

Beaufort County Stormwater Management Utility Board (SWMU Board) Meeting Minutes

November 15, 2017 at 2:00 p.m. in Executive Conference Room, Administration Building, Beaufort County Government Robert Smalls Complex, 100 Ribaut Road, Beaufort, South Carolina

Board Members

Present

Don Smith
Marc Feinberg
Allyn Schneider
Larry Meisner
William Bruggeman

Absent

James Fargher
Patrick Mitchell

Ex-Officio Members

Present

Andy Kinghorn

Absent

Scott Liggett
Kim Jones
Van Willis

Beaufort County Staff

Eric Larson
Melissa Allen

Visitors

Neil Desai, City of Beaufort
Alan Warren, USCB Lab
Bill Baugher, Town of Bluffton
York Glover, County Council
Alice Howard, County Council
Ellen Comeau, Clemson Extension
Denise Parsick, Beaufort SW Conservation District

1. Meeting called to order – Don Smith

- A. Agenda – Addition to Unfinished Business – Dirt Roads – Approved.
- B. October 18, 2017 Minutes – Approved.

2. Introductions – Completed.

3. Public Comment(s) – None.

4. Reports – Mr. Eric Larson and Mr. David Wilhelm provided a written report which is included in the posted agenda and can be accessed at:

<http://www.bcgov.net/departments/Administrative/beaufort-county-council/boards-and-commissions/council-appointed/board-list/stormwater-management-utility-board/agendas/2017/111517.pdf>

A. Utility Update – Eric Larson

In regards to items #1 and #5, they will be discussed in unfinished business. In reference to item #4, staff is actively meeting with the Treasurer's, Assessor's and Auditor's offices to improve the data management process for the tax run.

Mr. Larry Meisner asked about Entreladership (item #2). Mr. Larson explained that it is a training series by Ramsey Solutions and that senior management in Stormwater, Public Works and Community Development attended the training webinar.

B. Monitoring Update – Eric Larson

In reference to the USCB Lab report, it includes a summary of routine business. In reference to Item #2, the meeting for the Battery Creek 319 project, the County met with Neil Desai (City of Beaufort) and Alan Warren (USCB Lab) and determined they were not seeing the bacteria reduction that was hoped to be seen. This may be the result of post hurricane damage, so the plan is to make modifications and repairs and do water level testing over the next few months. Additional monitoring will take place once all of the repairs and testing are complete.

Mr. Mark Feinberg asked about the publicity that has been seen about pollutants in the water sheds and in oyster beds. The Town of Bluffton mentioned the need to connect sewers, as there are septic tank issues. He asked if this is a perceived problem or real problem and is it human fecal or animal borne. Mr. Larson said it is both, the Town of Bluffton does DNA and source tracking and failing septic tanks have been found in the process, but not all bacteria problems are related to that and there are other sources.

Mr. Don Smith asked (in reference to septic tanks) what does failing mean or how are they failing. Mr. Larson said failing to the County is when sewage water is coming from the ground and leach fields. Even if it is staying on site it can run off and make it to the ditches. Mr. Smith asked if they are septic tanks failing because of lack of maintenance or high water table. Mr. Bill Bauer said it is both and sometimes they cannot find the cause. Mr. Larson commented there isn't one single problem; it's a little bit of everything.

Mr. Bill Bruggeman asked if Bluffton's goal is to eliminate all septic tanks. Mr. Baugher said yes eventually, where it is feasibly possible. All of the PUD's are on sewer, but not along the old town section or along the May River.

C. Stormwater Implementation Committee (SWIC) Report – Eric Larson

The SWIC has not met since the last board meeting.

D. Stormwater Related Projects – Eric Larson

In reference to item #1, Okatie West, the project was referred to the Bluffton planning commission for a hearing that will take place November 15 at 6:00 p.m. in Bluffton, to try to get a development permit for the project. The concern is about the amount of trees that need to be taken down to create the two acre stormwater pond. In response to a question about the next step if they do not give permission, Mr. Larson explained it is a grant funded project and they will need to figure out a way to make it approvable, as there is too much invested in the project.

In reference to item #4, the widening of HWY170, an additional engineering studying is being done to analyze the roadside ditch from Bluffton Parkway and Lawton Station, to satisfy the concerns of adjacent property owners.

