



Washtenaw County Office of Strategic Planning

STAFF REPORT: ALLEN CREEK DRAIN PIONEER HIGH SCHOOL STORM WATER
DETENTION SYSTEM DRAIN PROJECT (City of Ann Arbor)
Full-Faith and Credit Review

Date: July 17, 2009

Background

The Washtenaw County Water Resources Commissioner was petitioned by City of Ann Arbor, under the Michigan Drain Code, to undertake improvements to the Allen Creek Drain at Pioneer High School, known as the Allen Creek Pioneer High School Storm Water Detention System Drain Project. The purpose of the project is to reduce downstream flooding and improve water quality in the Allen Creek Drainage District. The Allen Creek Initiative (a collaboration between the Washtenaw County Water Resources Commissioner, the City of Ann Arbor, Ann Arbor Public Schools, and the Allen Creek Advisory Committee) identified construction of a detention system at Pioneer High School as the top priority to control water quantity and improve water quality within the creekshed during storm events. Much of Allen Creek is contained in underground piping that carries stormwater runoff from the urban core of Ann Arbor. Nearly 44% of the land draining to the creek is impervious, and as a result, stormwater frequently enters the creek too quickly, causing localized flooding during rain events. These rain events also carry pollutants from impervious areas to the creek, lowering water quality. Allen Creek falls within the Total Maximum Daily Load (TMDL) area of the Huron River. The goal of the TMDL is to remove 50% of the phosphorus from storm water, and reduce E. coli to a level deemed acceptable by the State of Michigan (300 CFU/100 ml).

Pioneer High School is located in the upstream area of Allen Creek and provides drainage for approximately 309 acres of land in the creekshed. Pioneer High School currently has no stormwater quantity control measures. The project will provide the high school with needed detention and improve downstream water quality and quantity. An estimated 93 lbs. of phosphorus per year per acre of the upstream drainage area will be removed from the creek as a result of the project. The detention system includes an underground storage chamber that allows for infiltration, porous pavement, swirl concentrators and bio infiltration.

The Water Resources Commissioner is requesting the Planning Advisory Board recommend that the Washtenaw County Board of Commissioners approve to pledge the County's limited full faith and credit for payment of bonds for the Allen Creek Drain Pioneer High School Storm Water Detention System Drain Project in an amount not to exceed \$5,360,000. Bonds will be retired through special assessments against the following:

City of Ann Arbor
State of Michigan for benefits to State Highways

Section 280.24 of the Michigan Drain Code authorizes the Water Resources Commissioner to borrow funds on behalf of drainage districts and the Board of Commissioners to pledge its Full Faith and Credit to back such borrowing upon approval of two-thirds of its membership.

By utilizing Washtenaw County's full faith and credit, local communities are able to more effectively finance major infrastructure projects. This Project will provide drain improvements to the City of Ann Arbor and Washtenaw County.

The County has a Full Faith and Credit Policy that identifies a procedure for receiving comments by County Administration when considering a project. Specifically, this procedure, calls for comments as to whether the County's land use policies are consistent or inconsistent with a proposed project.

The Planning Advisory Board has established procedures for Full Faith and Credit Reviews to provide recommendations to the County Administrator and the Board of Commissioners. The procedure calls for review of how a proposed project affects the following:

- 1) Existing land use;
- 2) Compliance with local unit master plans;
- 3) Compliance with Washtenaw County's Comprehensive Plan;

Existing Land Use

The current land use north of Stadium Boulevard, north of Pioneer High School is mostly single-family residential and institutional uses as well as small areas of multi-family residential and commercial uses. West of Pioneer High School, is Greenview Park. South of Scio Church Road, south of Pioneer High School, is mostly single-family residential as well as small areas of multi-family residential and commercial uses. East of Pioneer High School, across Main Street, is the University of Michigan Golf Course.

The proposal is to install a detention system on the Pioneer High School property. This project will provide needed detention and will improve downstream water quality, and manage quantity as well. Staff sees no effect on land use on the surrounding areas.

