

1. 9:30 A.M. 2018 06 26 Planning Commission Agenda

Documents:

[6-26-18 Agenda.pdf](#)

2018 06 26 Supplemental Staff Report - LID

Documents:

[Supplemental LID Staff Report 06262018.pdf](#)

REGULAR MEETING AGENDA
PIERCE COUNTY PLANNING COMMISSION

Tuesday, June 26, 2018, 9:30 A.M.
Public Meeting Room, 2401 So. 35th St., Tacoma

I. CALL TO ORDER

II. DIRECTOR'S REPORT

III. MINUTES

IV. PUBLIC HEARINGS

Amendments to Pierce County Codes, continued

The Planning Commission continues review of proposed amendments to Pierce County Construction and Infrastructure Regulations: Title 17A, Site Development and Stormwater Drainage; Title 17B, Road and Bridge Design and Construction Standards; Title 17C, Building and Fire Codes; and the Manual on Design Guidelines and Specifications for Road and Bridge Construction in Pierce County; and Pierce County Development Regulations: Title 18A, Zoning; Title 18E, Critical Areas; Title 18F, Boundary Changes; Title 18G, Conservation Programs; and Title 18J, Design Standards and Guidelines; relating to Low Impact Development (LID).

Contact: Mitch Brells, Engineering Manager, 253-798-3755

V. JOINT STUDY SESSION

Amendments to Pierce County Code on Traffic Impact Fees

The Pierce County Planning Commission and the Transportation Advisory Commission will conduct a joint study session to discuss proposed amendments to Pierce County Code Chapter 4A.10 and Chapter 4A.40 as it relates to Traffic Impact Fees. The Transportation Advisory Commission (TAC), a nine-member commission established by the County Council and County Executive, has met on the issue of traffic impact fees for a period of over a year. The purpose of this study session is for the TAC to brief the Planning Commission of the topics covered in their study of the Traffic Impact Fee (TIF) Program and discuss proposed revisions to the current TIF Program. No action will be taken at this Study Session.

Contact: Jesse Hamashima, 253-798-2760

VI. OTHER BUSINESS

VII. ADJOURNMENT

NOTE: The Planning Commission is principally an advisory board to the Pierce County Council. Actions taken by the Planning Commission on almost all agenda items will be forwarded to the County Council as a recommendation for its consideration and final action.

Questions should be directed to the Planning staff at the Pierce County Public Services Building, 2401 So. 35th Street, Tacoma, WA 98409, or by calling 253-798-7156.

How to get information on what is being proposed. A brief staff presentation on the issue precedes most public hearings. Additionally, staff reports and proposed ordinances or resolutions are available in advance of the hearing. If you have questions, use part of your speaking time to ask the question and the Chair will ask staff to respond. Staff members are available before and after the hearing to answer questions or you may call them.

Written comment. Please send or submit your written comments to the Pierce County Planning Commission, 2401 So. 35th Street, Tacoma, WA 98409, or email comments to tfairba@co.pierce.wa.us. If you wish your comments to be distributed to the Commission in advance of a hearing, comments must be received by the Clerk of the Commission in the Planning Office a week before the hearing. If you want to deliver your written comments at the public hearing, please provide ten (10) copies to the Clerk of the Commission.

Sign in. Clearly PRINT your full name, address (ZIP included), and indicate if you wish to speak. People who sign in are called upon first. Please indicate if you are speaking as a representative of a group.

County Council information. For details about testifying before the County Council, please contact that office at 253-798-7777.



SUPPLEMENTAL STAFF REPORT

DATE: June 26, 2018

TO: Pierce County Planning Commission

FROM: Sean Gaffney, Planning Manager

BY: Mitch Brels, Engineering Manager
Jeffrey D. Mann, AICP, Senior Planner, Long Range Planning

SUBJECT: Additional Information requested by the Planning Commission at their May 22, 2018, meeting regarding proposed Amendments to Pierce County Construction and Infrastructure Regulations: Title 17B, Road and Bridge Design and Construction Standards; Title 17C, Building and Fire Codes; and Pierce County Development Regulations: Title 18A, Zoning; Title 18E, Critical Areas; Title 18F, Boundary Changes; Title 18J, Design Standards and Guidelines; and the Manual on Design Guidelines and Specifications for Road and Bridge Construction in Pierce County relating to Low Impact Development (LID).

BACKGROUND

At its meeting on May 22, 2018, regarding amendments to the County Infrastructure and Development Regulations related to Low Impact Development, the Planning Commission requested additional information regarding the following:

- Opportunities or alternatives to sidewalk improvements in residential and commercial areas;
- Information regarding the construction, operation, and maintenance of permeable surfaces;
- Options available on site by site basis to meet stormwater needs;
- Receive comments from the Fire Marshal on changes to EV access standards.

