapter. Alternative stormwater management measures, removal rates, or calculation methods may be utilized, subject to any limitations specified in this chapter, provided the design engineer demonstrates to the municipality, in accordance with Section IV.F. of this ordinance and N.J.A.C. 7:8-5.2(g), that the proposed measure and its design will contribute to achievement of the design and performance standards established by this chapter.

“Node” means an area designated by the State Planning Commission concentrating facilities and activities which are not organized in a compact form.

“Nutrient” means a chemical element or compound, such as nitrogen or phosphorus, which is essential to and promotes the development of organisms.

“Person” means any individual, corporation, company, partnership, firm, association, political subdivision of this State and any state, interstate or Federal agency.

“Pollutant” means any dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, refuse, oil, grease, sewage sludge, munitions, chemical wastes, biological materials, medical wastes, radioactive substance (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. §§ 2011 *et seq.*)), thermal waste, wrecked or discarded equipment, rock, sand, cellar dirt, industrial, municipal, agricultural, and construction waste or runoff, or other residue discharged directly or indirectly to the land, ground waters or surface waters of the State, or to a domestic treatment works. “Pollutant” includes both hazardous and nonhazardous pollutants.

“Recharge” means the amount of water from precipitation that infiltrates into the ground and is not evapotranspired.

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“Regulated impervious surface” means any of the following, alone or in combination:

1. A net increase of impervious surface;
2. The total area of impervious surface collected by a new stormwater conveyance system (for the purpose of this definition, a “new stormwater conveyance system” is a stormwater conveyance system that is constructed where one did not exist immediately prior to its construction or an existing system for which a new discharge location is created);
3. The total area of impervious surface proposed to be newly collected by an existing stormwater conveyance system; and/or
4. The total area of impervious surface collected by an existing stormwater conveyance system where the capacity of that conveyance system is increased.

“Regulated motor vehicle surface” means any of the following, alone or in combination:

1. The total area of motor vehicle surface that is currently receiving water;
2. A net increase in motor vehicle surface; and/or
quality treatment either by vegetation or soil, by an existing stormwater management measure, or by treatment at a wastewater treatment plant, where the water quality treatment will be modified or removed.

“Sediment” means solid material, mineral or organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water or gravity as a product of erosion.

“Site” means the lot or lots upon which a major development is to occur or has occurred.

“Soil” means all unconsolidated mineral and organic material of any origin.

“State Development and Redevelopment Plan Metropolitan Planning Area (PA1)” means an area delineated on the State Plan Policy Map and adopted by the State Planning Commission that is intended to be the focus for much of the State’s future redevelopment and revitalization efforts.

“State Plan Policy Map” is defined as the geographic application of the State Development and Redevelopment Plan’s goals and statewide policies, and the official map of these goals and policies.

“Stormwater” means water resulting from precipitation (including rain and snow) that runs off the land’s surface, is transmitted to the subsurface, or is captured by separate storm sewers or other sewage or drainage facilities, or conveyed by snow removal equipment.

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“Stormwater management BMP” means an excavation or embankment and related areas designed to retain stormwater runoff. A stormwater management BMP may either be normally dry (that is, a detention basin or infiltration system), retain water in a permanent pool (a retention basin), or be planted mainly with wetland vegetation (most constructed stormwater wetlands).

“Stormwater management measure” means any practice, technology, process, program, or other method intended to control or reduce stormwater runoff and associated pollutants, or to induce or control the infiltration or groundwater recharge of stormwater or to eliminate illicit or illegal non-stormwater discharges into stormwater conveyances.

“Stormwater runoff” means water flow on the surface of the ground or in storm sewers, resulting from precipitation.

“Stormwater management planning agency” means a public body authorized by legislation to prepare stormwater management plans.

“Stormwater management planning area” means the geographic area for which a stormwater management planning agency is authorized to prepare stormwater management plans, or a specific portion of that area identified in a stormwater management plan prepared by that agency.

“Tidal Flood Hazard Area” means a flood hazard area in which the flood elevation resulting from the two-, 10-, or 100-year storm, as applicable, is governed by tidal flooding from the Atlantic Ocean. Flooding in a tidal flood hazard area may be contributed to, or influenced by, stormwater runoff from inland areas, but the depth of flooding generated by the tidal rise and fall of the Atlantic Ocean is greater than flooding from any fluvial sources. In some situations, depending upon the extent of the storm surge from a particular storm event, a flood hazard area may be tidal in the 100-year storm, but fluvial in more frequent storm events.

“Urban Coordinating Council Empowerment Neighborhood” means a neighborhood given priority access to State resources through the New Jersey Redevelopment Authority.

“Urban Enterprise Zones” means a zone designated by the New Jersey Enterprise Zone Authority pursuant to the New Jersey Urban Enterprise Zones Act, N.J.S.A. 52:27H-60 et. seq.

“Urban Redevelopment Area” is defined as previously developed portions of areas:

1. Delineated on the State Plan Policy Map (SPPM) as the Metropolitan Planning Area (PA1), Designated Centers, Cores or Nodes;

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2. Designated as CAFRA Centers, Cores or Nodes;
3. Designated as Urban Enterprise Zones; and
4. Designated as Urban Coordinating Council Empowerment Neighborhoods.

“Water control structure” means a structure within, or adjacent to, a water, which intentionally or coincidentally alters the hydraulic capacity, the flood elevation resulting from the two-, 10-, or 100-year storm, flood hazard area limit, and/or floodway limit of the water. Examples of a water control structure may include a bridge, culvert, dam, embankment, ford (if above grade), retaining wall, and weir.

“Waters of the State” means the ocean and its estuaries, all springs, streams, wetlands, and bodies of surface or groundwater, whether natural or artificial, within the boundaries of the State of New Jersey or subject to its jurisdiction.

“Wetlands” or “wetland” means an area that is inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

Section III. Design and Performance Standards for Stormwater Management Measures

- A. Stormwater management measures for major development shall be designed to provide erosion control, groundwater recharge, stormwater runoff quantity control, and stormwater runoff quality treatment as follows:
 1. The minimum standards for erosion control are those established under the Soil and Sediment Control Act, N.J.S.A. 4:24-39 et seq., and implementing rules at N.J.A.C. 2:90.
 2. The minimum standards for groundwater recharge, stormwater quality, and stormwater runoff quantity shall be met by incorporating green infrastructure.
- B. The standards in this ordinance apply only to new major development and are intended to minimize the impact of stormwater runoff on water quality and water quantity in receiving water bodies and maintain groundwater recharge. The standards do not apply to new major development to the extent that alternative design and performance standards are applicable under a regional stormwater management plan or Water Quality Management Plan adopted in accordance with Department rules.

Note: Alternative standards shall provide at least as much protection from stormwater-related loss of groundwater recharge, stormwater quantity and water quality impacts of major development projects as would be provided under the standards in N.J.A.C. 7:8-5.

