

(Revised)
Minutes
of the
Stormwater Management Committee (SWMC)
May 1, 2014

8:00 AM
1600 Second Avenue North
Metro Water Services Administration Building, 2nd Floor Conference Room

STORMWATER MANAGEMENT COMMITTEE

(Quorum Required: Four Members)

Committee Members Present:

Ms. Elaine Bright – Vice Chairman
Mr. Roy Dale, P.E. – Chairman
Ms. Anna Maddox, P.E.
Mr. Slade Sevier, P.E.
Mr. Monte Turner
Mr. Lance Wagner, P.E.

Committee Members Absent:

Mr. Dodd Galbreath

I. CALL TO ORDER

The meeting was called to order at 8:07 a.m.

II. APPROVAL OF APRIL 3, 2014 MEETING MINUTES AND DECISION LETTER

Mr. Slade Sevier moved and Mr. Monte Turner seconded the motion to approve the April 3, 2014 meeting minutes and decision letter. Ms. Elaine Bright, Mr. Roy Dale, Ms. Anna Maddox, Mr. Sevier, Mr. Turner, and Mr. Lance Wagner approved the motion.

III. STORMWATER MANAGEMENT COMMITTEE AGENDA

Comments were solicited from the Planning and Codes Departments for the following Agenda item.

1. 201400004

Nashville Zoo – Main Entrance Phase 2
3777 Nolensville Pike
APN: 13300000400
Inspector: Denice Johns

CD-26 (Chris Harmon)

APPLICANT'S REQUEST – Previously granted SWMC Variance #201200021 which expired on January 3, 2014. Current variance requests (which are unchanged) are to allow:

- 1) Disturbance of the 50' (30' Zone 1 & 20' Zone 2) stream buffer of an unnamed tributary to Cathy Jo Creek (tributary to Sevenmile Creek) for construction of a portion of new roadway, associated grading, new boardwalk/sidewalk, retaining walls, and installation of erosion prevention & sediment control (EPSC) measures.
- 2) Placement of Stormwater BMPs in the buffer.
- 3) Less than 1,000 ft. spacing between roadway/driveway crossings.
- 4) Continuous mowing and maintenance of a portion of the buffer area.

APPELLANT: Nashville Zoo (Mr. Rick Schwartz)

REPRESENTATIVE: Mr. Kevin Gangaware

COMMENTS:

SW Staff: Grading Permit SWGR #T201200131. Although non-variance-related revisions to the plan have been approved by Staff, the previous variance requests and mitigation remain unchanged. Additional comments are as follows:

If the new variance is granted, Staff requests that a condition be added that the Appellant coordinate with Stormwater Staff on review and approval of the final wording for the educational sign detail.

Regarding maintenance of the Zoo's existing BMPs associated with past projects:

Nashville Zoo – Flamingo Barn (G.P. #201000019): the annual report (due 7/1/2012) for the Bioretention BMP was not submitted.

Nashville Zoo – Parking (G.P. #200800014): the annual report for two detention ponds will be due 7/1/2014.

The following BMPs need to be inspected and maintained but have no reporting requirement. No reports have been received.

Nashville Zoo – Elephant Exhibit (G.P. #2003-096): WQ unit

Nashville Zoo – Commissary (G.P. #2003-008): Detention Pond

Nashville Zoo – Gabion Pond (G.P. #2004-232): Detention Pond

Nashville Zoo – Quarantine Area (G.P. #2003-144): Two Detention Ponds

Question: What is the Zoo's plan in regards to maintaining PTPs in the future?

CODES: No comment provided.

PLANNING: Defer to Stormwater Staff.

GREENWAYS: Greenways will defer to Stormwater Staff's comments on this request.

Mr. Kevin Gangaware gave an overview of the project and a description of the variance request. He stated that the reason for the delay of the project is that Public Works (PW) will be building the road under its budget and is now putting the plans out for bid. With regard to staff comments about BMP maintenance, he stated that the Zoo is creating an inspection program for all of their BMPs and will have them on annual inspection. Ms. Elaine Bright asked if the Zoo was putting someone in charge of the program, to which Mr. Gangaware stated yes and that they have a massive crew of maintenance personnel.

