Staff Analysis of Proposed Amendment to the Dane County Water Quality Plan, Revising the Oregon Urban Service Area Boundary and Environmental Corridors in the Village of Oregon

1. Applicant: Village of Oregon

2. Description of Proposal

The proposed amendment is located on the west side of the Village of Oregon, at the south end of North Perry Parkway and north of Park Street, contiguous to the Oregon Urban Service Area. The Village of Oregon proposes to add 6.6 acres to the Oregon Urban Service Area, including 1.4 acres of environmental corridors, with a net developable area of 5.2 acres. The land use proposed for the addition is recreational, as the site of a community sports arena. There is no residential component to this amendment proposal (see Maps 1, 2, and 3).

3. Existing Environment

Land Use. The proposed addition to the urban service area is currently vacant, with the exception of a small gravel parking area. It is currently used as baseball and soccer fields.

North: Recreational (Village of Oregon)
East: Recreational (Village of Oregon)

South: Oregon Branch of Badfish Creek (Village of Oregon)
West: Municipal wastewater treatment plan (Village of Oregon)

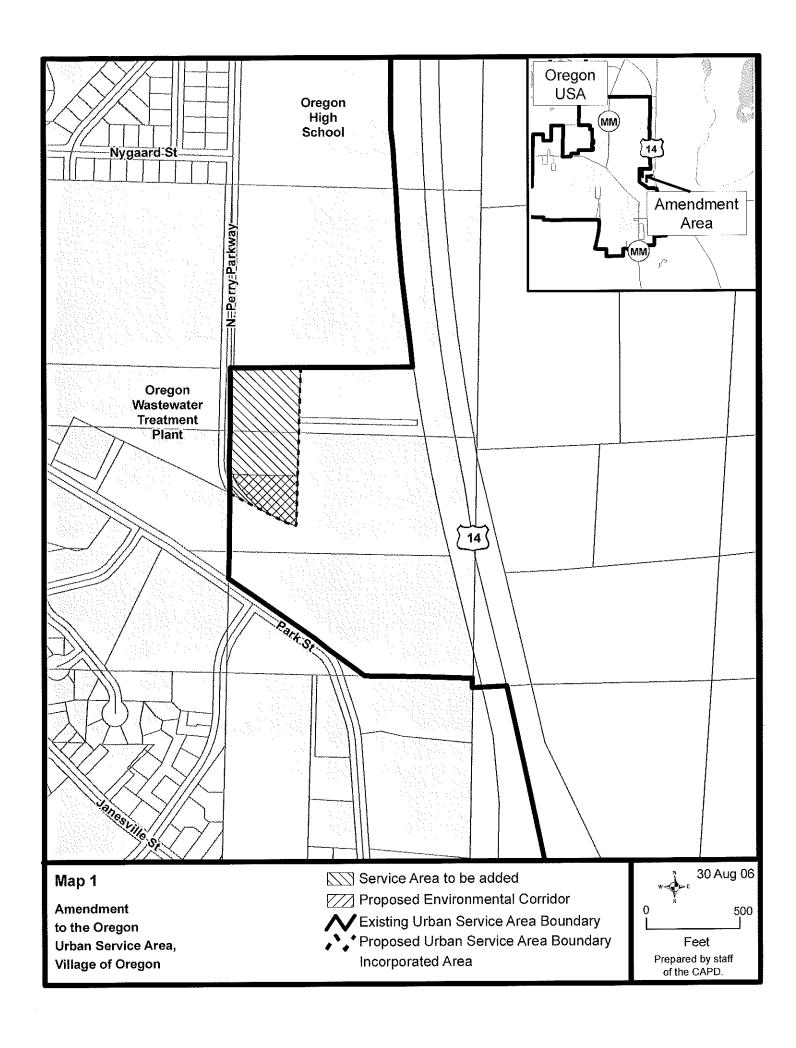
Natural Resources. The proposed amendment area is located in the Yahara River Watershed, in the Lower Rock River Basin. The Oregon Branch of Badfish Creek defines the south boundary of the amendment area. The Oregon Branch supports limited aquatic life in the area of the amendment. Approximately one mile east of the amendment area it supports a limited forage fishery. About four miles farther downstream, downstream from its confluence with the main stem of Badfish Creek, the creek supports a warm water sport fishery (at this location, the Madison Metropolitan Sewerage District discharge comprises most of the Badfish Creek flow).

