Staff Analysis of Proposed Amendment to the *Dane County Land Use and Transportation Plan* and *Water Quality Plan*, Revising the Stoughton Urban Service Area Boundary and Environmental Corridors in the West End Neighborhood in the City of Stoughton and Town of Rutland

1. Applicant: City of Stoughton

2. Description of Proposal

The proposed amendment will add 192.8 acres to the Stoughton Urban Service Area on the west side of U.S. Highway 51, north of Highway 138. Over 99% of the amendment area (191.9 acres) is in the Town of Rutland. Approximately one acre is in the City of Stoughton. There are 75.6 acres of existing development in the amendment area including two rural non-farm residences on 6.9 acres, 45.6 acres of commercial businesses (including a lumber company, a garden center, and a car dealership), and 23.1 acres of existing right-of-way (primarily U.S. Highway 51 and Highway 138). Environmental corridor designation is proposed for 42.1 acres of stormwater management areas. Approximately 18 acres of the environmental corridors will be within the residential areas, in configurations to be determined as part of the design of this later phase. The amendment will add 75.1 developable acres to the Stoughton Urban Service Area.

Table 1: Stoughton Urban Service Area - West End

Requested by the City of Stoughton

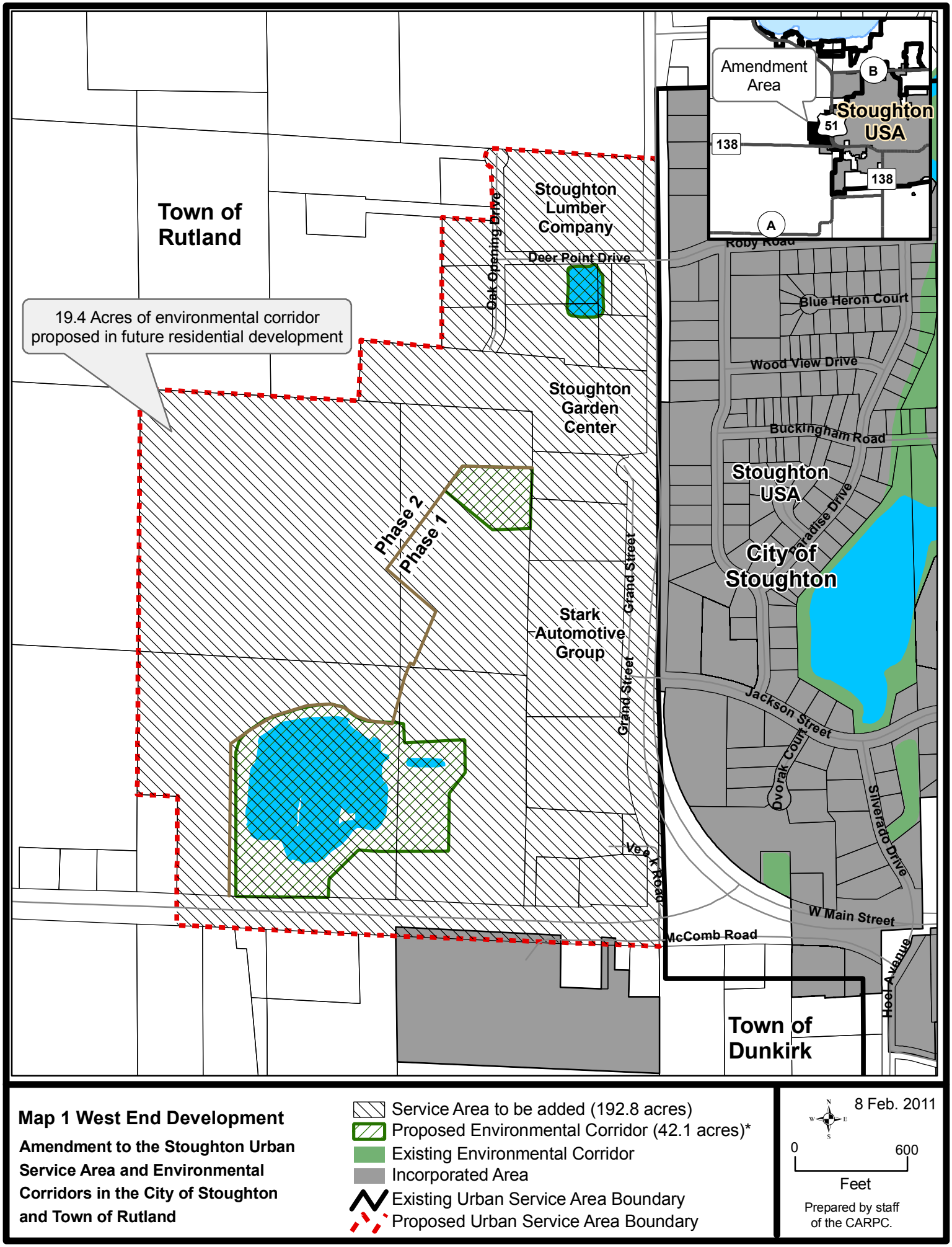
Proposed Land Use	Density (units/acre) Proposal	SUSA	Total (ac.)	% of Total	Housing Units	No. of Persons	No. of Students	Existing Develop.	Environ. Corridor*	Develop-able
Mixed SF/MF residential			38.7	20%	213	539	121	6.9		
Residential Total	**5.5**	**5.1**	**38.7**	**20%**	**213**	**539**	**121**	**6.9**		
Commercial			73.3	38%				45.6		
Street R-O-W			38.7	20%				23.1		
Stormwater Management and Wetland			42.1	22%					42.1	
Parkland			0.0	0%						
TOTAL			**192.8**	100%				**75.6**	**42.1**	**75.1**
0.9 acres in the City of Stoughton (0.5%), 191.9 acres in the Town of Rutland (99.5%)										

Source: City of Stoughton Planning Submittal and CARPC

The development plan for the amendment area calls for 73.5 acres of commercial land use, 38.7 acres of mixed residential development, 38.7 acres of street right-of-way and 42.1 acres for stormwater management and wetland protection. The majority of the existing commercial development is anticipated to remain, with approximately 5 acres to be redeveloped to accommodate extension of Jackson Street. The first phase of development of the amendment area is to include the commercial development. The WestEnd Commercial Center is proposed for approximately 30 acres at the intersection of U.S. Highway 51 and Highway 138, in the southeast corner of the amendment area. It is intended to be a community scale commercial development, providing foods and services to residents of Stoughton and the surrounding area. Initial projections call for the center to accommodate approximately 263,000 square feet for gross floor area (GFA) of commercial space.