Mr. Michael Hunt, Stormwater (SW) – NPDES, stated that SW did not have a lot of experience with PW and grading projects and asked who would be overseeing the contractor during construction and ensuring that approved plans are followed. Mr. Gangaware stated that it would need to be established. Mr. Hunt stated that everyone would need to know what the plan is and coordination done at the front end.

After discussion and review of the information presented, Ms. Elaine Bright made a motion to approve the variance, as requested, with the following Conditions #1-3 and standard Conditions #4-6. Mr. Slade Sevier seconded the motion. The motion was approved by Ms. Bright, Mr. Roy Dale, Ms. Anna Maddox, Mr. Sevier, Mr. Monte Turner, and Mr. Lance Wagner.

1. The Appellant shall coordinate with Stormwater Staff on review and approval of the final wording for the educational sign detail.
2. The Appellant shall submit the overdue annual BMP report (Nashville Zoo – Flamingo Barn, Grading Permit #201000019) prior to the pre-construction meeting for this project.
3. Continuous mowing of up to six feet on either side of the edges of the existing road, proposed road and sidewalk shall be allowed as a condition of this variance.

4. The Appellant shall have the landscaper who installs the required mitigation plantings to certify to MWS Stormwater – NPDES Office, in writing (referencing Variance #201400004), once plantings are installed per approved variance plans and again once plantings have been found to meet a two full growing season requirement. The owner shall maintain a minimum of 75 percent survivability of plantings through two full growing seasons.
5. This variance will expire on May 1, 2015. However, if a Grading Permit, Stormwater Single Family Permit, or Building Permit is issued within that period, the variance expiration date will run concurrent with that permit expiration date.
6. The Appellant is reminded that no construction or disturbance should commence prior to obtaining any applicable Grading Permit or Stormwater Single Family Permit from Metro Water Services and any or all applicable Building Permits from Metro Codes.

The reasons for approval are that: 1) there was a previous variance approval, 2) there are no changes since the past approval, and 3) the only holdup was alternate funding from Metro.

2. 201400005

Nashville Zoo – Visitor Entrance
3777 Nolensville Pike
APN: 13300000400
Inspector: Denice Johns

CD-26 (Chris Harmon)

APPLICANT'S REQUEST – Variance requests are to allow the following:

- 1) Disturbance and encroachment of the 50' stream buffer of Cathy Jo Creek (30' Zone 1 & 20' Zone 2) for construction of a portion of a building and installation of erosion prevention and sediment control (EPSC) measures.
- 2) Continuous maintenance of the buffer.
- 3) Construction of a light maintenance vehicle crossing over the stream <1,000' from an existing stream crossing.
- 4) Elimination of the requirement for installation of stream buffer signs.
- 5) Installation of a water quality Best Management Practice (BMP) in the buffer.
- 6) Elimination of the Stormwater Quantity Detention requirement. The stormwater discharge for this project will flow to an existing lake on the property, and the parking lot expansion (constructed in 2008) reduced the post development peak flow an average of 7 cfs.

APPELLANT: Nashville Zoo (Mr. Rick Schwartz)

REPRESENTATIVE: Mr. Kevin Gangaware

COMMENTS:

SW Staff: Grading Permit SWGR #T201400100. Project is awaiting technical review. The Appellant has submitted an Alternate Site Plan which does not require a variance along with an explanation of why it is not feasible. Additional comments are as follows:

Regarding maintenance of the Zoo's existing BMPs associated with past projects:

Nashville Zoo – Flamingo Barn (G.P. #201000019): the annual report (due 7/1/2012) for the Bioretention BMP was not submitted.

Nashville Zoo – Parking (G.P. #200800014): the annual report for two detention ponds will be due 7/1/2014.

The following BMPs need to be inspected and maintained but have no reporting requirement. No reports have been received.