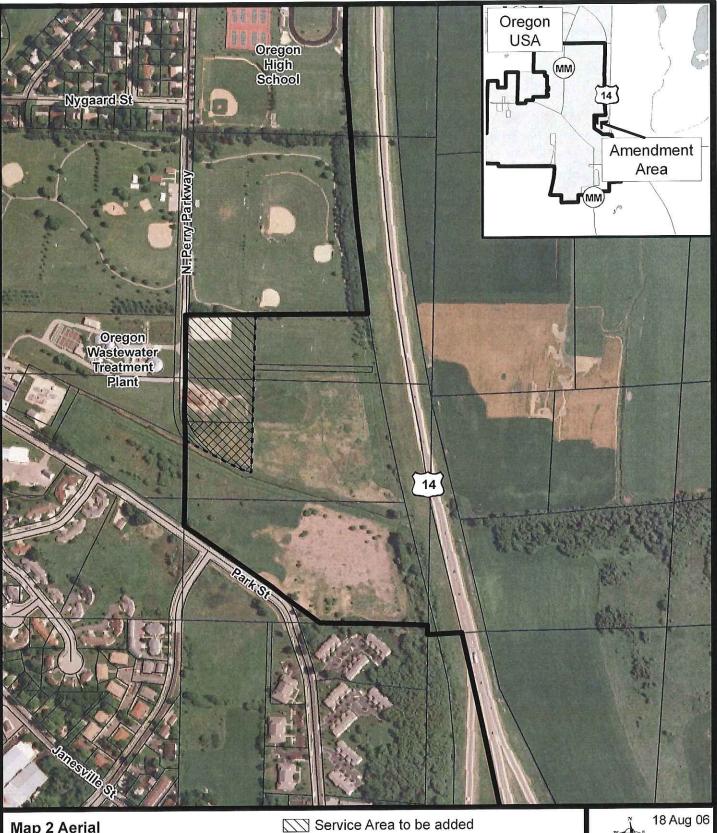
Currently, the property has a drainage swale running in a north to south direction along the eastern edge of the amendment area. The Oregon Branch of the Badfish Creek is the receiving body for stormwater runoff.

Depth to the water table in the amendment area is less than 10 feet. Floodplain associated with Badfish Creek is designated along the southern edge of the amendment area, within the area proposed for designation as environmental corridors. There are also floodplain and wetlands located outside the amendment area on the south side of Badfish Creek.

Sandstone bedrock is located at a depth of over 50 feet throughout the amendment area.

The soils of the amendment area are in the Batavia-Houghton-Dresden Association. These soils are formed in outwash material and they are well-drained and poorly drained deep silt loams and mucks that are underlain by silt, sand, and gravel. The northern 80 percent of the amendment area contains Sable soils. These are deep, poorly drained soils formed