Approximately 80% of the space is anticipated to be retail, 7% dining, and 13% office and services. Phase One also includes seven acres of higher density residential development adjacent to the commercial area. Pedestrian and bicycle path linkages are planned to connect to the commercial area the future residential neighborhood.

The balance of the residential development is planned for Phase Two and beyond. While specific plans for the residential areas have not yet been reviewed or approved by the City, the development is anticipated to include a small neighborhood service area and mixed residential development with single family lots and multifamily uses with an overall net density of approximately 5.5 units per acre. The 213 housing units proposed for the amendment area are estimated to accommodate approximately 539 persons, including an estimated 121 school-aged children. (see Table 1 and Maps 1, 2, 3 and 4)



Map 1 West End Development

Amendment to the Stoughton Urban Service Area and Environmental Corridors in the City of Stoughton and Town of Rutland

- Service Area to be added (192.8 acres)
- Proposed Environmental Corridor (42.1 acres)*
- Existing Environmental Corridor
- Incorporated Area
- Existing Urban Service Area Boundary
- Proposed Urban Service Area Boundary

8 Feb. 2011

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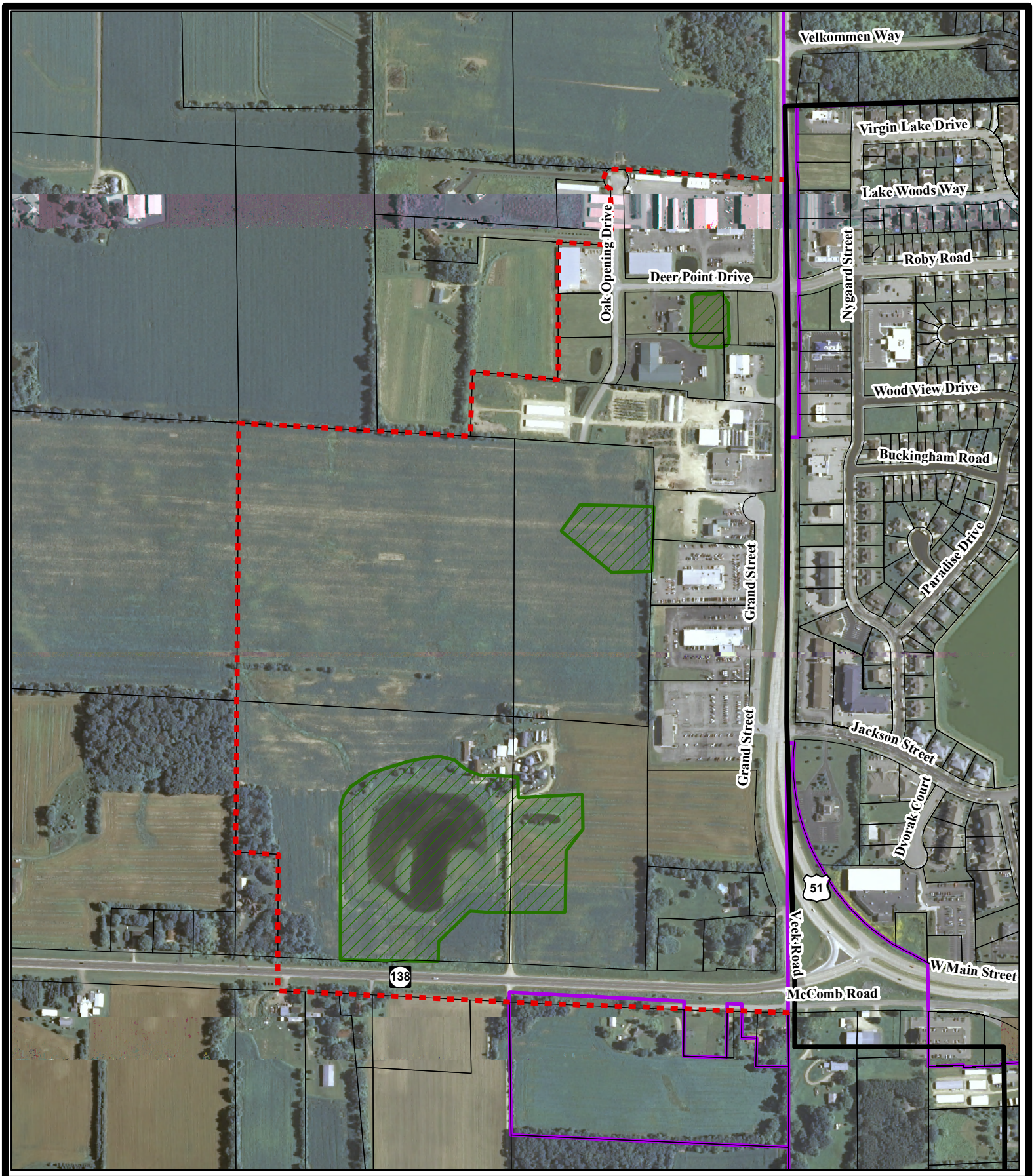
Feet

Prepared by staff of the CARPC.