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Section IV. Stormwater Management Requirements for Major Development

- A. The development shall incorporate a maintenance plan for the stormwater management measures incorporated into the design of a major development in accordance with Section X.
- B. Stormwater management measures shall avoid adverse impacts of concentrated flow on habitat for threatened and endangered species as documented in the Department's Landscape Project or Natural Heritage Database established under N.J.S.A. 13:1B-15.147 through 15.150, particularly *Helonias bullata* (swamp pink) and/or *Clemmys muhlenbergi* (bog turtle).
- C. The following linear development projects are exempt from the groundwater recharge, stormwater runoff quality, and stormwater runoff quantity requirements of Section IV.P, Q and R:
 - 1. The construction of an underground utility line provided that the disturbed areas are revegetated upon completion;
 - 2. The construction of an aboveground utility line provided that the existing conditions are maintained to the maximum extent practicable; and
 - 3. The construction of a public pedestrian access, such as a sidewalk or trail with a maximum width of 14 feet, provided that the access is made of permeable material.
- D. A waiver from strict compliance from the green infrastructure, groundwater recharge, stormwater runoff quality, and stormwater runoff quantity requirements of Section IV.O, P, Q and R may be obtained for the enlargement of an existing public roadway or railroad; or the construction or enlargement of a public pedestrian access, provided that the following conditions are met:
 - 1. The applicant demonstrates that there is a public need for the project that cannot be accomplished by any other means;
 - 2. The applicant demonstrates through an alternatives analysis, that through the use of stormwater management measures, the option selected complies with the requirements of Section IV.O, P, Q and R to the maximum extent practicable;
 - 3. The applicant demonstrates that, in order to meet the requirements of Section IV.O, P, Q and R, existing structures currently in use, such as homes and buildings, would need to be condemned; and
 - 4. The applicant demonstrates that it does not own or have other rights to areas, including the potential to obtain through condemnation lands not falling under IV.D.3 above within the upstream drainage area of the receiving stream, that would provide additional opportunities to mitigate the requirements of Section IV.O, P, Q and R that were not achievable onsite.
- E. Tables 1 through 3 below summarize the ability of stormwater best management practices identified and described in the New Jersey Stormwater Best Management

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Practices Manual to satisfy the green infrastructure, groundwater recharge, stormwater runoff quality and stormwater runoff quantity standards specified in Section IV.O, P, Q and R. When designed in accordance with the most current version of the New Jersey Stormwater Best Management Practices Manual, the stormwater management measures found at N.J.A.C. 7:8-5.2 (f) Tables 5-1, 5-2 and 5-3 and listed below in Tables 1, 2 and 3 are presumed to be capable of providing stormwater controls for the design and performance standards as outlined in the tables below. Upon amendments of the New Jersey Stormwater Best Management Practices to reflect additions or deletions of BMPs meeting these standards, or changes in the presumed performance of BMPs designed in accordance with the New Jersey Stormwater BMP Manual, the Department shall publish in the New Jersey Registers a notice of administrative change revising the applicable table. The most current version of the BMP Manual can be found on the Department's website at:

https://njstormwater.org/bmp_manual2.htm.

- F. Where the BMP tables in the NJ Stormwater Management Rule are different due to updates or amendments with the tables in this ordinance the BMP Tables in the Stormwater Management rule at N.J.A.C. 7:8-5.2(f) shall take precedence.

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Table 1 Green Infrastructure BMPs for Groundwater Recharge, Stormwater Runoff Quality, and/or Stormwater Runoff Quantity				
Best Management Practice	Stormwater Runoff Quality TSS Removal Rate (percent)	Stormwater Runoff Quantity	Groundwater Recharge	Minimum Separation from Seasonal High Water Table (feet)
Cistern	0	Yes	No	--
Dry Well ^(a)	0	No	Yes	2
Grass Swale	50 or less	No	No	2 ^(e) 1 ^(f)
Green Roof	0	Yes	No	--
Manufactured Treatment Device ^{(a) (g)}	50 or 80	No	No	Dependent upon the device
Pervious Paving System ^(a)	80	Yes	Yes ^(b) No ^(c)	2 ^(b) 1 ^(c)
Small-Scale Bioretention Basin ^(a)	80 or 90	Yes	Yes ^(b) No ^(c)	2 ^(b) 1 ^(c)
Small-Scale Infiltration Basin ^(a)	80	Yes	Yes	2
Small-Scale Sand Filter	80	Yes	Yes	2
Vegetative Filter Strip	60-80	No	No	--

(Notes corresponding to annotations ^(a) through ^(g) are found on Page D-15)

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Table 2 Green Infrastructure BMPs for Stormwater Runoff Quantity (or for Groundwater Recharge and/or Stormwater Runoff Quality with a Waiver or Variance from N.J.A.C. 7:8-5.3)				
Best Management Practice	Stormwater Runoff Quality TSS Removal Rate (percent)	Stormwater Runoff Quantity	Groundwater Recharge	Minimum Separation from Seasonal High Water Table (feet)
Bioretention System	80 or 90	Yes	Yes ^(b) No ^(c)	2 ^(b) 1 ^(c)
Infiltration Basin	80	Yes	Yes	2
Sand Filter ^(b)	80	Yes	Yes	2
Standard Constructed Wetland	90	Yes	No	N/A
Wet Pond ^(d)	50-90	Yes	No	N/A

(Notes corresponding to annotations ^(b) through ^(d) are found on Page D-15)

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Table 3 BMPs for Groundwater Recharge, Stormwater Runoff Quality, and/or Stormwater Runoff Quantity only with a Waiver or Variance from N.J.A.C. 7:8-5.3				
Best Management Practice	Stormwater Runoff Quality TSS Removal Rate (percent)	Stormwater Runoff Quantity	Groundwater Recharge	Minimum Separation from Seasonal High Water Table (feet)
Blue Roof	0	Yes	No	N/A
Extended Detention Basin	40-60	Yes	No	1
Manufactured Treatment Device ^(h)	50 or 80	No	No	Dependent upon the device
Sand Filter ^(c)	80	Yes	No	1
Subsurface Gravel Wetland	90	No	No	1
Wet Pond	50-90	Yes	No	N/A

Notes to Tables 1, 2, and 3:

- (a) subject to the applicable contributory drainage area limitation specified at Section IV.O.2;
- (b) designed to infiltrate into the subsoil;
- (c) designed with underdrains;
- (d) designed to maintain at least a 10-foot wide area of native vegetation along at least 50 percent of the shoreline and to include a stormwater runoff retention component designed to capture stormwater runoff for beneficial reuse, such as irrigation;
- (e) designed with a slope of less than two percent;
- (f) designed with a slope of equal to or greater than two percent;
- (g) manufactured treatment devices that meet the definition of green infrastructure at Section II;
- (h) manufactured treatment devices that do not meet the definition of green infrastructure at Section II.