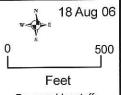
Map 2 Aerial

Amendment to the Oregon Urban Service Area, Village of Oregon

Proposed Environmental Corridor

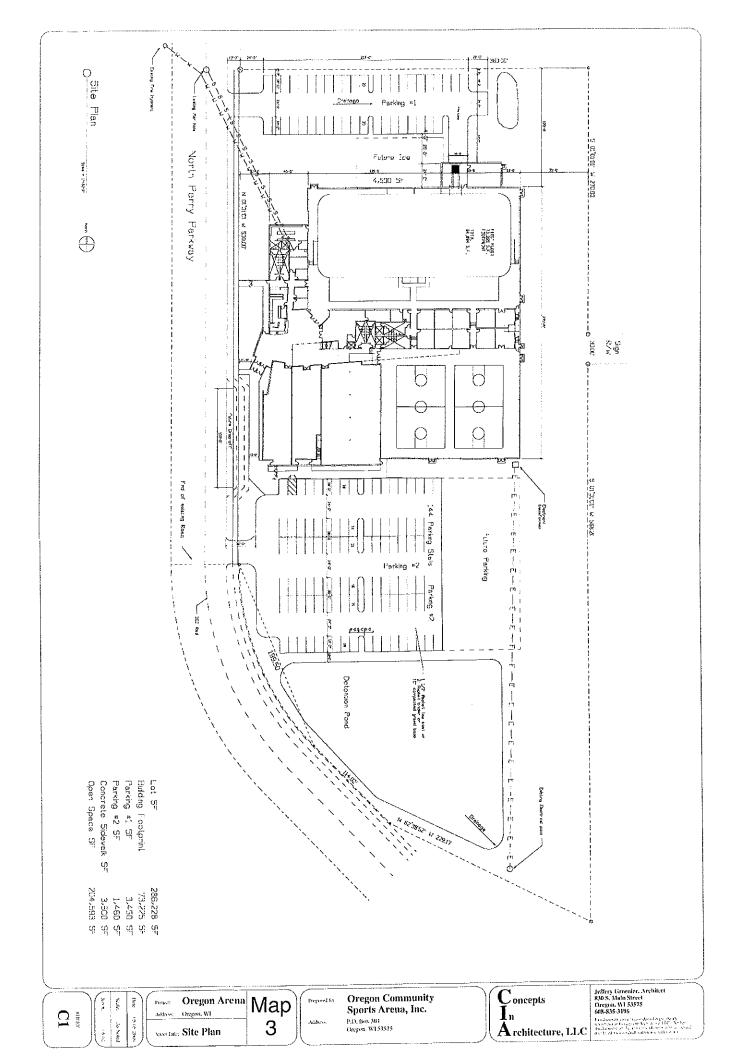
Existing Urban Service Area Boundary Proposed Urban Service Area Boundary

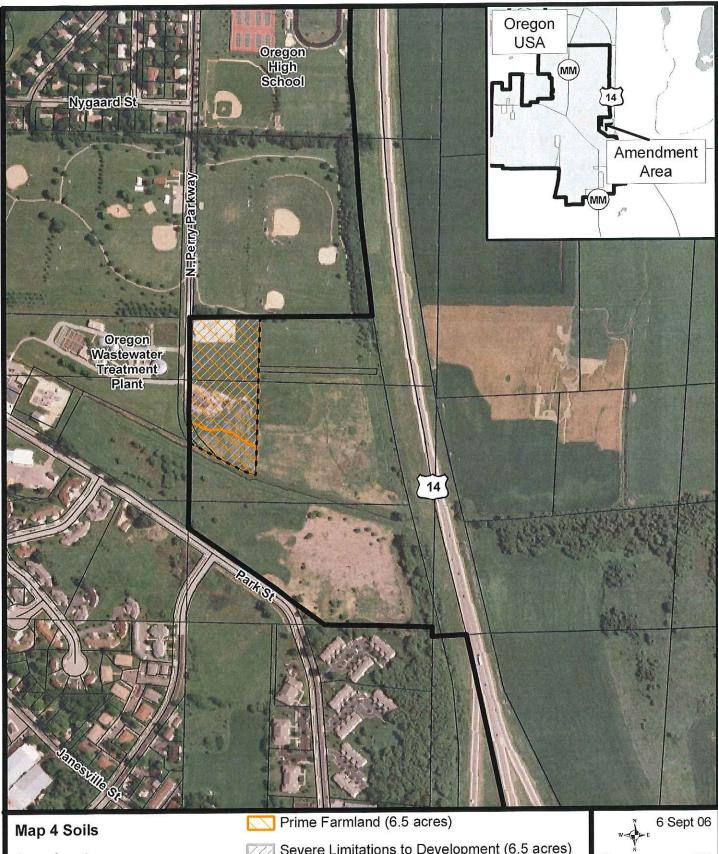
2005 Aerial Courtesy of FSA/NRCS



Prepared by staff of the CAPD.