Map 2 Aerial (2010)

Amendment to the Stoughton Urban Service Area and Environmental Corridors in the City of Stoughton and Town of Rutland

- Existing Service Area
- Service Expansion Boundary
- Tax Parcels
- Environmental Corridor to be Added
- Municipal Boundary

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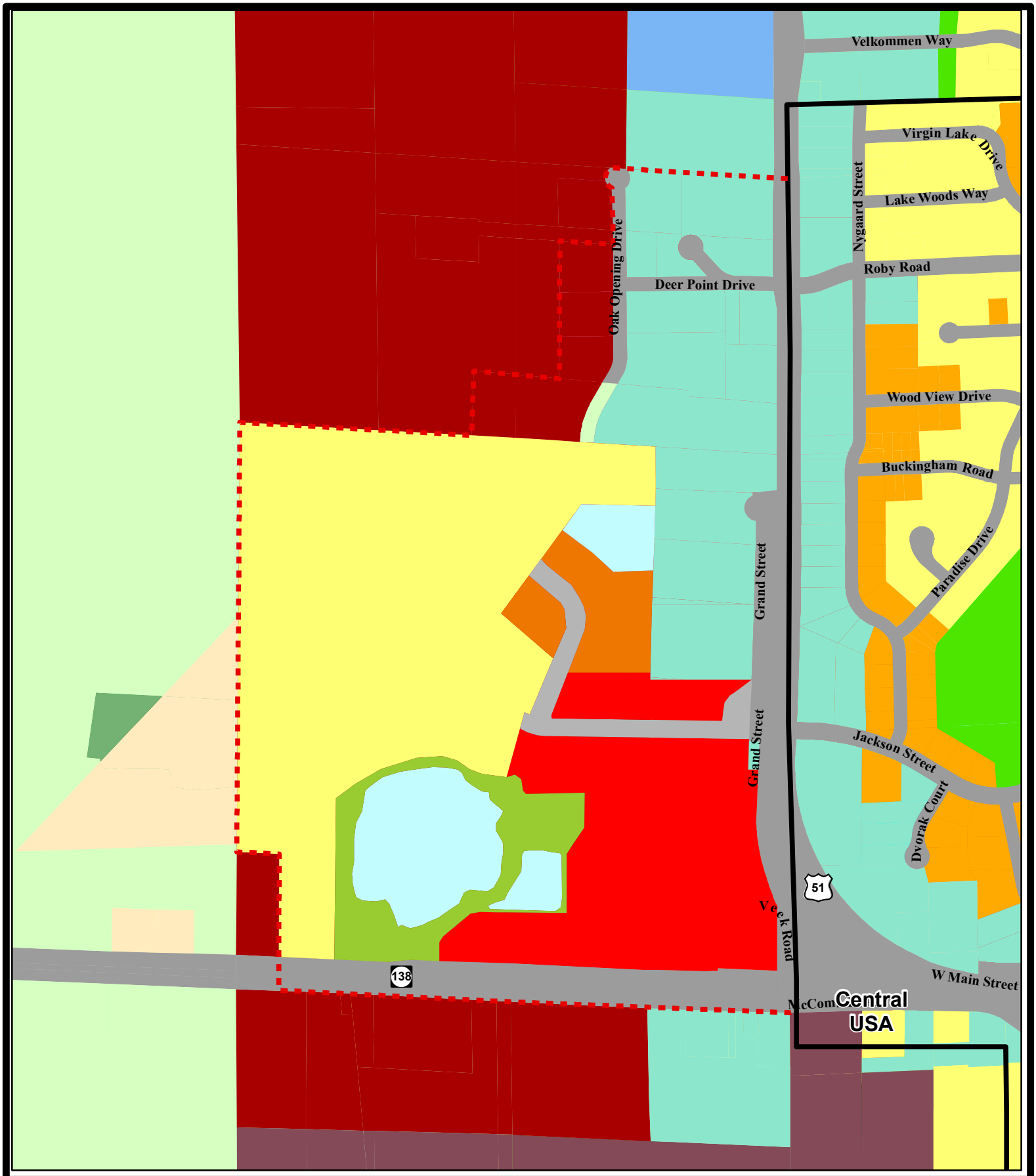

Map 3 Planned Land Use

Amendment to the Stoughton Urban Service Area and Environmental Corridors in the City of Stoughton and Town of Rutland

- Service Area To Be Added
- Current Service Area

Planned Land Use (MATPB)

- Agriculture
- Commercial Retail and Services
- Communication / Utilities
- Extractive
- High Density Residential
- Incorporated
- Industrial / Business
- Institutional / Government
- Residential
- Medium Density Residential
- Mixed Commercial / Residential
- Natural Area
- Parks / Outdoor Recreation
- Planned Development
- Rural Residential
- Transportation
- Under Construction
- Water Body
- Woodland