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- G. An alternative stormwater management measure, alternative removal rate, and/or alternative method to calculate the removal rate may be used if the design engineer demonstrates the capability of the proposed alternative stormwater management measure and/or the validity of the alternative rate or method to the municipality. A copy of any approved alternative stormwater management measure, alternative removal rate, and/or alternative method to calculate the removal rate shall be provided to the Department in accordance with Section VI.B. Alternative stormwater management measures may be used to satisfy the requirements at Section IV.O only if the measures meet the definition of green infrastructure at Section II. Alternative stormwater management measures that function in a similar manner to a BMP listed at Section O.2 are subject to the contributory drainage area limitation specified at Section O.2 for that similarly functioning BMP. Alternative stormwater management measures approved in accordance with this subsection that do not function in a similar manner to any BMP listed at Section O.2 shall have a contributory drainage area less than or equal to 2.5 acres, except for alternative stormwater management measures that function similarly to cisterns, grass swales, green roofs, standard constructed wetlands, vegetative filter strips, and wet ponds, which are not subject to a contributory drainage area limitation. Alternative measures that function similarly to standard constructed wetlands or wet ponds shall not be used for compliance with the stormwater runoff quality standard unless a variance in accordance with N.J.A.C. 7:8-4.6 or a waiver from strict compliance in accordance with Section IV.D is granted from Section IV.O.
- H. Whenever the stormwater management design includes one or more BMPs that will infiltrate stormwater into subsoil, the design engineer shall assess the hydraulic impact on the groundwater table and design the site, so as to avoid adverse hydraulic impacts. Potential adverse hydraulic impacts include, but are not limited to, exacerbating a naturally or seasonally high water table, so as to cause surficial ponding, flooding of basements, or interference with the proper operation of subsurface sewage disposal systems or other subsurface structures within the zone of influence of the groundwater mound, or interference with the proper functioning of the stormwater management measure itself.
- I. Design standards for stormwater management measures are as follows:
1. Stormwater management measures shall be designed to take into account the existing site conditions, including, but not limited to, environmentally critical areas; wetlands; flood-prone areas; slopes; depth to seasonal high water table; soil type, permeability, and texture; drainage area and drainage patterns; and the presence of solution-prone carbonate rocks (limestone);
 2. Stormwater management measures shall be designed to minimize maintenance, facilitate maintenance and repairs, and ensure proper functioning. Trash racks shall be installed at the intake to the outlet structure, as appropriate, and shall have

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parallel bars with one-inch spacing between the bars to the elevation of the water quality design storm. For elevations higher than the water quality design storm, the parallel bars at the outlet structure shall be spaced no greater than one-third the width of the diameter of the orifice or one-third the width of the weir, with a minimum spacing between bars of one inch and a maximum spacing between bars of six inches. In addition, the design of trash racks must comply with the requirements of Section VIII.C;

3. Stormwater management measures shall be designed, constructed, and installed to be strong, durable, and corrosion resistant. Measures that are consistent with the relevant portions of the Residential Site Improvement Standards at N.J.A.C. 5:21-7.3, 7.4, and 7.5 shall be deemed to meet this requirement;
 4. Stormwater management BMPs shall be designed to meet the minimum safety standards for stormwater management BMPs at Section VIII; and
 5. The size of the orifice at the intake to the outlet from the stormwater management BMP shall be a minimum of two and one-half inches in diameter.
- J. Manufactured treatment devices may be used to meet the requirements of this subchapter, provided the pollutant removal rates are verified by the New Jersey Corporation for Advanced Technology and certified by the Department. Manufactured treatment devices that do not meet the definition of green infrastructure at Section II may be used only under the circumstances described at Section IV.O.4.
- K. Any application for a new agricultural development that meets the definition of major development at Section II shall be submitted to the Soil Conservation District for review and approval in accordance with the requirements at Sections IV.O, P, Q and R and any applicable Soil Conservation District guidelines for stormwater runoff quantity and erosion control. For purposes of this subsection, "agricultural development" means land uses normally associated with the production of food, fiber, and livestock for sale. Such uses do not include the development of land for the processing or sale of food and the manufacture of agriculturally related products.
- L. If there is more than one drainage area, the groundwater recharge, stormwater runoff quality, and stormwater runoff quantity standards at Section IV.P, Q and R shall be met in each drainage area, unless the runoff from the drainage areas converge onsite and no adverse environmental impact would occur as a result of compliance with any one or more of the individual standards being determined utilizing a weighted average of the results achieved for that individual standard across the affected drainage areas.
- M. Any stormwater management measure authorized under the municipal stormwater management plan or ordinance shall be reflected in a deed notice recorded in the *{insert Office of the County Clerk or the registrar of deeds and mortgages of the county in which the development, project, project site, or mitigation area containing the stormwater management measure is located, as appropriate, to the municipality}*. A form of deed notice shall be submitted to the municipality for approval prior to filing.

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Ordinance #[insert number] – Stormwater Control *(continued)*

The deed notice shall contain a description of the stormwater management measure(s) used to meet the green infrastructure, groundwater recharge, stormwater runoff quality, and stormwater runoff quantity standards at Section IV.O, P, Q and R and shall identify the location of the stormwater management measure(s) in NAD 1983 State Plane New Jersey FIPS 2900 US Feet or Latitude and Longitude in decimal degrees. The deed notice shall also reference the maintenance plan required to be recorded upon the deed pursuant to Section X.B.5. Prior to the commencement of construction, proof that the above required deed notice has been filed shall be submitted to the municipality. Proof that the required information has been recorded on the deed shall be in the form of either a copy of the complete recorded document or a receipt from the clerk or other proof of recordation provided by the recording office. However, if the initial proof provided to the municipality is not a copy of the complete recorded document, a copy of the complete recorded document shall be provided to the municipality within 180 calendar days of the authorization granted by the municipality.

- N. A stormwater management measure approved under the municipal stormwater management plan or ordinance may be altered or replaced with the approval of the municipality, if the municipality determines that the proposed alteration or replacement meets the design and performance standards pursuant to Section IV of this ordinance and provides the same level of stormwater management as the previously approved stormwater management measure that is being altered or replaced. If an alteration or replacement is approved, a revised deed notice shall be submitted to the municipality for approval and subsequently recorded with the *{insert appropriate Office of the County Clerk or the registrar of deeds and mortgages, as applies}* and shall contain a description and location of the stormwater management measure, as well as reference to the maintenance plan, in accordance with M above. Prior to the commencement of construction, proof that the above required deed notice has been filed shall be submitted to the municipality in accordance with M above.