Compliance with Local Unit Master Plans

The Ann Arbor Central Area Plan, the Ann Arbor South Area Plan, and the Ann Arbor West Area Plan are applicable to this project. The Ann Arbor Central Area Plan calls for developing enforceable mechanisms to protect wetlands, watercourses, woodlands, and landmark trees. The Ann Arbor South Area Plan identifies "preserve and enhance remaining natural areas including areas along creeks, drains, and hedgerows," as well as "pay special attention to development in proximity to natural areas" as overall goals for the area. The Ann Arbor West Area plan includes the following two objectives: "prevent future, and correct existing, flooding and drainage problems," and "prevent and correct flooding and drainage problems both in the West Area and downstream." The installation of a detention system on the Pioneer High School property will help to protect watercourses (Central Area Plan), enhance the Allen Creek Drain (South Area Plan) and prevent

future and correct existing flooding and drainage problems (West Area Plan), thus, this action is fully compliant with the City of Ann Arbor Central Area Plan, South Area Plan and West Area Plan.

Compliance with Washtenaw County's Comprehensive Plan

The County's Comprehensive Plan recognizes the continuing need for the Washtenaw County Water Resources Commissioner to maintain deteriorating waterways and drains. Specifically, this action is supported by the following recommendations;

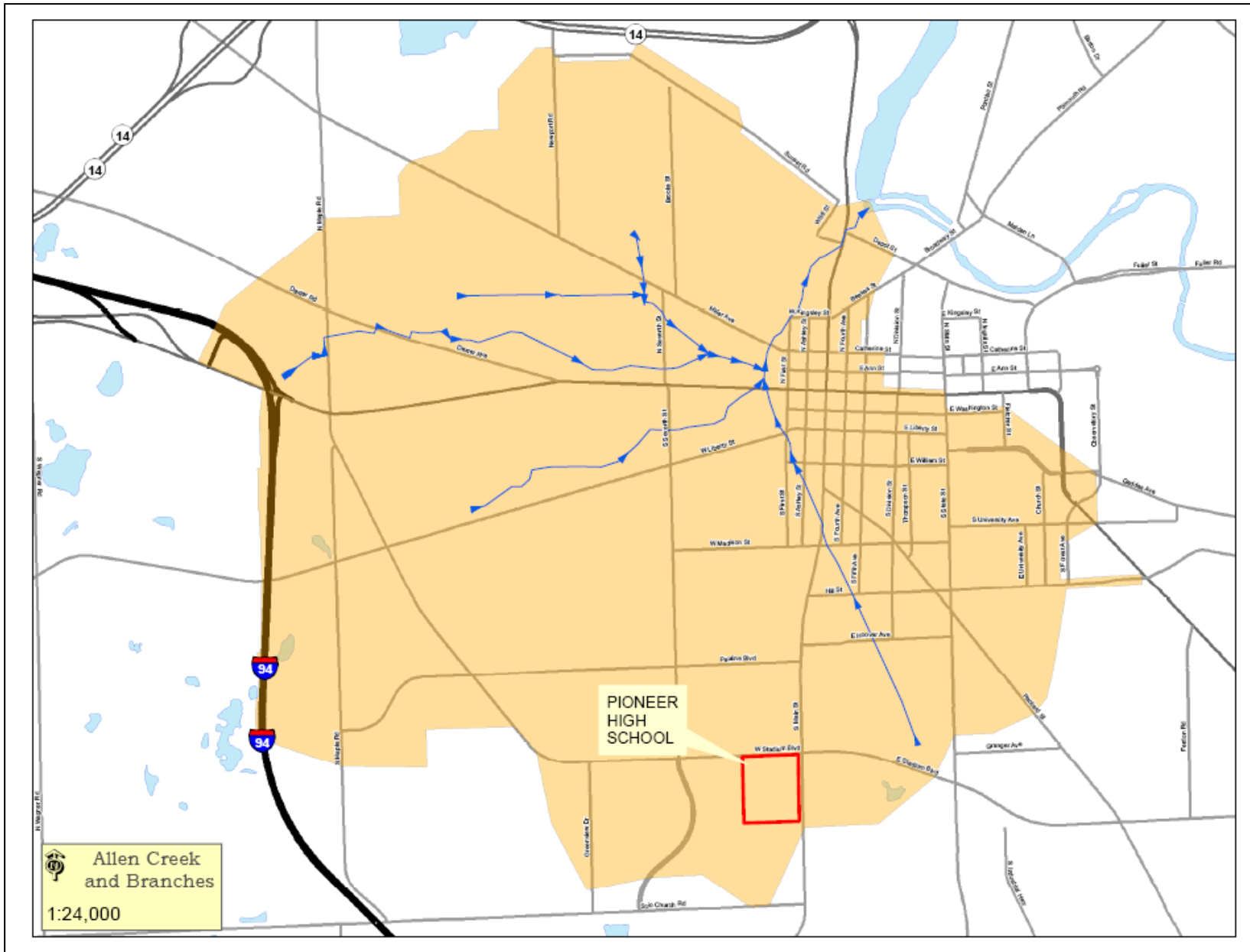
Natural Resources Recommendation 1.4 – Urban Storm Water Systems: Pursue grants and local funding sources to retrofit urban stormwater systems;