8 Feb. 2011

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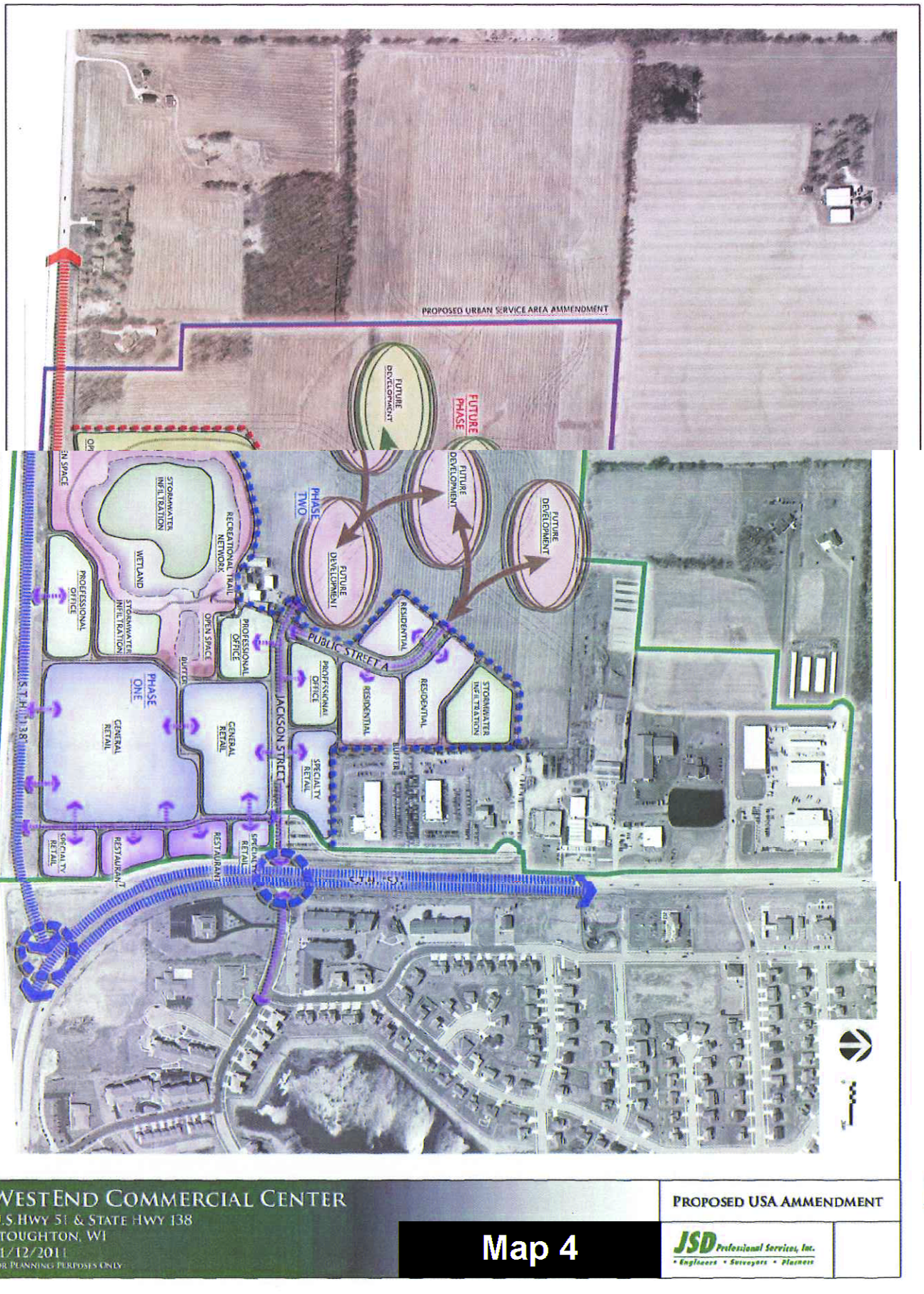
Prepared by staff of the CARPC.



WESTEND COMMERCIAL CENTER

U.S. HWY 51 & STATE HWY 138
STOUGHTON, WI
01/12/2011
FOR PLANNING PURPOSES ONLY

Map 4

PROPOSED USA AMMENDMENT

JSD Professional Services, Inc.
• Engineers • Surveyors • Planners

FINAL
02/03/11

3. Existing Environment

Natural Resources. The proposed amendment area is located in the Yahara River and Lake Kegonsa sub-watershed of the Yahara River Watershed/Lower Rock River Basin in the Rock River Basin (see Map 5). The amendment area is internally drained to a kettle wetland. The nearest stream is the Lower Yahara River, approximately 1.5 miles east of the amendment area. The Lower Yahara River is a perennial stream that drains the entire Yahara chain of lakes (see Map 5).

Wetlands

The Wisconsin Wetland Inventory identifies a 7.7 acre palustrine wetland with open, standing water (wetland 1) and an excavated pond (wetland 2) within the amendment area. In 2006, Natural Resources Consulting (NRC) conducted a wetland delineation for the amendment area. They identified an 8.7 acre isolated wet meadow associated with and surrounding a shallow open water pond (wetland 1) and a 0.5 acre isolated, depressional, farmed wetland area that surrounds a small excavated pond (wetland 2). The NRC report describes wetland 1 as a wet meadow community with areas of exposed mudflat that transitions to open water and is dominated by Pennsylvania knotweed and invasive reed canary grass. The margins of portions of the wetland have been farmed and portions have been plowed and/or herbicided. The hydrology of wetland 1 is maintained by shallow groundwater and local surface water runoff. The NRC report describes wetland 2 as an excavated pond farmed up to the pond edge with pockets of invasive reed canary grass. The hydrology of wetland 2 is also maintained by shallow groundwater and local surface water runoff.

Yahara River

The Yahara River watershed covers an area of more than 466 square miles. The Yahara River is classified as a perennial (continuous) stream and has a baseflow of 68.8 cubic feet per second (cfs), measured downstream of Stoughton. The Lower Yahara River subwatershed (the portion downstream of Lake Kegonsa) is approximately 44 square miles. The Lower Yahara River is designated as a warm water sport fish community by the WDNR for fish management purposes, under NR 102.04(3). The stream use standards are state water quality standards established to guide water quality planning under NR 121. A 22-mile segment of the Lower Yahara River from Lake Kegonsa downstream to its mouth at the Rock River has been listed as an impaired water per Section 303(d) of the Clean Water Act since 1998. Pollutants of concern are sediment/total suspended solids and total phosphorus, which have resulted in degraded habitat and low dissolved oxygen. Total Maximum Daily Loads (TMDL) for total phosphorus and total suspended solids are being developed by the DNR for the Rock River Basin, which includes the Lower Yahara River. A TMDL is a quantitative analysis of the amount of a particular pollutant (load) that a stream or lake can accept before exceeding water quality standards. Sources of the pollutants include point sources, as well as agricultural and urban non point sources.

Endangered Resources

The WDNR Bureau of Endangered Resources maintains a database representing the known occurrences of rare species and natural communities that have been recorded in the Wisconsin Natural Heritage Inventory (NHI). At the request of the applicant, the DNR has completed a NHI review for the possible presence of Threatened, Endangered, and Special Concern species in the amendment area. The DNR review determined that no further

actions need to be taken to comply with state and/or federal endangered species laws based on the project information provided, since suitable habitat is not present for the species in the historic records.