O. Green Infrastructure Standards

1. This subsection specifies the types of green infrastructure BMPs that may be used to satisfy the groundwater recharge, stormwater runoff quality, and stormwater runoff quantity standards.
2. To satisfy the groundwater recharge and stormwater runoff quality standards at Section IV.P and Q, the design engineer shall utilize green infrastructure BMPs identified in Table 1 at Section IV.F. and/or an alternative stormwater management measure approved in accordance with Section IV.G. The following green infrastructure BMPs are subject to the following maximum contributory drainage area limitations:

(continued on the next page)

Ordinance #[insert number] – Stormwater Control *(continued)*

Best Management Practice	Maximum Contributory Drainage Area
Dry Well	1 acre
Manufactured Treatment Device	2.5 acres
Pervious Pavement Systems	Area of additional inflow cannot exceed three times the area occupied by the BMP
Small-scale Bioretention Systems	2.5 acres
Small-scale Infiltration Basin	2.5 acres
Small-scale Sand Filter	2.5 acres

3. To satisfy the stormwater runoff quantity standards at Section IV.R, the design engineer shall utilize BMPs from Table 1 or from Table 2 and/or an alternative stormwater management measure approved in accordance with Section IV.G.
4. If a variance in accordance with N.J.A.C. 7:8-4.6 or a waiver from strict compliance in accordance with Section IV.D is granted from the requirements of this subsection, then BMPs from Table 1, 2, or 3, and/or an alternative stormwater management measure approved in accordance with Section IV.G may be used to meet the groundwater recharge, stormwater runoff quality, and stormwater runoff quantity standards at Section IV.P, Q and R.
5. For separate or combined storm sewer improvement projects, such as sewer separation, undertaken by a government agency or public utility (for example, a sewerage company), the requirements of this subsection shall only apply to areas owned in fee simple by the government agency or utility, and areas within a right-of-way or easement held or controlled by the government agency or utility; the entity shall not be required to obtain additional property or property rights to fully satisfy the requirements of this subsection. Regardless of the amount of area of a separate or combined storm sewer improvement project subject to the green infrastructure requirements of this subsection, each project shall fully comply with the applicable groundwater recharge, stormwater runoff quality control, and stormwater runoff quantity standards at Section IV.P, Q and R, unless the project is granted a waiver from strict compliance in accordance with Section IV.D.

P. Groundwater Recharge Standards

1. This subsection contains the minimum design and performance standards for groundwater recharge as follows:
2. The design engineer shall, using the assumptions and factors for stormwater runoff and groundwater recharge calculations at Section V, either:

(continued on the next page)

Ordinance #[insert number] – Stormwater Control *(continued)*

- i. Demonstrate through hydrologic and hydraulic analysis that the site and its stormwater management measures maintain 100 percent of the average annual pre-construction groundwater recharge volume for the site; or
 - ii. Demonstrate through hydrologic and hydraulic analysis that the increase of stormwater runoff volume from pre-construction to post-construction for the 2-year storm is infiltrated.
3. This groundwater recharge requirement does not apply to projects within the “urban redevelopment area,” or to projects subject to 4 below.
4. The following types of stormwater shall not be recharged:
 - i. Stormwater from areas of high pollutant loading. High pollutant loading areas are areas in industrial and commercial developments where solvents and/or petroleum products are loaded/unloaded, stored, or applied, areas where pesticides are loaded/unloaded or stored; areas where hazardous materials are expected to be present in greater than “reportable quantities” as defined by the United States Environmental Protection Agency (EPA) at 40 CFR 302.4; areas where recharge would be inconsistent with Department approved remedial action work plan or landfill closure plan and areas with high risks for spills of toxic materials, such as gas stations and vehicle maintenance facilities; and
 - ii. Industrial stormwater exposed to “source material.” “Source material” means any material(s) or machinery, located at an industrial facility, that is directly or indirectly related to process, manufacturing or other industrial activities, which could be a source of pollutants in any industrial stormwater discharge to groundwater. Source materials include, but are not limited to, raw materials; intermediate products; final products; waste materials; by-products; industrial machinery and fuels, and lubricants, solvents, and detergents that are related to process, manufacturing, or other industrial activities that are exposed to stormwater.

Q. Stormwater Runoff Quality Standards

1. This subsection contains the minimum design and performance standards to control stormwater runoff quality impacts of major development. Stormwater runoff quality standards are applicable when the major development results in an increase of one-quarter acre or more of regulated motor vehicle surface.
2. Stormwater management measures shall be designed to reduce the post-construction load of total suspended solids (TSS) in stormwater runoff generated from the water quality design storm as follows:
 - i. Eighty percent TSS removal of the anticipated load, expressed as an annual average shall be achieved for the stormwater runoff from the net increase of motor vehicle surface.

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Ordinance #[insert number] – Stormwater Control *(continued)*

- ii. If the surface is considered regulated motor vehicle surface because the water quality treatment for an area of motor vehicle surface that is currently receiving water quality treatment either by vegetation or soil, by an existing stormwater management measure, or by treatment at a wastewater treatment plant is to be modified or removed, the project shall maintain or increase the existing TSS removal of the anticipated load expressed as an annual average.
- 3. The requirement to reduce TSS does not apply to any stormwater runoff in a discharge regulated under a numeric effluent limitation for TSS imposed under the New Jersey Pollutant Discharge Elimination System (NJPDES) rules, N.J.A.C. 7:14A, or in a discharge specifically exempt under a NJPDES permit from this requirement. Every major development, including any that discharge into a combined sewer system, shall comply with 2 above, unless the major development is itself subject to a NJPDES permit with a numeric effluent limitation for TSS or the NJPDES permit to which the major development is subject exempts the development from a numeric effluent limitation for TSS.
- 4. The water quality design storm is 1.25 inches of rainfall in two hours. Water quality calculations shall take into account the distribution of rain from the water quality design storm, as reflected in Table 4, below. The calculation of the volume of runoff may take into account the implementation of stormwater management measures.

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Ordinance #[insert number] – Stormwater Control *(continued)*