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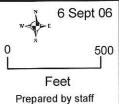


Amendment to the Oregon Urban Service Area, Village of Oregon

Severe Limitations to Development (6.5 acres)

Existing Urban Service Area Boundary

Proposed Urban Service Area Boundary 2005 Aerial Courtesy of FSA/NRCS



of the CAPD.

on low benches in stream valleys. They have high fertility and moderate permeability, and pose severe to very severe limitations for development due to seasonally high water table. The southern 20 percent of the area contains Wacousta silty clay loam, a deep, poorly drained soil formed on low benches in old lake basins. The Wacousta soils have low fertility and moderately slow permeability, and pose very severe limitations for development due to a seasonally high water table. Although this area is not in agricultural use, both these soil types are prime agricultural soils, with 150 and 110 bushels/acre corn yield, respectively (see Map 4, previous page).

The applicant reports no known historic structures or archeological resources located in the proposed USA addition area. The State Historical Society comment letter (attached) notes that an archaeological survey in the vicinity of the amendment area did not uncover archaeological resources in the area. The SHS notes that as the result of the findings of the previous survey and the nature of the landscape in the area, no additional archaeological survey of the area is necessary.

The Natural Heritage Inventory, maintained by the Department of Natural Resources, does not indicate the occurrence of threatened or endangered species in the amendment area. Extensive historical site disturbance would make the presence of threatened species unlikely.

4. Consistency or Conflict with Adopted Plans and Policies

The Oregon Urban Service Area was established in 1977 and the environmental corridors were adopted in 1984. The urban service area was last amended in June of 2003.

The Oregon USA has an estimated 2005 population of 8,279 and a 2030 population forecast of 13,163. The Oregon Housing Unit and Land Area Analysis provides for a maximum urban service area of 3,662 acres. This represents a potential addition of 977 acres of developable land over the current urban service area size of 2,685 acres. The proposed amendment would add 5.2 acres of developable land to the urban service area.

The proposed amendment is consistent with the Village of Oregon Comprehensive Plan which designates the land proposed for addition to the USA as "Active Recreation," defined as "park and open space facilities devoted to playgrounds, play fields, play courts, trails, picnic areas, and related recreational activities." On June 1, 2006 the Plan Commission found the proposal for the sports area to be consistent with the Comprehensive Plan, and on June 5, 2006 the Village Board approved the USA amendment application.

Table 1 presents the goal achievement checklist for the eleven major goals of the *Dane County Land Use and Transportation Plan*. The proposed amendment is supportive of the goal of developing a system of open space corridors to preserve environmental functions, scenic value, and recreational opportunities by designating 1.4 acres of environmental corridors within the amendment area, and adding a recreational amenity to the service area. The amendment has off-setting characteristics with regards to protecting agricultural lands because although the original soils in the area were predominantly prime agricultural soils, the area has been filled; therefore, the existing soils are no longer prime soils. Furthermore, the amendment area has not been in agricultural use, nor is it intended to be in agricultural use. The amendment is also neutral with regard to the other nine goals.