Other Natural Resource

There is approximately 2 acres of woods located in the southwestern corner of the proposed amendment area. It is the City's intent to preserve the trees to the greatest extent practicable as the development concepts are refined for this area, which is in Phase Two of the development. The quality of the small woodland is not known.

There are no known springs, floodplains or drainage-ways, within the amendment area.

Soils and Geology

The amendment area is located in the East Johnstown - Milton Moraines. The moraines once included blocks of ice left behind by the glacier. When these blocks melted, they left behind potholes or kettles, some of which remain as small ponds and wetlands. The Land Type Associations of Wisconsin classifies the surficial geology of this area as an undulating hummocky moraine and outwash plain complex with scattered lake plains. Surface elevations in the amendment area range from around 902 feet to 946 feet (see Map 6).

According to the Natural Resource Conservation Service (NRCS) Soil Survey of Dane County, the majority of soils in the amendment area are in the Dodge – St. Charles – McHenry association. These soils are well drained to moderately well drained, deep silt loams that are underlain by sandy loam glacial till. Table 2 shows detailed classification for soils in the amendment area. Table 3 shows important soil characteristics for the amendment area (see Map 7).

Historically, the depth to groundwater is over 25 feet in the majority of the amendment area, with shallower groundwater in the area of the kettle wetland. No areas of hydric soils are located within the amendment area. The Radford silt loam, Salter sandy loam, and Troxel silt loam soils have hydric inclusions. The Radford silt loam and the Salter sandy loam can have a seasonal (April to June) zone of water saturation within 3 feet of the ground surface and are classified as somewhat poorly drained. Soils with seasonal high water tables that are also classified as poorly drained generally pose limitations for buildings with basements (see Map 8). The Batavia, Salter, St. Charles, and Troxel silt loam soils can have a seasonal (April to June) zone of water saturation within 5 feet of the ground surface, but these soils are classified as well drained. Soils with seasonal high water tables that are also classified as well drained generally do not pose limitations for buildings with basements.

According to Wisconsin Geological and Natural History Survey mapping, the bedrock in the amendment area is in the Prairie du Chien Group, which is dolomite with some sandstone and shale. The depth to bedrock varies widely throughout the amendment area. Shallow bedrock between 5 and 10 feet deep is present in about 30% of the amendment area, primarily in the western and southern parts. The depth to bedrock in the remainder of the amendment area is generally 10 to 50 feet in the west and over 50 feet in the east.

Table 2
Soils Classification

Soil	% of Area	General Characteristics
Kidder Loam; KdB, KdC2, KdD2	24.9	Deep, well drained gently sloping to very steep soils on glaciated uplands. Soils have medium fertility, moderate permeability, and a moderate to very severe hazard of erosion. Poses slight to severe limitations for development due to steep slope and shrink-swell potential.
Batavia Silt Loam, gravelly substratum; BbA, BbB	18.2	Deep, well drained, nearly level to sloping soils on high benches. Soils have high fertility, moderate permeability, and a slight to moderate hazard of erosion. Poses slight to moderate limitations for development due to low bearing capacity.
St. Charles Silt Loam; ScB	8.5	Deep, well drained and moderately well drained, nearly level to moderately steep soils on glaciated uplands. Soils have high fertility, moderate permeability, and a moderate hazard of erosion. Poses slight to moderate limitations for development due to low bearing capacity.
Kegonsa Silt Loam; KeB	8.9	Moderately deep, well drained, nearly level and gently sloping soils on benches on outwash plains. Soils have medium fertility, moderate permeability, and a moderate hazard of erosion. Poses slight to moderate limitations for development due to low bearing capacity.
Dresden Silt Loam; DsC2	6.6	Moderately deep, well drained, gently sloping to steep soils on benches in stream valleys. Soils have medium fertility, moderate permeability, and a severe hazard of erosion. Poses moderate limitations for development due to steep slopes.
Salter Sandy Loam, wet; ShA	6.2	Deep, somewhat poorly drained, nearly level and gently sloping soils on low benches in old lake basins. Soils have medium fertility, moderate permeability, and a slight hazard of erosion. Poses severe limitations for development due to seasonal high water table.
Salter Silt Loam; SfB2	6.2	Moderately deep, well drained and moderately well drained, gently sloping and sloping soils on benches in old lake basins. Soils have medium fertility, moderately rapid permeability, and a moderate hazard of erosion. Poses moderate limitations for development due low to moderate bearing capacity.
McHenry Silt Loam; MdB, MdC2	4.1	Deep, well drained, gently sloping to moderately steep soils on glaciated uplands. Soils have medium fertility, moderate permeability, and a moderate to severe hazard of erosion. Poses slight to moderate limitations for development due to low bearing capacity.
Radford Silt Loam: RaA	3.7	Deep, somewhat poorly drained, nearly level and gently undulating alluvial soils in low drainageways and stream channels. Soils have high fertility, moderate permeability, and a slight hazard of erosion. Poses very severe limitations for development due to very low bearing capacity and seasonal high water table.
Warsaw Silt Loam; WrB	3.0	Well drained, gently sloping and sloping soils on benches in stream valleys. Soils have medium fertility, moderate permeability, and a moderate hazard of erosion. Poses slight to moderate limitations for development due to moderate bearing capacity.
Troxel Silt Loam; TrB	2.7	Deep, well drained and moderately well drained, gently sloping soils in draws, on fans, and in drainageways. Soils have high fertility, moderate permeability, and a moderate hazard of erosion. Poses severe limitations for development due to low bearing capacity and seasonal flooding.
Dodge and Kidder Soils; DoC2	2.1	Deep, well drained, gently sloping and sloping soils on glaciated uplands. Soils have high fertility, moderate permeability, and a very severe hazard of erosion. Poses severe limitations

Table 2
Soils Classification

Soil	% of Area	General Characteristics
		for development due to steep slopes and low bearing capacity.
Dodge Silt Loam; DnC2	0.1	Deep, well drained, gently sloping and sloping soils on glaciated uplands. Soils have high fertility, moderate permeability, and a severe hazard of erosion. Poses moderate limitations for development due to steep slopes and low bearing capacity.