E. Professional Contracts Report – Eric Larson

Mr. Larson shared that the project is delayed; the County is waiting on a contract extension request from ATM for more time.

F. Regional Coordination – Eric Larson

In reference to item #4, the Wallace Road drainage project, the County will be using an alternative plan which will avoid DOT right-of-way encroachment and has easement

agreement from the property owners. All but one easement has been granted, but is expected to be given soon. This will allow work to be done behind houses and take advantage of some natural ponds in the area.

Mr. Don Smith asked about Battery Creek Watershed Pond and whether the problems were determined to be design, construction or maintenance issues. Mr. Larson indicated it may be a maintenance issue; the weir is showing signs of seepage and washing and blamed on Irma do to the high flows that went through there. The plan is to repair the weir, clean the inlet and outlet structures, and check the outlet for backflow as well as check the ground levels. Mr. Andy Kinghorn mentioned that it seemed like after a rainfall that the water levels don't drop very rapidly, that it may be something to check.

In reference to #7, the Mossy Oaks task force will be meeting on December 6th.

Mr. Larson mentioned the County met with the district office DOT staff and had a discussion about stormwater once it leaves state right-of-way. He indicated the meeting went well and that they were able to find some common ground.

G. Municipal Reports – Eric Larson

Mr. Neil Desai mentioned that their efforts had been concentrated on maintenance efforts from Hurricane Irma and after the first of the year plan to start some of the small drainage projects that were displaced due to the storm.

H. Municipal Separate Storm Sewer System (MS4 Update) – Eric Larson

Mr. Larson mentioned that a \$15,000 extension was made on one of the contracts for plan review and may eventually need to extend the other as well. He is working with administration to find an alternative way to do this plan review, to be less dependent on contractors and more cost effective.

Mr. Larson noted that the number of stormwater permits issue is misleading; staff has met and caught a bug in system. The process has been fixed, there was a miscommunication as to when a permit was to be issued and that has been clarified. Mr. Don Smith asked if any of the violations went past a written notice. Mr. Larson said no, most of the enforcement has been to educate and have seen compliance after they have been educated on what they have done wrong.

The Pond Conference was successful, there were 111 participants registered with very few no shows. As a result of the conference, Ellen is working with a neighborhood (Rose Hill) on some pond maintenance.

Mr. Larson pointed out that the next Lowcountry Stormwater Partners Consortium meeting is on November 28th at 1:30 p.m. in BJWSA Community Room.

I. Maintenance Projects Report – Eric Larson

Please reference the report which is included in the posted agenda. No additional updates.

5. Unfinished Business

A. Stormwater Regionalization Update - Mr. Larson noted there are two upcoming meetings where regionalization will be discussed. On November 20th, the Natural Resources Committee (NRC) is meeting in the Executive Conference Room at 2:00 p.m. and the second meeting is on December 5th with the SoLoCo committee at Town of Bluffton at 11:00 a.m.. The SoLoCo meeting will be held to present the findings from the previous meetings and the NRC

meeting will discuss the recommendation to form an exploratory committee. The minutes (regionalization discussion) from last month's Stormwater Utility Board meeting will be included in the meeting packet with the committee's (SoLoCo) minutes.

B. Dirt Road Paving - Mr. Larson presented two text amendments to the Stormwater Ordinance and BMP Manual in reference to the dirt road paving memo that was discussed during the October 18th SWMU Board meeting. Mr. Andy Kinghorn asked if the changes only apply to public and private dirt roads. Mr. Larson responded, only to the County [capital project roads] and explained that the County is not changing the use of the road; it is simply a maintenance activity. A private road that is being upgraded as a part of subdivision or development on the road, they would be changing adjacent land use and use of the road.

Mr. Larry Meisner asked if this applies to DOT state roads also. Mr. Larson said no, explaining it only applies to County roads and that the County doesn't have jurisdiction over State Roads.

Mr. Don Smith commented that an argument could be made that by the County paving a dirt road that it could encourage development along side of it. Mr. Larson mentioned these [proposed amendments] will go to Natural Resources Committee in December. The Board has an opportunity to amend the draft and make clarifications to the proposed revisions to the definition of development.