Nashville Zoo – Elephant Exhibit (G.P. #2003-096): WQ unit

Nashville Zoo – Commissary (G.P. #2003-008): Detention Pond

Nashville Zoo – Gabion Pond (G.P. #2004-232): Detention Pond

Nashville Zoo – Quarantine Area (G.P. #2003-144): Two Detention Ponds

Question: What is the Zoo's plan in regards to maintaining PTPs in the future?

CODES: No comment provided.

PLANNING: Defer to Stormwater Staff.

GREENWAYS: Greenways will defer to Stormwater Staff's comments on this request.

Mr. Kevin Gangaware gave an overview of the project and a description of the variance request. He stated that the property is owned by Metro government, and the Mayor's office has offered some funds to the Zoo for the improvements. A portion of the new building would be constructed over the existing box culvert/maintenance road, since they felt removal of the crossing might cause more damage to the stream. The existing road pavement would also remain. They are proposing a new 25' clear span of the creek for the wooden maintenance road.

There was discussion regarding the proposed building (that it could possibly be constructed out of the buffer) and possible removal of the existing maintenance road and associated pavement. The alternate plan was also reviewed.

Ms. Anna Maddox asked about detention, to which Mr. Gangaware responded that they are increasing the impervious slightly (approximately 0.7 cfs); however, there are two lakes on the property, and the peak runoff was decreased by 7 cfs for a previous parking lot.

Ms. Elaine Bright made a motion to deny the variance request stating that it is a brand new building encroaching into both buffers, there is no valid hardship, and the reason for the buffer is for filtering and water quality and if the building extends over buffer (even on poles) it could cause erosion.

There was additional discussion regarding the size of the building and possible reduction of square footage.

Mr. Roy Dale stated that buffers are for water quality, and there are certain situations where disturbance is unavoidable. There are multiple existing buildings and paved areas within the buffer, and if they can find a way to offset or treat/provide water quality, it would be acceptable to him. There is something positive to be said about removing the existing culvert and paving and re-establishing the area. Ms. Bright asked about the difference between the Zone 1 and Zone 2 buffers. Mr. Dale stated that grade changes are allowed in Zone 2 with re-vegetation; however, Zone 1 is to remain undisturbed (no-touch).

Ms. Maddox seconded the motion. Mr. Steve Mishu stated that he was in an inter-department pre-application meeting before the SWMC pre-application meeting and did mention that the project would require a variance. Mr. Terry Cobb (Mayor's Office) did want him to relay to the Committee that the Zoo has done a lot of water quality in the past and is beneficial to the community. Mr. Dale stated that he had received a call from the council member.

Mr. Monte Turner asked if they would be treating the area underneath the elevated floor of the proposed building, to which Mr. Gangaware stated yes; it is sparse now, but there would be re-vegetation and a significant increase in added vegetation. Ms. Bright stated that she would almost want to hold Metro to a higher standard. It is a new building, and they have allowed encroachments in Zones 1 and 2 for existing buildings with hardships. Even though it is proposed to be elevated, no vegetation will grow underneath it. Mr. Slade Sevier stated that there are no detention issues and no water quality issues since the runoff will be taken to two ponds.

Mr. Lance Wagner stated that he would support the building removed from Zone 1 along with educational buffer signage provided. Ms. Paula Kee (Secretary) responded that the variance request includes elimination of the buffer signage requirement, to which Mr. Gangaware responded that he was not sure why it was included in the application, they were fine with the signage, and to remove it from the list. Mr. Wagner also stated that the building could be removed from Zone 1 and the footprint/design reworked. The existing maintenance bridge/crossing could also be removed to provide more continuous bed and bank and promote habitat. There was also some discussion regarding the view of the creek from the building.

Mr. Michael Hunt (Stormwater – NPDES) mentioned that no one from the Zoo was present and asked who is the Zoo contact that directly oversees development. Mr. Gangaware stated that Mr. Rick Schwartz is the Zoo president, but he is out of the country on Zoo business, and he advised him that he did not need to attend. Mr. Hunt stated that he would like to have a closer relationship with the Zoo on water quality issues – currently they do not have one. Mr. Dale stated that he did not believe in precedence. In his opinion, everything has to be considered on its own.