Table 4 - Water Quality Design Storm Distribution

Time (Minutes)	Cumulative Rainfall (Inches)	Time (Minutes)	Cumulative Rainfall (Inches)	Time (Minutes)	Cumulative Rainfall (Inches)
1	0.00166	41	0.1728	81	1.0906
2	0.00332	42	0.1796	82	1.0972
3	0.00498	43	0.1864	83	1.1038
4	0.00664	44	0.1932	84	1.1104
5	0.00830	45	0.2000	85	1.1170
6	0.00996	46	0.2117	86	1.1236
7	0.01162	47	0.2233	87	1.1302
8	0.01328	48	0.2350	88	1.1368
9	0.01494	49	0.2466	89	1.1434
10	0.01660	50	0.2583	90	1.1500
11	0.01828	51	0.2783	91	1.1550
12	0.01996	52	0.2983	92	1.1600
13	0.02164	53	0.3183	93	1.1650
14	0.02332	54	0.3383	94	1.1700
15	0.02500	55	0.3583	95	1.1750
16	0.03000	56	0.4116	96	1.1800
17	0.03500	57	0.4650	97	1.1850
18	0.04000	58	0.5183	98	1.1900
19	0.04500	59	0.5717	99	1.1950
20	0.05000	60	0.6250	100	1.2000
21	0.05500	61	0.6783	101	1.2050
22	0.06000	62	0.7317	102	1.2100
23	0.06500	63	0.7850	103	1.2150
24	0.07000	64	0.8384	104	1.2200
25	0.07500	65	0.8917	105	1.2250
26	0.08000	66	0.9117	106	1.2267
27	0.08500	67	0.9317	107	1.2284
28	0.09000	68	0.9517	108	1.2300
29	0.09500	69	0.9717	109	1.2317
30	0.10000	70	0.9917	110	1.2334
31	0.10660	71	1.0034	111	1.2351
32	0.11320	72	1.0150	112	1.2367
33	0.11980	73	1.0267	113	1.2384
34	0.12640	74	1.0383	114	1.2400
35	0.13300	75	1.0500	115	1.2417
36	0.13960	76	1.0568	116	1.2434
37	0.14620	77	1.0636	117	1.2450
38	0.15280	78	1.0704	118	1.2467
39	0.15940	79	1.0772	119	1.2483
40	0.16600	80	1.0840	120	1.2500

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Ordinance #[insert number] – Stormwater Control *(continued)*

5. If more than one BMP in series is necessary to achieve the required 80 percent TSS reduction for a site, the applicant shall utilize the following formula to calculate TSS reduction:

$$R = A + B - (A \times B) / 100,$$

Where

R = total TSS Percent Load Removal from application of both BMPs, and

A = the TSS Percent Removal Rate applicable to the first BMP

B = the TSS Percent Removal Rate applicable to the second BMP.

6. Stormwater management measures shall also be designed to reduce, to the maximum extent feasible, the post-construction nutrient load of the anticipated load from the developed site in stormwater runoff generated from the water quality design storm. In achieving reduction of nutrients to the maximum extent feasible, the design of the site shall include green infrastructure BMPs that optimize nutrient removal while still achieving the performance standards in Section IV.P, Q and R.
7. In accordance with the definition of FW1 at N.J.A.C. 7:9B-1.4, stormwater management measures shall be designed to prevent any increase in stormwater runoff to waters classified as FW1.
8. The Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-4.1(c)1 establish 300-foot riparian zones along Category One waters, as designated in the Surface Water Quality Standards at N.J.A.C. 7:9B, and certain upstream tributaries to Category One waters. A person shall not undertake a major development that is located within or discharges into a 300-foot riparian zone without prior authorization from the Department under N.J.A.C. 7:13.
9. Pursuant to the Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-11.2(j)3.i, runoff from the water quality design storm that is discharged within a 300-foot riparian zone shall be treated in accordance with this subsection to reduce the post-construction load of total suspended solids by 95 percent of the anticipated load from the developed site, expressed as an annual average.
10. This stormwater runoff quality standards do not apply to the construction of one individual single-family dwelling, provided that it is not part of a larger development or subdivision that has received preliminary or final site plan approval prior to December 3, 2018, and that the motor vehicle surfaces are made of permeable material(s) such as gravel, dirt, and/or shells.

R. Stormwater Runoff Quantity Standards

1. This subsection contains the minimum design and performance standards to control stormwater runoff quantity impacts of major development.
2. In order to control stormwater runoff quantity impacts, the design engineer shall, using the assumptions and factors for stormwater runoff calculations at Section V, complete one of the following:

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Ordinance #[insert number] – Stormwater Control *(continued)*

- i. Demonstrate through hydrologic and hydraulic analysis that for stormwater leaving the site, post-construction runoff hydrographs for the 2-, 10-, and 100-year storm events do not exceed, at any point in time, the pre-construction runoff hydrographs for the same storm events;
 - ii. Demonstrate through hydrologic and hydraulic analysis that there is no increase, as compared to the pre-construction condition, in the peak runoff rates of stormwater leaving the site for the 2-, 10- and 100-year storm events and that the increased volume or change in timing of stormwater runoff will not increase flood damage at or downstream of the site. This analysis shall include the analysis of impacts of existing land uses and projected land uses assuming full development under existing zoning and land use ordinances in the drainage area;
 - iii. Design stormwater management measures so that the post-construction peak runoff rates for the 2-, 10- and 100-year storm events are 50, 75 and 80 percent, respectively, of the pre-construction peak runoff rates. The percentages apply only to the post-construction stormwater runoff that is attributable to the portion of the site on which the proposed development or project is to be constructed; or
 - iv. In tidal flood hazard areas, stormwater runoff quantity analysis in accordance with 2.i, ii and iii above is required unless the design engineer demonstrates through hydrologic and hydraulic analysis that the increased volume, change in timing, or increased rate of the stormwater runoff, or any combination of the three will not result in additional flood damage below the point of discharge of the major development. No analysis is required if the stormwater is discharged directly into any ocean, bay, inlet, or the reach of any watercourse between its confluence with an ocean, bay, or inlet and downstream of the first water control structure.
3. The stormwater runoff quantity standards shall be applied at the site's boundary to each abutting lot, roadway, watercourse, or receiving storm sewer system.

Section V. Calculation of Stormwater Runoff and Groundwater Recharge:

- A. Stormwater runoff shall be calculated in accordance with the following:
1. The design engineer shall calculate runoff using one of the following methods:
 - i. The USDA Natural Resources Conservation Service (NRCS) methodology, including the NRCS Runoff Equation and Dimensionless Unit Hydrograph, as described in Chapters 7, 9, 10, 15 and 16 Part 630, Hydrology National Engineering Handbook, incorporated herein by reference as amended and supplemented. This methodology is additionally described in *Technical Release 55 - Urban Hydrology for Small Watersheds* (TR-55), dated June 1986,

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Ordinance #[insert number] – Stormwater Control *(continued)*

incorporated herein by reference as amended and supplemented. Information regarding the methodology is available from the Natural Resources Conservation Service website at:

https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1044171.pdf

or at United States Department of Agriculture Natural Resources Conservation Service, 220 Davison Avenue, Somerset, New Jersey 08873; or

- ii. The Rational Method for peak flow and the Modified Rational Method for hydrograph computations. The rational and modified rational methods are described in "Appendix A-9 Modified Rational Method" in the Standards for Soil Erosion and Sediment Control in New Jersey, January 2014. This document is available from the State Soil Conservation Committee or any of the Soil Conservation Districts listed at N.J.A.C. 2:90-1.3(a)3. The location, address, and telephone number for each Soil Conservation District is available from the State Soil Conservation Committee, PO Box 330, Trenton, New Jersey 08625. The document is also available at:

<http://www.nj.gov/agriculture/divisions/anr/pdf/2014NJSoilErosionControlStandardsComplete.pdf>.