Source: Dane County Soil Survey

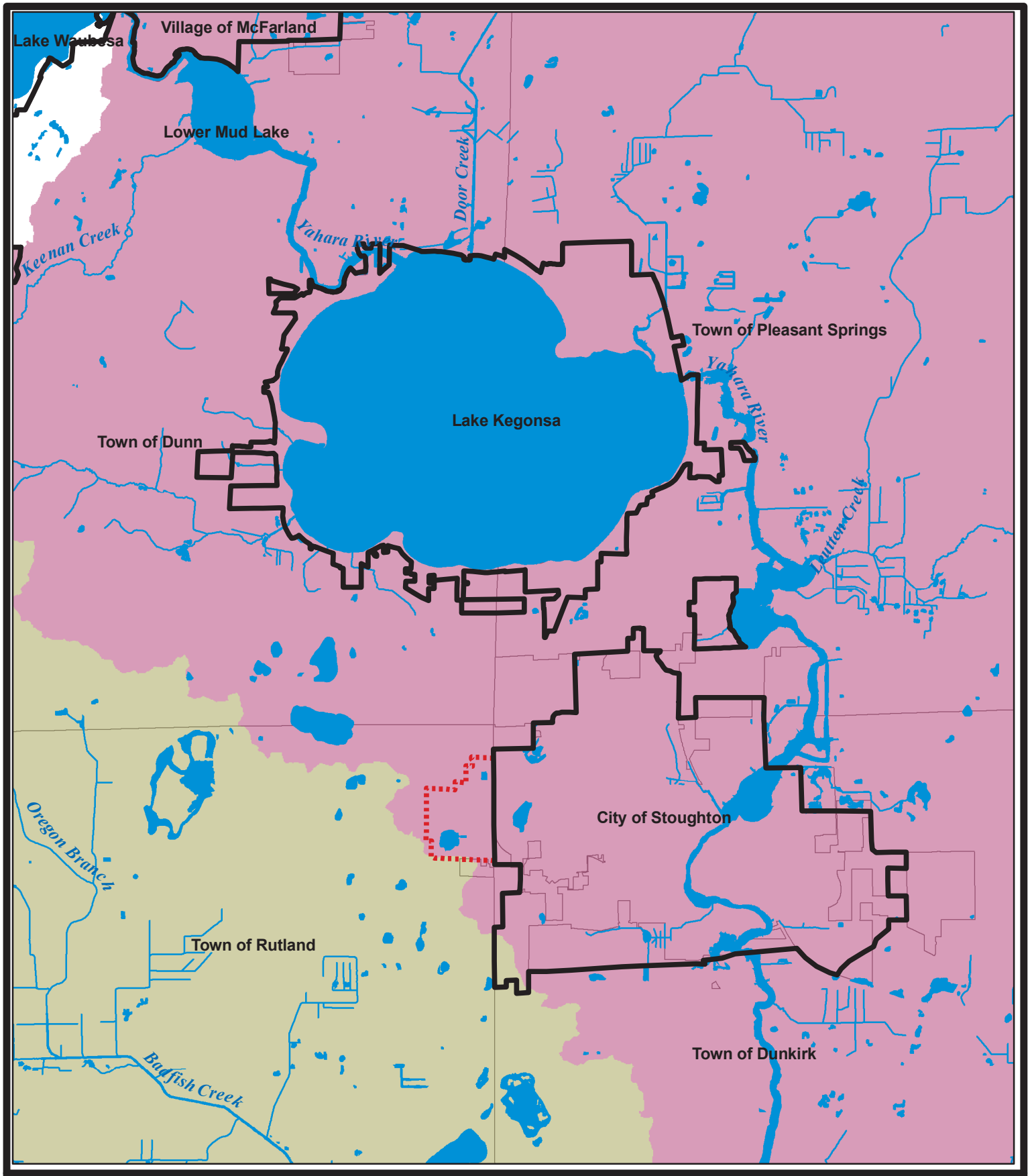
Table 3
Soils Characteristics

Characteristic	Soil Map Symbols (see Map 7)	% of Area
Prime Agricultural Soils	BbA, BbB, KdB, KeB, MdB, ScB, SfB2, TrB, WrB	48.9
Hydric Soils (Indicates Potential / Restorable Wetlands)	None	0
Soils with Seasonal High Water Table (< 5')	BbA, BbB, RaA, ScB, SfB2, ShA, TrB	45.4
Soils Associated with Steep Slopes (> 12%)	KdD2	4.0
Soils Associated with Shallow Bedrock (< 5')	None	0
Poorly Drained Soils	RaA, ShA	9.8
Best Potential for High Rates of Infiltration in Subsoils	BbA, BbB, DnC2, DoC2, DsC2, KeB, WrB	38.8

Source: Dane County Soil Survey

Groundwater Recharge

In 2009, the Wisconsin Geological and Natural History Survey published a report estimating the existing groundwater recharge rates in Dane County based on the soil water balance method. The study estimates the existing groundwater recharge rate in the majority of the amendment area to be 9 to 10 inches per year. The existing groundwater recharge rate in the northeast corner of the amendment area is estimated to be 7 to 9 inches per year.