Ms. Bright, Ms. Maddox, and Mr. Wagner voted in favor of the motion, and Mr. Dale, Mr. Sevier, and Mr. Turner voted against the motion. The motion failed.

Mr. Sevier then made a motion to approve the variance requests with a denial of Request #4 (elimination of the buffer signage requirement), stating that from a water quality standpoint, the Zoo does a lot, they have extra TDEC permitting, the requirements on the Zoo are far and above what residential has, circumstances unlike what they see, and they try to do what they can for detention and water quality. Mr. Turner seconded the motion. Reference to the condition of submitting the overdue BMP annual report (as stated in Case #201400004) would also be included. Mr. Sevier made a motion to amend to take out the existing crossing and restore the bed and bank of the creek such that habitat is consistent throughout. Mr. Dale seconded the motion. The motion to amend was approved by Ms. Bright, Mr. Dale, Ms. Maddox, Mr. Sevier, Mr. Turner, and Mr. Wagner. Mr. Dale, Mr. Sevier, and Mr. Turner voted in favor of the main motion with amendment, and Ms. Bright, Ms. Maddox, and Mr. Wagner voted against. The motion failed.

There was discussion regarding proposed changes to the current Plan of Record and approval of a variance based on proposed changes.

Mr. Dale then made a motion to approve the variance requests as submitted with the following Conditions #1-6 and standard Conditions #7-9. Mr. Wagner seconded the motion. The motion was approved by Ms. Bright, Mr. Dale, Ms. Maddox, Mr. Sevier, Mr. Turner, and Mr. Wagner.

1. Variance Request #4 (elimination of the buffer signage requirement) is denied. Buffer signage shall be required.
2. No portion of the building can touch the Zone 1 buffer.
3. The Appellant shall remove the existing culvert and associated impervious surface from the Zone 1 buffer. The disturbed area shall be re-established and mitigated per Staff's direction.
4. The footprint shall stay the same with the exception of truncating it at the Zone 1 buffer (i.e., no additional buffer disturbance; however, changes to the footprint outside of the buffer are allowed).
5. If there are any other new variances that result from the above changes to the plan, the Appellant shall return to the Committee.
6. The Appellant shall provide a copy of the final approved plan to the SWMC secretary to ensure conformance with the granted variance.
7. The Appellant shall have the landscaper who installs the required mitigation plantings to certify to MWS Stormwater – NPDES Office, in writing (referencing Variance #201400005), once plantings are installed per approved variance plans and again once plantings have been found to meet a two full growing season requirement. The owner shall maintain a minimum of 75 percent survivability of plantings through two full growing seasons.
8. This variance will expire on May 1, 2015. However, if a Grading Permit, Stormwater Single Family Permit, or Building Permit is issued within that period, the variance expiration date will run concurrent with that permit expiration date.
9. The Appellant is reminded that no construction or disturbance should commence prior to obtaining any applicable Grading Permit or Stormwater Single Family Permit from Metro Water Services and any or all applicable Building Permits from Metro Codes.

The reasons for approval are: 1) the building will be out of the Zone 1 buffer, and 2) removal of the existing culvert and associated impervious surface from the Zone 1 buffer will more than compensate for the small amount of impervious surface that will be placed within the Zone 2 buffer.

*Note: The Appellant is reminded of the requirement to submit the overdue annual BMP report (Nashville Zoo – Flamingo Barn, Grading Permit #201000019) prior to the pre-construction meeting for Nashville Zoo – Main Entrance Phase 2 (Grading Permit SWGR T201200131), as specified as a condition of approval for Variance #201400004, granted May 1, 2014.