2. For the purpose of calculating runoff coefficients and groundwater recharge, there is a presumption that the pre-construction condition of a site or portion thereof is a wooded land use with good hydrologic condition. The term "runoff coefficient" applies to both the NRCS methodology above at Section V.A.1.i and the Rational and Modified Rational Methods at Section V.A.1.ii. A runoff coefficient or a groundwater recharge land cover for an existing condition may be used on all or a portion of the site if the design engineer verifies that the hydrologic condition has existed on the site or portion of the site for at least five years without interruption prior to the time of application. If more than one land cover have existed on the site during the five years immediately prior to the time of application, the land cover with the lowest runoff potential shall be used for the computations. In addition, there is the presumption that the site is in good hydrologic condition (if the land use type is pasture, lawn, or park), with good cover (if the land use type is woods), or with good hydrologic condition and conservation treatment (if the land use type is cultivation).
3. In computing pre-construction stormwater runoff, the design engineer shall account for all significant land features and structures, such as ponds, wetlands, depressions, hedgerows, or culverts, that may reduce pre-construction stormwater runoff rates and volumes.
4. In computing stormwater runoff from all design storms, the design engineer shall consider the relative stormwater runoff rates and/or volumes of pervious and impervious surfaces separately to accurately compute the rates and volume of

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Ordinance #[insert number] – Stormwater Control *(continued)*

stormwater runoff from the site. To calculate runoff from unconnected impervious cover, urban impervious area modifications as described in the NRCS *Technical Release 55 – Urban Hydrology for Small Watersheds* or other methods may be employed.

5. If the invert of the outlet structure of a stormwater management measure is below the flood hazard design flood elevation as defined at N.J.A.C. 7:13, the design engineer shall take into account the effects of tailwater in the design of structural stormwater management measures.

B. Groundwater recharge may be calculated in accordance with the following:

The New Jersey Geological Survey Report GSR-32, A Method for Evaluating Groundwater-Recharge Areas in New Jersey, incorporated herein by reference as amended and supplemented. Information regarding the methodology is available from the New Jersey Stormwater Best Management Practices Manual; at the New Jersey Geological Survey website at:

<https://www.nj.gov/dep/njgs/pricelst/gsreport/gsr32.pdf>

or at New Jersey Geological and Water Survey, 29 Arctic Parkway, PO Box 420 Mail Code 29-01, Trenton, New Jersey 08625-0420.

Section VI. Sources for Technical Guidance:

- A. Technical guidance for stormwater management measures can be found in the documents listed below, which are available to download from the Department's website at:

http://www.nj.gov/dep/stormwater/bmp_manual2.htm.

1. Guidelines for stormwater management measures are contained in the New Jersey Stormwater Best Management Practices Manual, as amended and supplemented. Information is provided on stormwater management measures such as, but not limited to, those listed in Tables 1, 2, and 3.
2. Additional maintenance guidance is available on the Department's website at:

https://www.njstormwater.org/maintenance_guidance.htm.

- B. Submissions required for review by the Department should be mailed to:

The Division of Water Quality, New Jersey Department of Environmental Protection,
Mail Code 401-02B, PO Box 420, Trenton, New Jersey 08625-0420.

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Ordinance #[insert number] – Stormwater Control *(continued)*

Section VII. Solids and Floatable Materials Control Standards:

A. Site design features identified under Section IV.F above, or alternative designs in accordance with Section IV.G above, to prevent discharge of trash and debris from drainage systems shall comply with the following standard to control passage of solid and floatable materials through storm drain inlets. For purposes of this paragraph, “solid and floatable materials” means sediment, debris, trash, and other floating, suspended, or settleable solids. For exemptions to this standard see Section VII.A.2 below.

1. Design engineers shall use one of the following grates whenever they use a grate in pavement or another ground surface to collect stormwater from that surface into a storm drain or surface water body under that grate:
 - i. The New Jersey Department of Transportation (NJDOT) bicycle safe grate, which is described in Chapter 2.4 of the NJDOT Bicycle Compatible Roadways and Bikeways Planning and Design Guidelines; or
 - ii. A different grate, if each individual clear space in that grate has an area of no more than seven (7.0) square inches, or is no greater than 0.5 inches across the smallest dimension.

Examples of grates subject to this standard include grates in grate inlets, the grate portion (non-curb-opening portion) of combination inlets, grates on storm sewer manholes, ditch grates, trench grates, and grates of spacer bars in slotted drains. Examples of ground surfaces include surfaces of roads (including bridges), driveways, parking areas, bikeways, plazas, sidewalks, lawns, fields, open channels, and stormwater system floors used to collect stormwater from the surface into a storm drain or surface water body.

- iii. For curb-opening inlets, including curb-opening inlets in combination inlets, the clear space in that curb opening, or each individual clear space if the curb opening has two or more clear spaces, shall have an area of no more than seven (7.0) square inches, or be no greater than two (2.0) inches across the smallest dimension.
2. The standard in A.1. above does not apply:
 - i. Where each individual clear space in the curb opening in existing curb-opening inlet does not have an area of more than nine (9.0) square inches;
 - ii. Where the municipality agrees that the standards would cause inadequate hydraulic performance that could not practicably be overcome by using additional or larger storm drain inlets;
 - iii. Where flows from the water quality design storm as specified in N.J.A.C. 7:8 are conveyed through any device (e.g., end of pipe netting facility, manufactured treatment device, or a catch basin hood) that is designed, at a minimum, to

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Ordinance #[insert number] – Stormwater Control *(continued)*

prevent delivery of all solid and floatable materials that could not pass through one of the following:

- a. A rectangular space four and five-eighths (4.625) inches long and one and one-half (1.5) inches wide (this option does not apply for outfall netting facilities); or
- b. A bar screen having a bar spacing of 0.5 inches.

Note that these exemptions do not authorize any infringement of requirements in the Residential Site Improvement Standards for bicycle safe grates in new residential development (N.J.A.C. 5:21-4.18(b)2 and 7.4(b)1).

- iv. Where flows are conveyed through a trash rack that has parallel bars with one-inch (1 inch) spacing between the bars, to the elevation of the Water Quality Design Storm as specified in N.J.A.C. 7:8; or
- v. Where the New Jersey Department of Environmental Protection determines, pursuant to the New Jersey Register of Historic Places Rules at N.J.A.C. 7:4-7.2(c), that action to meet this standard is an undertaking that constitutes an encroachment or will damage or destroy the New Jersey Register listed historic property.