SIDEWALK IMPROVEMENTS/REQUIREMENTS

With one of the intents of the proposed regulation changes being the “minimization of impervious surfaces,” the Planning Commission raised questions about the County’s triggers for

the construction of frontage sidewalks when a new development or redevelopment occurs. In particular, the Planning Commission members pointed out “sidewalks to nowhere,” or in other words frontage sidewalks that do not connect to existing sidewalks or pathways. Staff understood these comments to mean that if we are trying to minimize impervious surface construction, “sidewalks to nowhere” might be a good place to start. The Planning Commission requested additional information pertaining to sidewalk requirements.

A review of the current Title 17B – “Construction and Infrastructure Regulations – Road and Bridge Design and Construction Standards” indicates that the installation of frontage sidewalks is required concurrent with development in the urban areas of the County and in some cases rural areas of the County. In the urban area, Title 17B requires that subdivisions larger than two lots, and commercial and industrial developments install sidewalk or pathways on the public roads they front on. In the rural area, Title 17B requires that commercial developments install sidewalks or pathways on the public roads they front on.

It should be noted that Title 17B does not exempt a development from installing sidewalks on their frontage because there are no sidewalks on either side of the development.

Staff believe that the matter of incremental sidewalk development is the County’s effort to increase and provide sidewalks within the County. While a new sidewalk may remain unconnected for quite a while, eventually neighboring properties will develop and build their portion of sidewalk, or a County road project will provide a connection.

Current options for meeting the frontage pedestrian way requirement are paved pathways, a standard concrete sidewalk, or a permeable concrete sidewalk. There are only two methods of relief from this requirement. If there is a fully funded County road project that plans to build the sidewalk/pathway, then the development will not have to build it. The second is for an applicant to apply for a deviation from the County Engineer.

Staff previously proposed language in an earlier low impact development amendment package (2017-28) that would have allowed the department to waive the requirement when it could be shown that a proposed development would not generate any pedestrian traffic from or to a site. The County Council removed this language from the proposal because they believed that pedestrian connectivity is an important transportation goal of Pierce County and they believed that the ability to waive sidewalk requirements should be part of a larger policy discussion on the issue outside of the proposal.

Until such time as there is a larger policy discussion specifically related to sidewalks, staff does not believe it is appropriate to propose any changes to the triggers for when a development has to build a frontage sidewalk or pathway.

Status of the “Payment in lieu” Sidewalk Proposal

A topic at the previous Planning Commission meeting was a discussion of a “payment in lieu” sidewalks program. Payment-in- lieu sidewalk programs would allow a developer to pay funds in to a sidewalk construction bank as opposed to installing sidewalk, particularly where the sidewalk would be an isolated, unconnected segment of sidewalk.

Hugh Taylor, County Council Legislative Analyst, was contacted as he has been involved in these discussion over the years. Mr. Taylor indicated that while there has been past discussion there is no current initiative by the County Council’s office or from development representative groups to revise current regulations or requirements for sidewalks or to establish the “in lieu” program for sidewalks.

Sprinker Permeable Pavement (Pilot Project)

The Sprinker project was a replacement of existing asphalt with porous asphalt. A discussion with staff that had firsthand knowledge of the project indicates that the pavement did prematurely lose its infiltrative capability. This was due to the fact that there was an excessive amount of run-on from adjacent conventional impervious surfaces, two to three times the area that current standards allow.

PERMEABLE SURFACES: REQUIREMENT OF, CONSTRUCTION, OPERATION, AND MAINTENANCE OF PERMEABLE SURFACES

Requirement of:

While the current County standards point toward the use of permeable surfaces as one of the first choices in managing a site’s stormwater runoff, other choices are available:

- 1.) In lieu of a permeable pavement, an applicant can use the following Best Management Practices(BMPs):
 - a. 65/10 Dispersion – involves routing stormwater runoff into a naturally vegetated area. The naturally vegetated area must be left undisturbed/undeveloped.
 - b. Rain gardens - a small depression with plantings and amended soils that treats stormwater runoff as it infiltrates.
 - c. Infiltration trenches - a trench constructed with a perforated pipe and backfilled with drain rock.
 - d. Bioretention - a large depression with plantings and amended soils that must be designed by an engineer.
 - e. Retention and detention ponds - these are the traditional methods of controlling stormwater runoff.
 - f. Manufactured stormwater filter - a concrete catch basin or vault that has filter media in it that cleans stormwater runoff.