Mr. Smith asked if they would be surfacing the current footprint of a road because many paving projects involve widening shoulders (i.e. from 20 ft. to 22 ft.) and regrading the ditches and back slopes trying to fix something. Mr. Larson answered yes, that is what they would be doing and they would be reshaping and stabilizing the ditches also.

Mr. Kinghorn shared his opinion in reference to private dirt roads, indicating that if there is no development that would be associated with the dirt road, that they shouldn't be treated any differently than the County and be exempt as well.

Mr. Billy Bruggeman asked what someone paving a long driveway would have to do. Mr. Larson said they would have to prove compliance with the stormwater manual (volume control, peak control, and water quality control). He explained there is a way to do it with a roadside ditch or direct to an offsite pond.

Mr. Meisner asked how many are paving private roads or driveways. Mr. Larson responded that in four years he has not had a request to pave a private dirt road; however, he has been working with the County dirt road paving program.

Mr. Larson noted that in Contract 50 (County dirt road paving project), the design engineer looked at downstream conveyance and the County worked to get easement to the outfall (from the road to the marsh) so the County would have the ability to do drainage maintenance if necessary.

Discussion took place about considering exempting private driveways as well. Mr. Larson noted that a driveway has a different definition from private road. He explained that the language in the amendment is very specific to the policy statement 15 and 17; therefore, if the Board wanted to recommend anything beyond that he would need to add additional language.

In reference to a question, Mr. Larson explained that the purpose is to exempt Contract 50 from having to do stormwater as part of the project. There is a difference between a driveway serving a house or two residences and a private road serving several homes.

Mr. Feinberg asked if we are turning a blind eye to a potential problem, by exempting a road without looking at it. Mr. Larson explained that a dirt road has an increased sediment load when it rains and washes off into the ditch. Pollutants attach to the dirt and that dirt and sediment

is getting into the water. When you pave a road you no longer have erosion into the ditch and can stabilize the ditch, the vegetation in the ditch can clean the water. The ditch may have less sediment, but might have more pollutants that run off of the paved road. Paving dirt roads reduces maintenance costs and provides a safer more stable surface, which is of the greater good to the public from a non stormwater point of view, knowing that stormwater is not the only factor.

In response to a question, Mr. Larson mentioned that the roads (to be paved) are very short sections, less than 2 miles with a few being dead-end roads.

A motion was made to move forward to recommendation approval as written. The motion failed (2:3). Mr. Larson offered the option that he could draft another proposed exemption now that he understands Board's concerns and email it out for comments. Action would then be postponed until January.

Discussion took place about dead-end roads. Mr. Larson (not knowing CTC's process to determine what roads qualify to be paved) thinks it is likely demand driven [servicing several homes]. Mr. York Glover asked what is considered to be a dead-end road and expressed that most of the roads are going to come to an end at some point and there are houses at the end of some of them. He expressed that in a rural community that dirt roads need to be paved for safety and conditions. Mr. Larson clarified that he was referring to roads that end at a driveway/property and do not come around to an intersection of another road.

Mr. Larson mentioned he would get with Community Development to see what the definition of a driveway versus a public and private dirt road open to the public is.

An alternative motion was made to recommend Eric go back to see if there is alternative language with respect to private dirt roads. The motion was approved (5:0).

[The Contract 50 Road Paving, Development and Stormwater memo, BMP Manual Proposed Revisions and Ordinance Proposed Revisions](#) are attached.

6. New Business –

Mr. Billy Bruggeman asked if the stormwater department has been involved with the new animal control facility on HWY170. Mr. Larson responded yes, the facility will have a wet detention pond on site (dog bone shaped) and porous pavement and it meets the standards.

7. Public Comment(s) – None.

8. Next Meeting Agenda – Approved.

A motion was made to skip the December 20, 2017 meeting. The Board unanimously (5:0) voted to cancel the December meeting.


The next meeting will be on January 10, 2018.