Table 1 Dane County Land Use and Transportation Plan Goals Achievement Checklist

Goals	Strongly Conflicts	Conflicts	Neutral or Offsetting Effects	Supports	Strongly Supports
Promote balanced communities with a mix of development	9000		X		
Promote compact urban development			х		
Promote distinct communities, mixed-use neighborhoods with a full range of public services			Х		
Provide a range of safe and affordable housing choices			х		
Provide an integrated all-mode transportation system			X		
Concentrate employment and activity centers along transit corridors			х		
Maintain Downtown Madison as region's major activity center	1		X		
Provide employment opportunities and a diverse economic base			Х		
Protect agricultural lands by limiting non-farm development in agricultural areas			X		
Protect environmental, cultural and historic resources			Х		
Develop a system of open space corridors to preserve environmental functions, scenic value, and recreational opportunities				х	

Proposal: Oregon Sports Complex, Oregon Urban Service Area

Applicant and

Submittal Date: Village of Oregon, September 2006

5. Proposed Urban Services

Public Water System. The Village of Oregon currently operates three groundwater wells for water supply. Each well yields between 800 and 1,000 gallons per minute (gpm). The current firm well pumping capacity (with one of the three wells out of operation) is 1,500 gpm. The village operates three reservoirs for water storage. The maximum storage capacity is 1,100,000 gallons and the effective storage capacity is approximately 915,000 gallons.

Water service to the expanded USA will be provided by existing Village mains that adjoin the property. The property will be served by a network of 8-inch and 12-inch water mains connected to the village's Primary Pressure Zone (PPZ). Static pressures during peak hour demands are approximately 65 psi. The distribution system can provide fire flows of approximately 2000 gallons per minute during maximum daily demand.

The Village developed a Water System Master Plan in 1988. Updates to this master plan were made in 1996 and 2003 to account for recent USA expansions on the west side of the Village. The 2003 Water System Master Plan update shows a proposed 12-inch water main loop that would cross USH 14 at Netherwood Street, run south to STH 138 and connect to the existing 12-inch at Park Street. The applicant states that, if improved water service is necessary within the proposed amendment area prior to this 12-inch water main loop east of USH 14 being installed, a 12-inch water main loop along North Perry Parkway from Nygaard Street to Park Street may be pursued.

Wastewater. The amendment area is proposed to be served by an existing sewer line along North Perry Parkway. The Village treatment plant has a rated capacity of 1.80 MGD, average daily flow. Currently the plant receives an average of about 1.12 MGD per day. The present reserve capacity is 0.68 MGD which the applicant estimates can support an additional 5,600 people.

A Facility Plan Amendment was completed in 2002 that evaluated cost effective alternatives for all the plant processes based upon a twenty-year planning period. This document provided the Village a long-term plan for wastewater treatment needs and incorporated and expanded upon the capacity analysis. The Facility Plan confirmed a conclusion from the Capacity Study that solids handling systems are currently near capacity. As a result of the plan recommendations and the Dane County Regional Planning Commission Resolution No. 945, the Village modified the existing aerobic digesters in 2003 to provide the necessary capacity to match the capacity of the liquid process train.

Stormwater Management System. The developer has submitted to the Village a stormwater management plan which incorporates a variety of infiltration, sedimentation, and detention techniques to accomplish the stormwater management requirements. Roof drainage will be directed to downspouts that will discharge to infiltration areas. Parking areas will sheet flow to dolomitic limestone filter basins for oil and grease removal. A detention pond designed per local ordinance will detain the post-developed 2-year, 10-year, and the 100-year, 24-hour storm events to pre-settlement rates. The outflow structure also includes an emergency spillway that will safely pass storm events greater than the 100-year storm event. The detention pond will be installed prior to land disturbing activities. Also, post-development sediment loads will be reduced by more than 80 percent compared to the development with no BMPs. The applicant states that the stormwater management system on the development will maintain or reduce the downstream flooding risk.

The stormwater system is proposed to be owned, managed, and maintained privately by Oregon Community Sports Arena, LLC.

Environmental Corridors. Environmental corridors including stormwater facilities have been proposed for 1.4 acres of this amendment. The proposal meets the minimum corridor designation criteria of the *Dane County Water Quality Plan*.