Natural Resources Recommendation 1.12 – Drain System Maintenance: Pursue a dedicated funding source for adequate routine maintenance through state legislation or local sources.

Recommendation

Washtenaw County Community Planning staff recommends that the Planning Advisory Board support the use of the County's Full Faith and Credit for construction of a detention system on the Pioneer High School property.

Attachment: Report from the Office of the Washtenaw County Water Resources Commissioner.





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To: William Lewis, Chair
Washtenaw County Planning Advisory Board

From: Janis A. Bobrin
Washtenaw County Water Resources Commissioner

Re: Allen Creek Drain Pioneer High School Storm Water Detention System Drain Project

Date: July 27, 2009

Action Requested: County Planning Advisory Board recommendation for County Board of Commissioners' approval to pledge the County's limited full faith and credit for payment of bonds for the Allen Creek Pioneer High School Storm Water Detention System Drain Project in an amount not to exceed five million three hundred sixty thousand (\$5,360,000.00) dollars. Bonds will be retired through special assessments against the following:

City of Ann Arbor
State of Michigan for benefits to State Highways

Background: Section 280.434 of the Michigan Drain Code authorizes the Water Resources Commissioner to borrow funds on behalf of drainage districts and the Board of Commissioners to pledge its Full Faith and Credit to back such borrowings upon approval of two-thirds of its membership.

Discussion: Washtenaw County Water Resources Commissioner was petitioned by the City of Ann Arbor to undertake improvements to the County Drain known as **Allen Creek Pioneer High School Storm Water Detention System Drain Project** to reduce downstream flooding and improve water quality in the Allen Creek Drainage District.

The Allen Creek Initiative identified construction of a detention system at Pioneer High School as the top priority to control water quantity and improve water quality within the creekshed during storm events. The Allen Creek Initiative was launched in 2007 and is a collaborative effort with the Washtenaw County Water Resources Commissioner, the City of Ann Arbor, Ann Arbor Public Schools and the Allens Creek Advisory Committee. Its goal was to identify, prioritize and select stormwater management projects that would reduce flooding and improve water quality in Allen Creek.

Much of Allen Creek is contained in underground piping that carries stormwater runoff from the urban core of Ann Arbor. Nearly 44% of the land draining to the creek is impervious, and as a result, stormwater frequently enters the creek too quickly, causing localized flooding during rain events. These rain events also carry pollutants from impervious areas to the creek, lowering water quality. Allen Creek falls within the Total Maximum Daily Load (TMDL) areas of the Huron River. The goals are to remove 50% of the Phosphorus, and reduce E. coli from storm water to the level deemed acceptable by the State of Michigan (300 CFU/100ml).

Office Open Week Days From 8:30 A.M. to 5:00 P.M.

The Pioneer High School property is located in the upstream area of Allen Creek and provides drainage for approximately 309 acres of land in the creekshed. Pioneer High School currently has no stormwater quantity control measures, so this project will provide the high school with needed detention and improve downstream water quality and quantity. It is estimated that 93 lbs of phosphorous per year per acre of the upstream drainage area will be removed from the creek as a result of the project. The detention system includes an underground storage chamber that allows for infiltration, porous pavement, swirl concentrators and bio infiltration.

Impact on Human Resources: None.

Impact on Budget: None.

Impact on Other County Departments or Outside Agencies: None.

Conformity to County Policies: The County's full faith and credit policy requires County Planning Advisory Board review and approval.

Attachments: Location maps.

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