Additions to January 10, 2018 Agenda

- Unfinished Business -
 - Dirt Road Paving
 - Special Presentation – TBD (one of topics below)
 - Animal Control Facility – Stormwater Controls
 - Convenience Center Update
 - Road Paving Program Criteria

9. Meeting Adjourned

MEMORANDUM

TO: Beaufort County Council
Public Facilities Committee Chairman Stu Rodman
Joshua Gruber, Interim County Administrator 

FROM: Robert McFee, Division Director of Construction, Engineering and Facilities
Eric Larson, Division Director for Environmental Engineering & Land Management
Anthony Criscitiello, Community Development Director

SUBJ: **Contract #50 Road Paving, Development, and Stormwater**

DATE: October 5, 2017

There has been some debate regarding the dirt road paving program and its compliance with adopted Beaufort county ordinances, specifically related to the Community Development Code road assemblies and Stormwater Management requirements.

Community Development Code

It should be noted that from a local historical perspective, this program has never sought to secure development permits, but has complied with the appropriate NPDES provisions.

In reviewing Section 1.3.10 of the Community Development Code (CDC), it clearly states that the code applies to "... the *development* of all land within unincorporated Beaufort County". Further, section 1.3.20 confirms the code "shall apply to *development* by the County or its agencies and departments".

Article 10, section 10.1.40 of the CDC defines what constitutes *development*:

"Development. This term includes the following:

- *All construction, modification, or use of any lot, parcel, building or structure.*
- *All disturbances of land surfaces of 10,000 square feet or greater, including removal of vegetation, excavation, filling, and grading.*
- *Any subdivision of a parcel or tract of land into two or more lots, parcels, or pieces for the purpose, whether immediate or future, of sale or transfer of title."*

Using this definition, the second bullet point would apply to the paving of dirt roads and place this activity under the jurisdiction of the CDC.

However, another way to interpret development that falls under the jurisdiction of the CDC is to look at the definition of a major land development in section 7.2.60. This section defines a major land development Plan as:

- (1) "Non-residential development of more than 5,000 square feet of gross floor area;
- (2) The addition of 5,000 square feet or 30 percent or more of the original building of a non-residential development which results in a building larger than 5,000 square feet; or
- (3) Apartment or multi-family development of six dwelling units or more."

Using this interpretation, the paving of dirt roads would not fall under the jurisdiction of the CDC.

As to the applicability of the Thoroughfare Standards in Article 2: Multi-lot and Single lot Community Scale Development, section 2.1.10—Purpose and Intent, states that “This Article then provides standards for laying out blocks, lots, open space set-asides, and thoroughfares within each community type. This ensures that new communities are both contextual and appropriately integrated with their surroundings”. This purpose and intent statement can be interpreted that the standards within Article 2 only apply to the creation of new lots, streets, and blocks.

However, Section 2.9.20 of the CDC that deals with the applicability of the County’s thoroughfare standards states that the “thoroughfare standards are applicable for the transformation of existing thoroughfares and the creation of new thoroughfares in any areas within the conventional and transect zones.” The phrase, "transformation of existing thoroughfares" can be interpreted to apply to the paving of dirt roads.

Given the historic precedent of not requiring the paving of dirt roads to follow local development standards and conflicting language in the Community Development Code, it can be interpreted that the CDC is not designed or intended to act as a rule for the narrow practice of the county dirt road paving program.

Stormwater Management

With respect to the NPDES/Stormwater Ordinance and MS4 aspects of the road paving program, the requirements for regulated small MS4s, the requirements for small construction activity (primarily activity disturbing between 1 and 5 acres of land) are not detailed in the Phase II regulation. Rather, the requirements are left to the discretion of the NPDES permitting authority when it develops the small construction activity permit. (see <https://www3.epa.gov/npdes/pubs/comguide.pdf>).

Beaufort County Code of Ordinances Chapter 99-106 defines developed land as “property altered from its natural state by construction or installation of improvements such as buildings, structures, or other impervious surfaces, or by other alteration of the property that results in a meaningful change in the hydrology of the property during and following rainfall events”. Further in Chapter 99-203 it states that development is “All project construction, modification, or use of any lot, parcel, building, or structure on land and on water.” The Beaufort County Manual for Stormwater Best Management and Design Practices (the BMP Manual) provides guidance in Section 2.1.1.1 stating “All development that creates runoff and/or discharge may adversely impact water quality in county streams, lakes and tidal waterbodies. Therefore, all proposed development and redevelopment shall be required to submit a Drainage Plan to show compliance with the peak attenuation, water quality, volume and construction pollution control requirements in this manual...”. It is also noteworthy that the Stormwater ordinance and BMP Manual do not distinguish between development and re-development, applying that re-development is simply yet another alteration of the property and therefore also categorized as development.