Public Safety Services. The proposed USA addition will be served by an existing fire hydrant on North Perry Parkway. The Oregon Area Fire-EMS District provides fire protection and emergency medical services to the Village of Oregon, Town of Oregon, Town of Dunn, and the Town of Rutland. The District Department is a combination agency that is mostly made up of paid on-call personnel, supplemented with full time Captains staffing the station 24 hours per day, six days per week. The fire station is located approximately one half-mile away at 131 Spring Street in the Village of Oregon. The district has two engines, one rescue squad, one tanker, one brush truck, three command cars, one ATV utility for rescue/brush fires, and two ambulances. In 2002 the ISO fire rating for the Village was determined to be 4.

The Village of Oregon Police Department facility is located at 383 Park Street, less than one half-mile from the amendment area. Current full time sworn officer staffing is at 14 officers, or 1.8 officers per 1,000 population, adequate for a village of this size.

Other City Services. The Village of Oregon will provide municipal services to the proposed amendment area including snow removal and refuse collection, and recycling. Refuse and recycling pickup is accomplished through contract with a private waste hauler.

Parks and Open Space. The amendment proposal includes 1.4 acres of open space in environmental corridors which will include stormwater detention facilities. Adjacent village park and open space to the north and east of the amendment area provide additional recreational areas complementary to the proposed sports facility.

6. Impacts or Effects of Proposal

Water Resource Impacts. The potential impacts of urban development in general include an increase in stormwater runoff volumes and rate, reduced groundwater recharge, and the introduction of contaminants from urban land uses to Badger Mill Creek. Some of these, notably increased pollutant loads, simply replace adverse impacts from agricultural land uses that preceded urbanization. However, the hydrologic and water quality impacts associated with urbanization have had short- and long-term adverse impacts on surface water and groundwater resources. This results from increased impervious ground cover from roadways, parking areas, and roofs; sedimentation and erosion associated with construction activities; and contaminants from landscaping, house keeping, street surfaces, and pets.

The Village of Oregon had historic flooding problems due to the natural setting and topography of the area. Since that time, the Village has updated and expanded its stormwater management ordinance and its stormwater management system within the Village to address a number of these problems. These include maximizing infiltration of the stormwater to reduce volumes and supplement the stream base flow, providing water quality treatment of the runoff, and controlling rates of runoff for all storms up to and including the 100-year event.

The application notes that the stormwater management facility for the sport center will be privately owned, managed, and operated. The *Dane County Water Quality Plan* requires

stormwater management facilities to be publicly managed (to ensure proper functioning). In cases where the facility is privately owned and operated, a perpetual, legally binding agreement between the owner and the Village is necessary. This agreement provides automatic access to the Village if the facility is not maintained, and ensures the proper maintenance and functioning of the facility through Village maintenance if needed.

The stormwater management standards proposed by the Village of Oregon would adequately mitigate the expected impacts from this development, if implemented. A stormwater review and approval condition should be added to the approval of this amendment to ensure implementation.

School System Impacts. With no residential component, this proposed amendment will not impact school system enrollments with additional students.

7. Alternatives

Alternatives to expanding the urban service area to include this location are addition to the USA in another location, or no expansion of the USA. According to the standards outlined in NR 121, and the USA expansion flexibility standards of the current *Dane County Water Quality Plan*, the Oregon Urban Service Area can expand by a maximum of 977 additional developable acres by 2030. The *Water Quality Plan* does not provide for "nogrowth" urban service areas if they fulfill the conditions, standards, and requirements of adding to the USA as outlined in the *Water Quality Plan*.