Map 5 Yahara River Basin Subwatersheds

Amendment to the Stoughton Urban Service Area and Environmental Corridors in the City of Stoughton and Town of Rutland

- Existing Urban / Limited Service Area
- Service Expansion Boundary
- Municipal Boundary

Subwatershed Name

- Badfish Creek
- Yahara River

4 Feb. 2011

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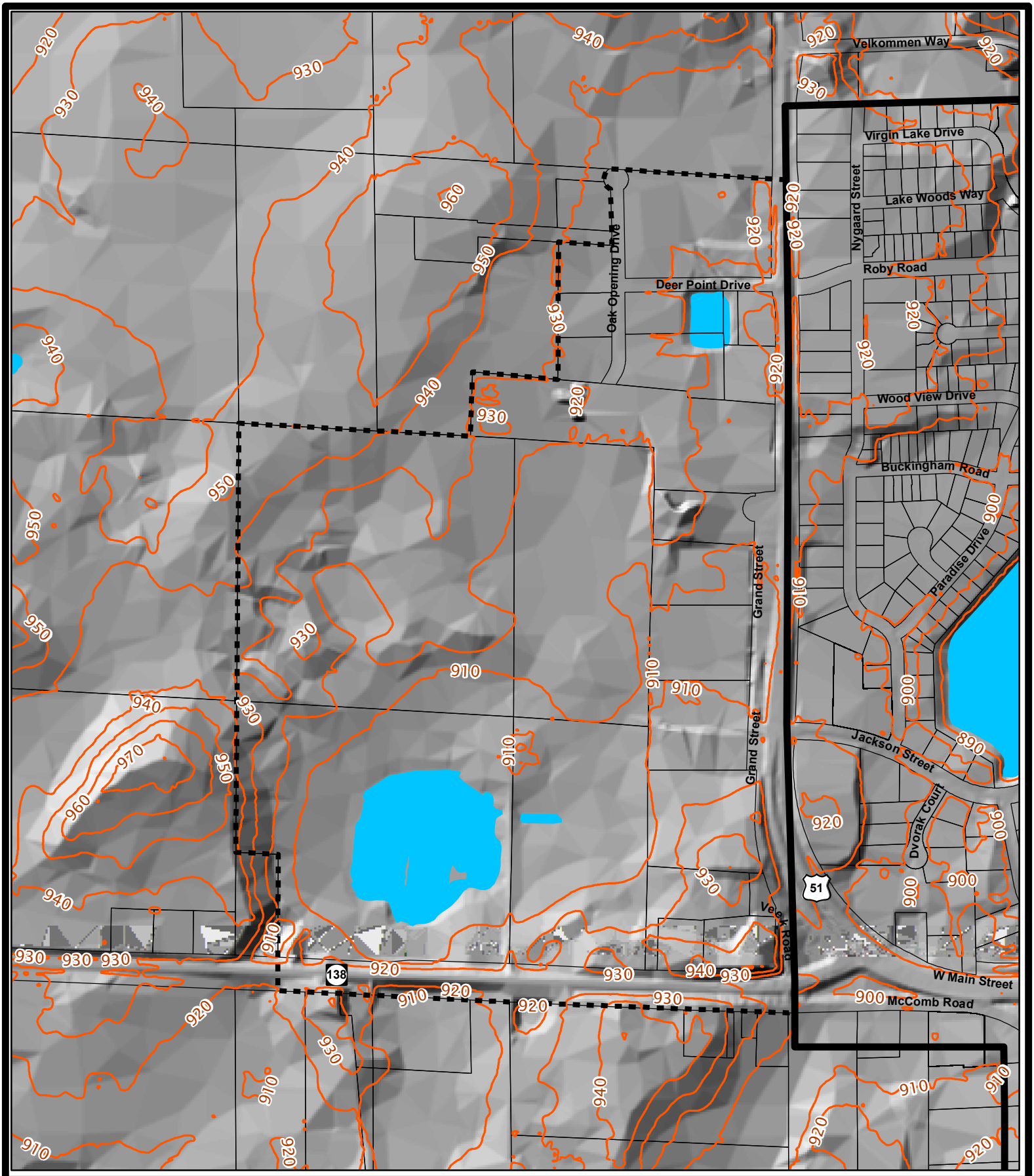
Feet

Prepared by staff of the CARPC.



Map 6 Elevation

Amendment to the Stoughton Urban Service Area and Environmental Corridors in the City of Stoughton and Town of Rutland

- Existing Service Area Boundary
- Service Expansion Boundary
- Contours (10ft) 2009
- Rivers and Streams
- Lakes and Ponds

27 Jan. 2011

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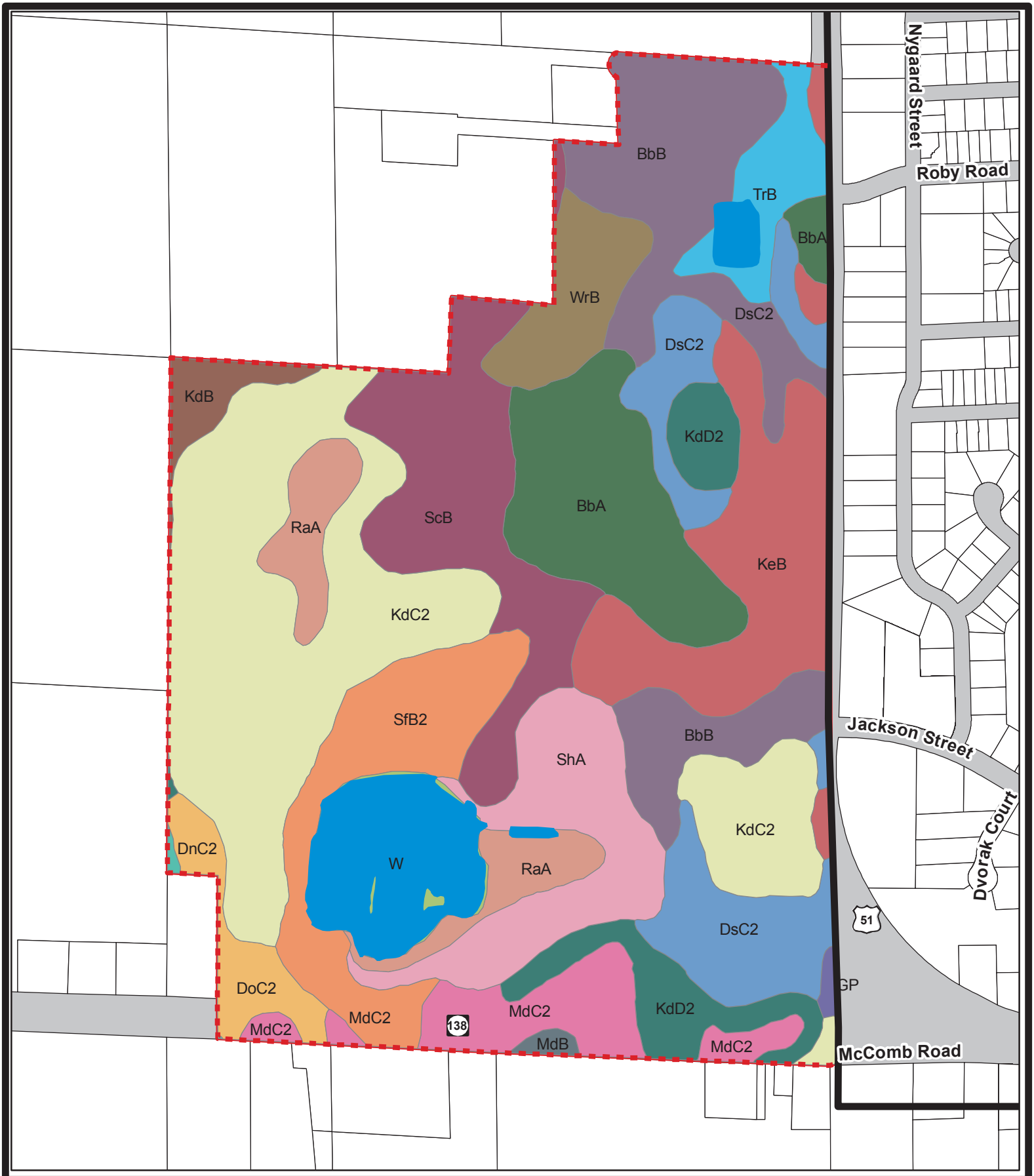
Feet