In the design process, commonly accepted engineering practices would assign a runoff coefficient to all surfaces. Paved surfaces such as asphalt or concrete would be given a higher runoff value than an exposed dirt surface, even if the surface was a compacted dirt road. The issue is that in theory, paving does increase runoff. It is hard to deny that paving a road is an improved alteration of the land, hence the basis for categorizing dirt road paving as “development”.

However, it must be noted that public and private roadways are exempt from the collection of stormwater fees. This exemption is based on the premise that most infrastructure belonging to the Beaufort County MS4 consists of roadside ditches and pipes within the roadway and that charging the community for the runoff created by the road is simply a pass through charge resulting in higher rates and therefore unnecessary.

In the case of using a rural cross section in dirt road paving, it should be understood that the paving of a dirt road has benefits to water quality by establishing grass shoulders and ditches, reducing the sediment load and improving our ability to properly maintain the drainage system.

In actual practice for the dirt road paving program, when filing the NPDES permit, our practice has been to classify the *entire grading area* as 'disturbed limits'. This hyper-conservative approach has been adopted by engineers to avoid the discussion with regulatory staff over what, exactly, the disturbed area really is. However, it is not at all unreasonable to assert a dirt road which is regularly graded is **already in a disturbed state and remains so as long as it is dirt**. Paving the roadway and establishing vegetated shoulders and ditches therefore stabilizes the disturbed area reducing sediment / pollutant loading and reduction in runoff rate and volume.

If this obvious condition is recognized, the adjustment in disturbed area is insignificant and it more properly reflects the *de minimus* impact of the improvement. In addition, these roadway improvements do not alter the hydrology of the property in meaningful way even if the difference in runoff coefficients would indicate otherwise. In fact, it is suggested that paving the road improves the hydrologic performance of the rights-of-ways.

Conclusion

Based on the interpretation of existing codes related to community development and stormwater management, this information supports the recommendation that the dirt road paving program be exempt from the provisions of the CDC and Stormwater ordinance.

ORD. ~~2016-201~~ / ~~38~~, ~~10~~ -~~24~~ -~~2016201~~

**AN ORDINANCE TO AMEND THE STORMWATER MANAGEMENT UTILITY ORDINANCE 2016/26
38 AS ADOPTED ~~SEPTEMBER 26~~OCTOBER 24, 2016 TO PROVIDE FOR THE ADDITION OF
ARTICLES III, IV, V, AND VI RELATED TO ADOPTION OF STORMWATER MANAGEMENT
STANDARDS TO MEET MUNICIPAL SEPARATE STORMSEWER SYSTEM (MS4) PERMIT
REQUIREMENTS THE DEFINITION OF "DEVELOPMENT" AND EXEMPTIONS RELATED TO
COUNTY DIRT ROAD PAVING**

WHEREAS, Act 283 of 1975, The Home Rule Act, vested Beaufort County Council with the independent authority to control all acts and powers of local governmental authority that are not expressly prohibited by South Carolina law; and

WHEREAS, Chapter 99, Article II, "Stormwater Management Utility" was adopted on August 27, 2001 and was modified by Ordinance on August 22, 2005, September 28, 2015, ~~and~~ September 26, 2016, ~~and October 24, 2016~~; and

WHEREAS, Stormwater Management Utility was established for the purpose of managing, acquiring, constructing, protecting, operating, maintaining, enhancing, controlling, and regulating the use of stormwater drainage systems in the county;

WHEREAS, to meet the increasing demands on the Stormwater Management Utility in the areas of federally mandated municipal Separate Stormsewer Systems (MS4) permitting, capital project needs, and cost of service of operations and maintenance, as well as an evolving understanding of the impacts of the urban environment on water quality, the Stormwater Management Utility finds it necessary to amend the structure in which rates are determined and adjust the rates charged to the citizens of Beaufort County to meet said demands in a fair and equitable manner; and

WHEREAS, the administrative structure of the Stormwater Management Utility needs to be amended to reflect the organization of the current administration; and

WHEREAS, further amendments are needed to make adjustments to the rate structure to address the differences in taxation and billing for condominiums and parcels affected by standing water or tidal impacts; and