Section VIII. Safety Standards for Stormwater Management Basins:

- A. This section sets forth requirements to protect public safety through the proper design and operation of stormwater management BMPs. This section applies to any new stormwater management BMP.
- B. The provisions of this section are not intended to preempt more stringent municipal or county safety requirements for new or existing stormwater management BMPs. Municipal and county stormwater management plans and ordinances may, pursuant to their authority, require existing stormwater management BMPs to be retrofitted to meet one or more of the safety standards in Section VIII.C.1, VIII.C.2, and VIII.C.3 for trash racks, overflow grates, and escape provisions at outlet structures.
- C. Requirements for Trash Racks, Overflow Grates and Escape Provisions
 - 1. A trash rack is a device designed to catch trash and debris and prevent the clogging of outlet structures. Trash racks shall be installed at the intake to the outlet from the Stormwater management BMP to ensure proper functioning of the BMP outlets in accordance with the following:
 - i. The trash rack shall have parallel bars, with no greater than six-inch spacing between the bars;
 - ii. The trash rack shall be designed so as not to adversely affect the hydraulic performance of the outlet pipe or structure;

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Ordinance #[insert number] – Stormwater Control *(continued)*

- iii. The average velocity of flow through a clean trash rack is not to exceed 2.5 feet per second under the full range of stage and discharge. Velocity is to be computed on the basis of the net area of opening through the rack; and
 - iv. The trash rack shall be constructed of rigid, durable, and corrosion resistant material and designed to withstand a perpendicular live loading of 300 pounds per square foot.
2. An overflow grate is designed to prevent obstruction of the overflow structure. If an outlet structure has an overflow grate, such grate shall meet the following requirements:
- i. The overflow grate shall be secured to the outlet structure but removable for emergencies and maintenance.
 - ii. The overflow grate spacing shall be no less than two inches across the smallest dimension
 - iii. The overflow grate shall be constructed and installed to be rigid, durable, and corrosion resistant, and shall be designed to withstand a perpendicular live loading of 300 pounds per square foot.
3. Stormwater management BMPs shall include escape provisions as follows:
- i. If a stormwater management BMP has an outlet structure, escape provisions shall be incorporated in or on the structure. Escape provisions include the installation of permanent ladders, steps, rungs, or other features that provide easily accessible means of egress from stormwater management BMPs. With the prior approval of the municipality pursuant to VIII.C, a free-standing outlet structure may be exempted from this requirement;
 - ii. Safety ledges shall be constructed on the slopes of all new stormwater management BMPs having a permanent pool of water deeper than two and one-half feet. Safety ledges shall be comprised of two steps. Each step shall be four to six feet in width. One step shall be located approximately two and one-half feet below the permanent water surface, and the second step shall be located one to one and one-half feet above the permanent water surface. See VIII.E for an illustration of safety ledges in a stormwater management BMP; and
 - iii. In new stormwater management BMPs, the maximum interior slope for an earthen dam, embankment, or berm shall not be steeper than three horizontal to one vertical.

D. Variance or Exemption from Safety Standard

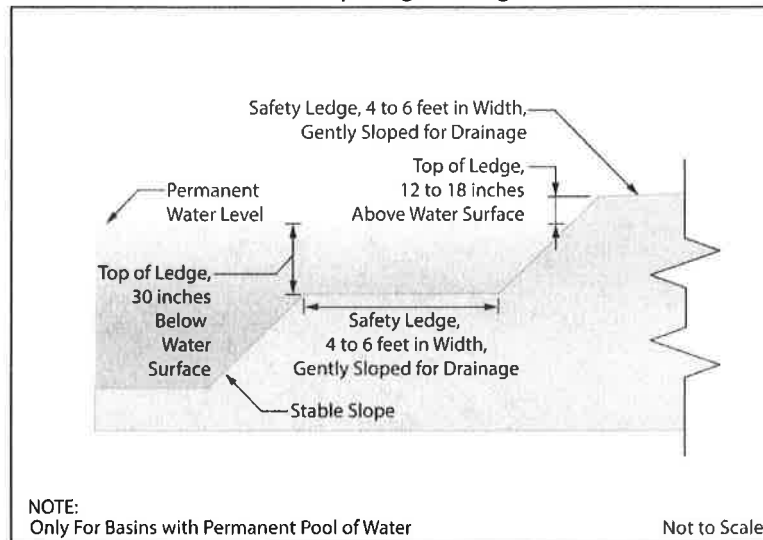
A variance or exemption from the safety standards for stormwater management BMPs may be granted only upon a written finding by the municipality that the variance or exemption will not constitute a threat to public safety.

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Ordinance #[insert number] – Stormwater Control (continued)

E. Safety Ledge Illustration

Elevation View –Basin Safety Ledge Configuration



Section IX. Requirements for a Site Development Stormwater Plan:

A. Submission of Site Development Stormwater Plan

1. Whenever an applicant seeks municipal approval of a development subject to this ordinance, the applicant shall submit all of the required components of the Checklist for the Site Development Stormwater Plan at Section IX.C below as part of the submission of the application for approval.
2. The applicant shall demonstrate that the project meets the standards set forth in this ordinance.
3. The applicant shall submit [*specify number*] copies of the materials listed in the checklist for site development stormwater plans in accordance with Section IX.C of this ordinance.

B. Site Development Stormwater Plan Approval

The applicant's Site Development project shall be reviewed as a part of the review process by the municipal board or official from which municipal approval is sought. That municipal board or official shall consult the municipality's review engineer to determine if all of the checklist requirements have been satisfied and to determine if the project meets the standards set forth in this ordinance.

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Ordinance #[insert number] – Stormwater Control *(continued)*

C. Submission of Site Development Stormwater Plan

The following information shall be required:

1. Topographic Base Map

The reviewing engineer may require upstream tributary drainage system information as necessary. It is recommended that the topographic base map of the site be submitted which extends a minimum of 200 feet beyond the limits of the proposed development, at a scale of 1"=200' or greater, showing 2-foot contour intervals. The map as appropriate may indicate the following: existing surface water drainage, shorelines, steep slopes, soils, erodible soils, perennial or intermittent streams that drain into or upstream of the Category One waters, wetlands and flood plains along with their appropriate buffer strips, marshlands and other wetlands, pervious or vegetative surfaces, existing man-made structures, roads, bearing and distances of property lines, and significant natural and manmade features not otherwise shown.

2. Environmental Site Analysis

A written and graphic description of the natural and man-made features of the site and its surroundings should be submitted. This description should include a discussion of soil conditions, slopes, wetlands, waterways and vegetation on the site. Particular attention should be given to unique, unusual, or environmentally sensitive features and to those that provide particular opportunities or constraints for development.

3. Project Description and Site Plans

A map (or maps) at the scale of the topographical base map indicating the location of existing and proposed buildings roads, parking areas, utilities, structural facilities for stormwater management and sediment control, and other permanent structures. The map(s) shall also clearly show areas where alterations will occur in the natural terrain and cover, including lawns and other landscaping, and seasonal high groundwater elevations. A written description of the site plan and justification for proposed changes in natural conditions shall also be provided.