The subject property is owned by the Village of Oregon and is currently used as baseball and soccer fields. The property was originally purchased by the Village to accommodate an expansion of the wastewater treatment plant, located to the immediate west. The Village more recently surveyed the area and determined that there are other possible locations for plant expansion, and decided that the land would be better used for the development of a community recreational facility. It is adjacent to current Village park and open space lands which are used for recreational activities. The proposed development is located approximately 1.5 miles from Oregon High School and less than a mile from Rome Corners Intermediate School, and is anticipated by the Village to be utilized by area school children and provide a valuable community recreation amenity.

Proximity to the wastewater treatment plant makes this a logical location for expansion of the urban service area, and the location of complementary uses nearby make it an appropriate location for expansion for the purpose of constructing a sports facility.

8. Controversies, Comments Received, Unresolved Issues

Dane County Community Analysis and Planning will hold a public hearing on this amendment on October 3, 2006, at 4:00 p.m. at the Oregon Village Hall, 117 Spring Street, Oregon, Wisconsin. The applicant states that there has been some controversy over the sports complex proposed for the area of the requested USA amendment. No controversies related to expansion of the urban service area or water quality issues have been noted.

9. Conclusions and Staff Recommendation

The proposed amendment is consistent with the requirements of the *Dane County Water Quality Plan* concerning additions to urban service areas, and the objectives and policy goals of the *Dane County Land Use and Transportation Plan* and the *Water Quality Plan*.

The proposed stormwater facilities need to be covered by a legal, perpetual maintenance agreement and easement that allow the Village access to perform needed work if the private owner(s) fail to maintain the facilities.

Staff tentatively recommends approval of the proposed amendment based on the land uses and materials submitted by the Village of Oregon, and conditioned on the Village of Oregon pursuing the following:

- Submit detailed stormwater management plan for the amendment area for CAPD and DCLCD staff review and approval prior to land disturbing activities. The stormwater management plan should control post-development runoff rates to predevelopment rates for all storms up to and including the 100-year storm, protect the water quality of receiving streams, and prevent increased downstream flooding and erosion.
- Include all stormwater management facilities in environmental corridors.
- Meet the minimum criteria for the delineation of environmental corridors for the amendment area as part of the final site plan.

Report approved by Kamran Mesbah, Deputy Administrator/Director of Environmental Resources Planning, Dane County Community Analysis and Planning Division



Headquarters Building 816 State Street Madison, WI 53706-1482 608-264-6400 Division of Historic Preservati Office: 608-264-6500 Fax: 608-264-6504 Web: www.wisconsinhistory.c

26 September 2006

K. Mesbah Community Analysis and Planning Division City-County Building, Room 362 210 Martin Luther King Jr. Boulevard Madison, WI 53703-2558

RE: Amending the *Dane County Water Quality Plan* by Revising the Oregon Urban Service Area Boundary and Environmental Corridors within the Village of Oregon.

Dear Mr. Mesbah:

No previously recorded archaeological site has been identified near the project area. Considering the absence of previously recorded sites, the results of another survey in the vicinity, and the nature of the landscape, no on-the-ground archaeological survey of the project area is recommended.

Under Wisconsin law, Native American burial mounds, unmarked burials, and all marked and unmarked cemeteries are protected from intentional disturbance. If anyone suspects that a Native American burial mound or an unmarked or marked burial is present in an area, the Burial Sites Preservation Office should be notified. If human bone is unearthed during any phase of a project, all work must cease, and the Burial Sites Preservation Office must be contacted at 1-800-342-7834 to be in compliance with Wis. Stat. 157.70 which provides for the protection of all human burial sites. Work cannot resume until the Burial Sites Preservation Office gives permission. If you have any questions concerning the law, please contact the Coordinator of the Burial Sites Preservation Program at the Wisconsin Historical Society, Dr. Leslie Eisenberg at 608-264-6503.

If you have any questions, or if you need additional information, please feel free to contact me.

Sincerely;

John H. Broihahn State Archaeologist State Archaeology and Maritime Preservation 608-264-6496 jhbroihahn@whs.wisc.edu (asi searches/Dane/ City of Middleton 09_14_06)