- 2.) The standards recognize that the use of pervious surfaces is not always feasible. There is a list of 26 infeasibility criteria that will eliminate the requirement to use a permeable surface. The following list is a sample of common infeasibility criteria for permeable surfaces:
 - a. Roads that have less than 400 car trips in a day. For example, a subdivision road serving 40 or less lots would need to install pervious roadways if other infeasibility criteria are not met.
 - b. Areas that have soils that infiltrate too slow.
 - c. When the slope of the surface exceeds 10%.
 - d. Areas where the risk of concentrated pollutant spills is more likely such as gas stations, truck stops, and industrial chemical storage areas.
 - e. Where infiltrating water could cause slope instability.
- 3.) If permeable pavement is feasible but an applicant does not want to use it, they also have the choice of using the Low Impact Development Performance Standard. This option typically requires an applicant to retain an engineer, primarily because calculations are required to show that this performance standard is met.

Construction:

Currently there are four types of material used when constructing a pervious driving surface - Permeable asphaltic concrete, permeable Portland Cement Concrete, permeable pavers, and concrete or plastic grid systems.

Permeable asphaltic concrete: Typically 3 to 4 inches of permeable asphalt over 6 inches of structural base rock. The structural base rock serves as a storage reservoir as the water infiltrates into the underlying soil. The use of the base rock for stormwater storage is a common trait of all the different types of permeable pavement.

Permeable Portland Cement Concrete: Typically, 6 to 8 inches of permeable concrete over 6 inches of structural base rock. For the construction of roads, County standards only allow the use of permeable Portland Cement Concrete. Permeable Portland Cement Concrete holds up longer than its asphalt counterpart and has a higher void ratio which helps to prevent plugging.

Permeable Pavers: Permeable paver systems are sold by numerous manufacturers. They are usually placed over 6 inches of structural base rock. While these may be labor intensive during the initial installation they do have the benefit of being reusable.

Grid Systems: There are also a number of different type of grid systems on the market. Grasscrete is an example that has been around for a number of years. Grasscrete is typically filled with topsoil after it is installed and planted with grass seed. While it does have the strength to support vehicles, it does not provide good traction and is not a

good choice for a driveway or road that has a slope to it. There are also plastic grid systems available that are backfilled with structural gravel.

Operation and Maintenance:

Operational issues related to a permeable pavement surface pertain mainly to recognition by the owner that the permeable pavement is also a stormwater facility and needs to be protected from plugging. Owners should not use permeable surfaces for storage of landscape materials like bark, topsoil, or sand and should protect the permeable surfaces from transport of sediments from adjacent landscape areas by keeping adjacent areas well maintained, vegetated and permanently stabilized.

Maintenance:

Permeable concrete pavements: To prevent plugging it is recommended that permeable concrete pavements be pressure washed and vacuumed two to three times a year. The use of sand and sealants are prohibited. Surfaces should be kept clean of leaves and other debris.

Permeable pavers: Missing or broken pavers should be replaced. Gravel in joints between blocks should be replaced per the manufacturer's recommendations. Sands and sediments on the surface should be swept and removed. Settlement of pavers may require removal of pavers, repair of the subgrade, and resetting of paver stones. If an area of ponding does occur it may be necessary to remove the pavers, and restore the infiltrative capacity of the subgrade and reset the pavers.

Open celled paving grid with gravel: It may be necessary to replace lost aggregate material in the grid from time to time. Replaced aggregate material should meet the manufacturer's recommendations.

Open celled paving grid with grass: Lack of grass coverage is a common problem with this type of system. Maintenance for this problem will be to refill and replant per the manufacturer's recommendations.

STORMWATER OPTIONS IN SITE DEVELOPMENT

The current Pierce County Stormwater Management and Site Development Manual (Manual) contains many Low Impact Development BMP options. These include:

- Permeable pavement
- Bioretention
- Rain Gardens
- 65/10 dispersion
- Compost amended vegetated filter strips
- Perforated stub out connections

- Tree and native vegetation retention
- Roof rainwater collection systems

These Low Impact Development BMPs supplement the traditional stormwater BMPs which are still allowed by the Manual. These include but are not limited to:

- Detention ponds
- Retention ponds
- Wet ponds
- Infiltration trenches
- Stormwater filters,
- Detention tanks
- Dispersal trench

FIRE MARSHAL REVIEW OF CHANGES TO ACCESS STANDARDS

The Pierce County Fire Marshall has reviewed and is supportive of the proposed code changes.