3. 201400006

Warner Park Trail Linkage – Phase 1
0 and 7311 Highway 100
APN: 14300002400 & 15700000100
Inspector: Phil Saad

CD-34 (Carter Todd)

APPLICANT'S REQUEST – Request is to allow disturbance of a wetland and 25' wetland buffer for 1) filling 0.04 acres of wetland, 2) constructing a portion of roadway and boardwalk/trail, 3) grading, 4) continuous mowing and maintenance of the roadway shoulder within the buffer, and 5) installation of erosion prevention and sediment control (EPSC) measures.

APPELLANT: Metropolitan Board of Parks and Recreation

REPRESENTATIVE: Mr. Tim Netsch (Metro Parks)

COMMENTS:

SW Staff: Grading Permit SWGR #T201400075 – under technical review. Comments are as follows:

Preliminary technical review indicates that bioretention areas designed and shown on the SWMC Plan of Record are sized to meet Stormwater requirements, but are not significantly oversized to provide adequate compensatory mitigation.

Stormwater Staff has seen numerous issues with the installation of bioretention and permeable gravel pave.

Stormwater Staff would like to emphasize the need for projects to be built per the approved plan.

CODES: No comment provided.

PLANNING: Defer to Stormwater Staff.

GREENWAYS: Greenways will defer to Stormwater Staff's comments on this request.

Mr. Tim Netsch introduced Mr. Jeff Heinze and Mr. Derek Baalbergen, both with Littlejohn Engineering. He gave an overview of the property, a significant portion acquired from a partnership between Friends of Warner Parks and Metro Parks Dept. Mr. Baalbergen gave an overview of the project and a description of the variance requests. He stated that the site is part of the future Burch Reserve. The project will consist of trails, a 75-car parking lot, new four-way intersection with pedestrian trail across Highway 100, and tunnel to access Burch Reserve.

There was discussion regarding the mitigation. Mr. Baalbergen stated that the proposed water quality volume will be 8,000 cubic feet and is 100% overdesigned above the required water quality volume. The parking lot will be compacted aggregate with a plastic grid system, along with a ribbon concrete curve. Ms. Elaine Bright asked staff about their concerns with the pervious gravel. They would do an undercut for the parking system. The drive isle and ADA spaces will be paved.

After discussion and review of the information presented, Ms. Elaine Bright made a motion to approve the variance requests with the following standard Conditions #1-3. Mr. Slade Sevier seconded the motion. The motion was approved by Ms. Bright, Mr. Roy Dale, Ms. Anna Maddox, Mr. Sevier, Mr. Monte Turner, and Mr. Lance Wagner.

1. The Appellant shall have the landscaper who installs the required mitigation plantings to certify to MWS Stormwater – NPDES Office, in writing (referencing Variance #201400006), once plantings are installed per approved variance plans and again once plantings have been found to meet a two full growing season requirement. The owner shall maintain a minimum of 75 percent survivability of plantings through two full growing seasons.
2. This variance will expire on May 1, 2015. However, if a Grading Permit, Stormwater Single Family Permit, or Building Permit is issued within that period, the variance expiration date will run concurrent with that permit expiration date.
3. The Appellant is reminded that no construction or disturbance should commence prior to obtaining any applicable Grading Permit or Stormwater Single Family Permit from Metro Water Services and any or all applicable Building Permits from Metro Codes.

The reasons for approval are that: 1) the road needs to be aligned with the existing road, 2) they have directed the road such that it is the minimum amount of disturbance to try to stay out of the wetland, and 3) they are providing a wetland retention area that will eventually turn into wetlands.

*Comment: If TDEC and/or the U.S. Army Corps of Engineers have any mitigation or other outstanding issues that require a redesign, the Committee needs to see that redesign.

4. 201400007

DCA – Concessions Improvements

300 & 245 Danyacrest Drive, 308 Myrick Drive, and 3032 Edgemont Drive

Map 85-7, Parcel 142, Map 85-6, Parcel 1, Map 85-10, Parcels 17 & 20

Inspector: Harold Bryant

CD-14 (James Bruce Stanley)

APPLICANT'S REQUEST – Requests are to allow the following:

- 1) Construction of a concessions building with ticketing and restrooms utilizing wet-floodproofing construction techniques, within the Stones River 100-year floodplain.
- 2) Disturbance of the 75' floodway buffer (50' Zone 1 & 25' Zone 2) of the Stones River for extension of a storm drain culvert and public use sidewalk, and installation of erosion prevention and sediment control (EPSC) measures.
- 3) Continuous mowing and maintenance of the buffer.