WHEREAS, pursuant to the requirements mandated by the Municipal Separate Stormsewer System (MS4) permit issued by the South Carolina Department of Health and Environmental Control (DHEC) on December 1, 2015, Beaufort County is required to adopt standards related to stormwater management and create a regulatory framework to enforce the same; and

WHEREAS, the Beaufort County Stormwater Utility Board has amended the Manual for Stormwater Best Management and Design Practices (BMP Manual) as the source of the technical stormwater standards used in the development of Stormwater Plans and adopted the same on September 14, 2016; and

WHEREAS, the Stormwater Utility Board has determined that limited County capital improvement functions, specifically dirt road paving, should not be subject to certain stormwater requirements typically required for development; and,

Formatted: Font: Not Bold

WHEREAS, Beaufort County Council believes to best provide for the health, safety, and welfare of its citizens it is appropriate to amend Chapter 99 of the Beaufort County Code and to provide for additional terms to said Article; and

WHEREAS, text that is underscored shall be added text and text ~~lined through~~ shall be deleted text; and

NOW, THEREFORE, BE IT ORDAINED BY BEAUFORT COUNTY COUNCIL, that Chapter 99 of the Beaufort County Code is hereby amended and replaced with the following:

Chapter 99 - STORMWATER MANAGEMENT

ARTICLE I. - IN GENERAL

Secs. 99-1—99-100. - Reserved.

ARTICLE II. - STORMWATER MANAGEMENT UTILITY

Sec. 99-106. - Definitions.

Unless the context specifically indicates otherwise, the meaning of words and terms used in this article shall be as set forth in S.C. Code § 48-14-20, and 26 S.C. Code Regulation 72-301, mutatis mutandis.

Developed land. Developed land shall mean property altered from its natural state by construction or installation of improvements such as buildings, structures, or other impervious surfaces, or by other alteration of the property that results in a meaningful change in the hydrology of the property during and following rainfall events. Existing dirt roads which are improved and or paved as part of Beaufort County's Dirt Road Paving Program as set forth in Beaufort County Policy Statement 15 and Policy Statement 17 are deemed not to constitute "developed land".

Article III. – REGULATORY GENERAL PROVISIONS

Sec. 99-203. - Definitions

The following definitions shall apply in Articles III, IV, V, and VI this Ordinance. Any term not herein defined shall be given the definition, if any, as is found elsewhere in the Code of Ordinances of Beaufort County, including the Community Development Code (CDC) Ordinance.

Development. All project construction, modification, or use of any lot, parcel, building, or structure on land and on water. Existing dirt roads which are improved and or paved as part of Beaufort County's Dirt Road Paving Program as set forth in Beaufort County Policy Statement 15 and Policy Statement 17 are deemed not to constitute "development".

Section 2

Stormwater Design Criteria

2.1 General Planning and Design Requirements

2.1.1 General Standards

General planning and design requirements for stormwater management are as follows:

1. All development that creates runoff and/or discharge may adversely impact water quality in county streams, lakes and tidal waterbodies. Therefore, all proposed development and redevelopment shall be required to submit a Drainage Plan to show compliance with the peak attenuation, water quality, volume and construction pollution control requirements in this manual, with the following exceptions:
 - a. Total disturbed area is under 5,000 square feet (sq ft). Disturbed area shall include all areas utilized for construction, access, and storage of materials that are disturbed.
 - b. Any maintenance, alteration, renewal use or improvement to an existing drainage structure as approved by the stormwater manager that does not create adverse environmental or water quality impacts and does not increase the temperature, rate, quality, volume or location of stormwater runoff discharge.
 - c. Site work on existing developed sites 1-acre or less, where impervious area is increased by less than 5,000 sq ft, and earthwork does not increase runoff and/or eliminate detention/retention facilities and/or stormwater storage or alter stormwater flow rates or discharge location(s).
 - d. Agricultural activity not involving relocation of drainage canals.
 - e. Work by agencies or property owners required to mitigate emergency flooding conditions. If possible, emergency work should be approved by the duly appointed officials in charge of emergency preparedness or emergency relief. Property owners performing emergency work will be responsible for any damage or injury to persons or property caused by their unauthorized actions. Property owners will restore the site of the emergency work to its approximate pre-emergency condition within a period of 60 days following the end of the emergency period.
 - f. Golf courses are required to comply with all site runoff volume and water quality control and drainage planning and design requirements. However, both golf courses and private lagoons shall be exempt from the peak attenuation requirements.