4. Land Use Planning and Source Control Plan

This plan shall provide a demonstration of how the goals and standards of Sections III through V are being met. The focus of this plan shall be to describe how the site is being developed to meet the objective of controlling groundwater recharge, stormwater quality and stormwater quantity problems at the source by land management and source controls whenever possible.

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Ordinance #[insert number] – Stormwater Control *(continued)*

5. Stormwater Management Facilities Map

The following information, illustrated on a map of the same scale as the topographic base map, shall be included:

- i. Total area to be disturbed, paved or built upon, proposed surface contours, land area to be occupied by the stormwater management facilities and the type of vegetation thereon, and details of the proposed plan to control and dispose of stormwater.
- ii. Details of all stormwater management facility designs, during and after construction, including discharge provisions, discharge capacity for each outlet at different levels of detention and emergency spillway provisions with maximum discharge capacity of each spillway.

6. Calculations

- i. Comprehensive hydrologic and hydraulic design calculations for the pre-development and post-development conditions for the design storms specified in Section IV of this ordinance.
- ii. When the proposed stormwater management control measures depend on the hydrologic properties of soils or require certain separation from the seasonal high water table, then a soils report shall be submitted. The soils report shall be based on onsite boring logs or soil pit profiles. The number and location of required soil borings or soil pits shall be determined based on what is needed to determine the suitability and distribution of soils present at the location of the control measure.

7. Maintenance and Repair Plan

The design and planning of the stormwater management facility shall meet the maintenance requirements of Section X.

8. Waiver from Submission Requirements

The municipal official or board reviewing an application under this ordinance may, in consultation with the municipality's review engineer, waive submission of any of the requirements in Section IX.C.1 through IX.C.6 of this ordinance when it can be demonstrated that the information requested is impossible to obtain or it would create a hardship on the applicant to obtain and its absence will not materially affect the review process.

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Ordinance #[insert number] – Stormwater Control *(continued)*

Section X. Maintenance and Repair:

A. Applicability

Projects subject to review as in Section I.C of this ordinance shall comply with the requirements of Section X.B and X.C.

B. General Maintenance

1. The design engineer shall prepare a maintenance plan for the stormwater management measures incorporated into the design of a major development.
2. The maintenance plan shall contain specific preventative maintenance tasks and schedules; cost estimates, including estimated cost of sediment, debris, or trash removal; and the name, address, and telephone number of the person or persons responsible for preventative and corrective maintenance (including replacement). The plan shall contain information on BMP location, design, ownership, maintenance tasks and frequencies, and other details as specified in Chapter 8 of the NJ BMP Manual, as well as the tasks specific to the type of BMP, as described in the applicable chapter containing design specifics.
3. If the maintenance plan identifies a person other than the property owner (for example, a developer, a public agency or homeowners' association) as having the responsibility for maintenance, the plan shall include documentation of such person's or entity's agreement to assume this responsibility, or of the owner's obligation to dedicate a stormwater management facility to such person under an applicable ordinance or regulation.
4. Responsibility for maintenance shall not be assigned or transferred to the owner or tenant of an individual property in a residential development or project, unless such owner or tenant owns or leases the entire residential development or project. The individual property owner may be assigned incidental tasks, such as weeding of a green infrastructure BMP, provided the individual agrees to assume these tasks; however, the individual cannot be legally responsible for all of the maintenance required.
5. If the party responsible for maintenance identified under Section X.B.3 above is not a public agency, the maintenance plan and any future revisions based on Section X.B.7 below shall be recorded upon the deed of record for each property on which the maintenance described in the maintenance plan must be undertaken.
6. Preventative and corrective maintenance shall be performed to maintain the functional parameters (storage volume, infiltration rates, inflow/outflow capacity, etc.) of the stormwater management measure, including, but not limited to, repairs or replacement to the structure; removal of sediment, debris, or trash; restoration

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Ordinance #[insert number] – Stormwater Control *(continued)*

of eroded areas; snow and ice removal; fence repair or replacement; restoration of vegetation; and repair or replacement of non-vegetated linings.

7. The party responsible for maintenance identified under Section X.B.3 above shall perform all of the following requirements:
 - i. maintain a detailed log of all preventative and corrective maintenance for the structural stormwater management measures incorporated into the design of the development, including a record of all inspections and copies of all maintenance-related work orders;
 - ii. evaluate the effectiveness of the maintenance plan at least once per year and adjust the plan and the deed as needed; and
 - iii. retain and make available, upon request by any public entity with administrative, health, environmental, or safety authority over the site, the maintenance plan and the documentation required by Section X.B.6 and B.7 above.
8. The requirements of Section X.B.3 and B.4 do not apply to stormwater management facilities that are dedicated to and accepted by the municipality or another governmental agency, subject to all applicable municipal stormwater general permit conditions, as issued by the Department.

Note: It may be appropriate to delete requirements in the maintenance and repair plan that are not applicable if the ordinance requires the facility to be dedicated to the municipality. If the municipality does not want to take this responsibility, the ordinance should require the posting of a two year maintenance guarantee in accordance with N.J.S.A. 40:55D-53. Maintenance and inspection guidance can be found on the Department's website at:

https://www.njstormwater.org/maintenance_guidance.htm.

9. In the event that the stormwater management facility becomes a danger to public safety or public health, or if it is in need of maintenance or repair, the municipality shall so notify the responsible person in writing. Upon receipt of that notice, the responsible person shall have fourteen (14) days to effect maintenance and repair of the facility in a manner that is approved by the municipal engineer or his designee. The municipality, in its discretion, may extend the time allowed for effecting maintenance and repair for good cause. If the responsible person fails or refuses to perform such maintenance and repair, the municipality or County may immediately proceed to do so and shall bill the cost thereof to the responsible person. Nonpayment of such bill may result in a lien on the property.
- C. Nothing in this subsection shall preclude the municipality in which the major development is located from requiring the posting of a performance or maintenance guarantee in accordance with N.J.S.A. 40:55D-53

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Ordinance #[insert number] – Stormwater Control *(continued)*

Section XI. Penalties:

Any person(s) who erects, constructs, alters, repairs, converts, maintains, or uses any building, structure or land in violation of this ordinance shall be subject to the following penalties:

{Municipality to specify}

Section XII. Severability:

Each section, subsection, sentence, clause and phrase of this Ordinance is declared to be an independent section, subsection, sentence, clause and phrase, and the finding or holding of any such portion of this Ordinance to be unconstitutional, void, or ineffective for any cause, or reason, shall not affect any other portion of this Ordinance.

Section XIII. Effective Date:

This Ordinance shall be in full force and effect from and after its adoption and any publication as required by law.

ALL OF WHICH IS ADOPTED THIS _____ day of _____, 2021, by the Township of Lawrence, Cumberland County, New Jersey