APPELLANT: Donelson Christian Academy

REPRESENTATIVE: Mr. Jamie Gillespie

COMMENTS:

SW Staff: No grading permit application has been submitted at this time. Staff has no additional comment and will defer to the SWMC.

CODES: No comment provided.

PLANNING: Defer to Stormwater Staff.

GREENWAYS: Greenways will defer to Stormwater Staff's comments on this request.

Mr. Jamie Gillespie gave an overview of the project and a description of the variance requests. Mr. Keith Singer (DCA – Headmaster) and Mr. Scott Patton (Wellspring Builders) were also in attendance.

Mr. Gillespie stated that for the proposed restrooms, backflow preventers will be installed on the sewer lines. He also briefly discussed the two offsite compensating cut areas. All electrical service in the concession stand will be elevated one foot above the floodplain.

After discussion and review of the information presented, Ms. Anna Maddox made a motion to approve the variance, as requested, with the following standard Conditions #1-4. Mr. Slade Sevier seconded the motion. The motion was approved by Ms. Elaine Bright, Mr. Roy Dale, Ms. Maddox, Mr. Sevier, Mr. Monte Turner, and Mr. Lance Wagner.

1. The difference between the base flood elevation (BFE=425.1') and the elevation to which the structure is to be built (FFE=417.0') is 8.1 feet. The Appellant is reminded that the issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage and such construction below the base flood level increases risks to life and property.
2. The Appellant shall have the landscaper who installs the required mitigation plantings to certify to MWS Stormwater – NPDES Office, in writing (referencing Variance #201400007), once plantings are installed per approved variance plans and again once plantings have been found to meet a two full growing season requirement. The owner shall maintain a minimum of 75 percent survivability of plantings through two full growing seasons.

3. This variance will expire on May 1, 2015. However, if a Grading Permit, Stormwater Single Family Permit, or Building Permit is issued within that period, the variance expiration date will run concurrent with that permit expiration date.
4. The Appellant is reminded that no construction or disturbance should commence prior to obtaining any applicable Grading Permit or Stormwater Single Family Permit from Metro Water Services and any or all applicable Building Permits from Metro Codes.

The reasons for approval are that: 1) proper mitigation is provided and 2) the building is to be wet-floodproofed in accordance with FEMA regulations.

IV. ITEMS OF BUSINESS

1. Mr. Lance Wagner asked who maintains small urban creeks, to which Mr. Roger Lindsey (Stormwater – Development Review) responded that typically, because a lot of those creeks flow through private property, it falls to the homeowners or the neighborhood associations. Metro can remove debris that catches on bridges, culverts, etc. Mr. Michael Hunt (Stormwater – NPDES) stated that Metro does have an Adopt-A-Stream program. In some instances of localized flooding, Metro will investigate.

2. Mr. Lindsey also provided a brief update on the status of the single family residential infill development process. The committee process was started months ago, working with a number of Metro councilmembers as well as representatives of the Homebuilders Association to address a significant number of complaints to councilmembers regarding the demolition of single old houses and the construction of multiple new houses on the lots.

One of the key criteria discussed is at what point is this regulated. Existing stormwater regulations state that if you will disturb >10,000 sq. ft., then a grading permit is required, along with water quality and detention requirements. Some of what is being done is modeled after the city of Atlanta. The committee is at the point of drafting the ordinance, and some of the criteria have been defined. Mr. Lindsey gave a brief overview of the current levels/thresholds.

V. ADJOURNMENT

The meeting was adjourned at 10:37 a.m.

Metropolitan Stormwater Management Committee

Approved:

By: _____
Secretary

Date: _____