f.g. Existing dirt roads which are improved and or paved as part of Beaufort County's Dirt Road Paving Program as set forth in Beaufort County Policy Statement 15 and Policy Statement 17 are deemed not to constitute "development" under the County Code of Ordinance Chapter 99 (Stormwater Utility Ordinance), MS4 Program or this BMP Manual and are, therefore, exempt from the provisions and requirements herein.

2. Compliance with this section shall be demonstrated by the submission of detailed plans and calculations showing compliance through the use of BMPs provided within this manual. Detailed hydraulic and hydrologic calculations will be provided in a written report showing methodology and inputs for required calculations. All calculations and plans must be signed and sealed by a qualified professional registered under the South Carolina Division of Professional and Occupational Licensing.
3. Priority wetlands or other significant wetlands identified on the official County conservation district maps, or the Federal National Wetlands Inventory should not be adversely impacted by the construction of BMP facilities in or near them, which deprives them of required runoff or lowers their normal water table elevations. Adjacent BMPs that benefit retention of normal wetland water table elevations are acceptable. If the BMP's proposed location is near a priority wetland, the applicant must provide data showing that impacts will not be detrimental to the wetland hydrology.
4. Measures used to collect and convey stormwater on any site ("stormwater management facilities") shall be designed to meet the following minimum performance standards:
 - a. Prevent erosion damage and satisfactorily carry off or detain and control the rate of release of surface waters.
 - b. Carry surface water to the nearest adequate street, storm drain, detention basin, natural watercourse, or drainage facility.
 - c. Control/accommodate not only the anticipated peak discharge from the onsite disturbed area but also the existing runoff being contributed from all land at a higher elevation in the same watershed.
 - d. No stormwater runoff or natural drainage shall be so diverted as to overload existing drainage systems or create flooding or the need for additional drainage structures on other private properties or public lands. Please see Appendix G regarding the Common Enemy Law.
 - e. All stormwater management facilities shall be designed to satisfy the following requirements:
 - i. They shall be capable of withstanding the discharge associated with the 100-year return rainfall event, without failing or resulting in damage to downstream areas. Some nondetention facilities may be designed to bypass stormwater discharges that are in excess of the appropriate design storm. In this case, conveyance must be provided to transport the 100-

year surcharge flow to downstream facilities, a natural watercourse, or storm drainage system inlet.

- ii. All infiltration devices shall be protected from sedimentation. Areas designated for recharge shall not receive runoff until the contributory drainage areas have achieved final stabilization.

5. No new stormwater discharge shall be permitted onto any beaches/shorelines.
6. Final landscape designs and plantings shall not adversely impact the stormwater runoff, volume and quality controls and drainage concepts approved as part of the development permit approval process. Landscape design and plantings should enhance opportunities for percolation, retention, detention, filtration and plant absorption of site-generated stormwater runoff.
7. Irrigation systems used for complying with these stormwater requirements must use of all available surface runoff or other retained or detained stormwater as the water supply source. No groundwater wells or use of potable water for irrigation of any kind will be permitted in developments or redevelopments unless it can be demonstrated that alternative sources of irrigation water are required beyond the amount needed to meet volume control standards in this manual, or other extenuating circumstances apply. Any use of potable water sources must be approved by the stormwater manager. In addition, the design standards outlined in the Fact sheet for Irrigation (PTP-10) shall apply to all irrigation systems. In the case of extenuating circumstances, the designer may present alternate design standards. These must be approved by the stormwater manager prior and calculations and backup data must be presented for review.
8. The developer shall provide adequate outfall ditches, pipes and easements downstream from the proposed discharge if adequate public or private drainage facilities do not exist to carry the proposed discharge. If the outfall ditches, pipes and easements required for adequate drainage are larger than those needed to carry the additional proposed discharge from the development sought by the applicant, the County may bear those incremental costs that are greater than those properly allocable to the development. The County shall have the authority, however, to condition use of such expanded system by subsequent users on contributions by such users for allocable portions of the cost borne by the County.