Prepared by staff of the CARPC.



Map 7 Soil Types

Amendment to the Stoughton Urban Service Area and Environmental Corridors in the City of Stoughton and Town of Rutland

Service Expansion Boundary
Existing Urban Service Area
Lake or Pond

4 Feb. 2011

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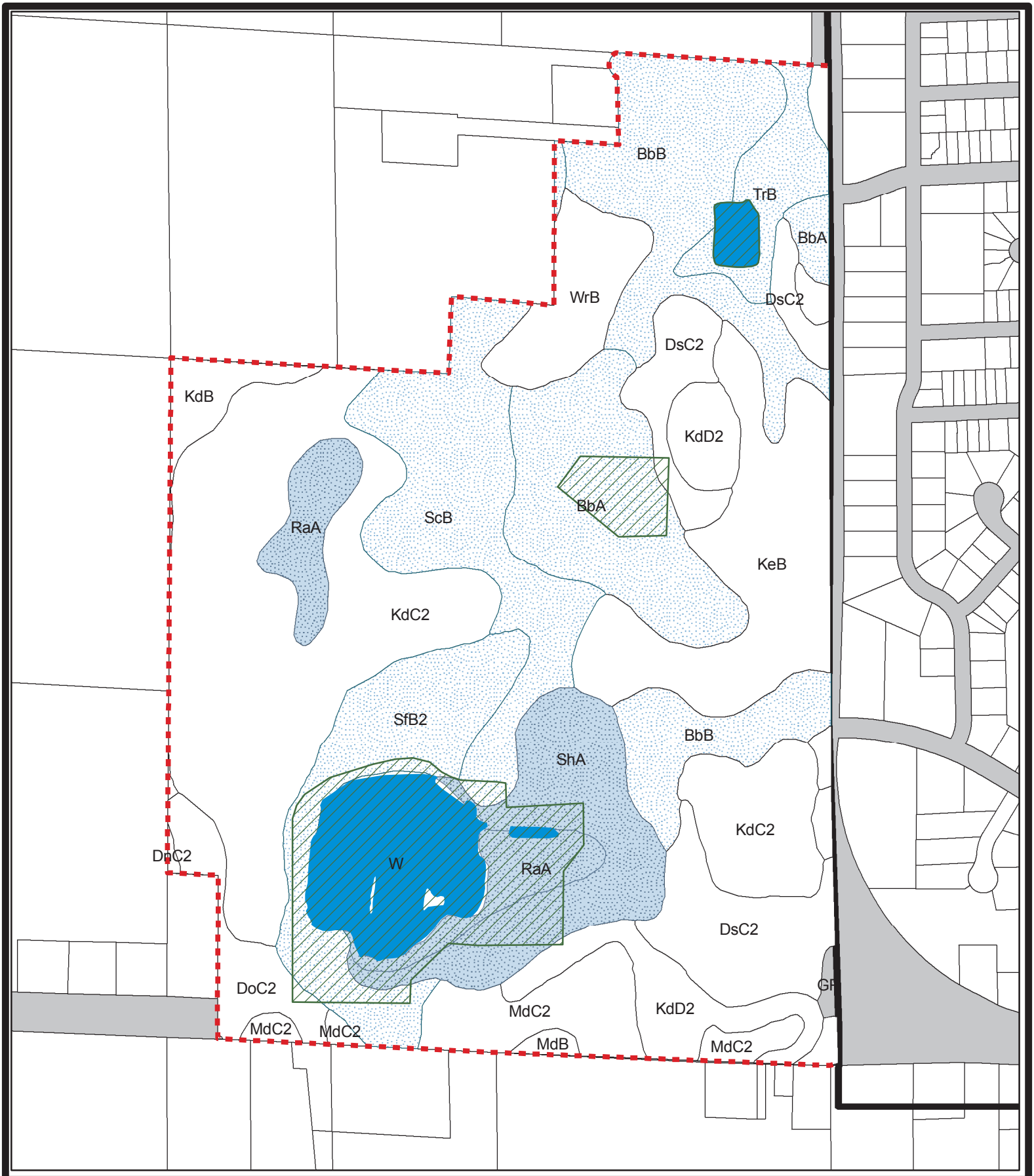

Map 8 Seasonal High Groundwater / Poorly Drained Soils

Amendment to the Stoughton Urban Service Area and Environmental Corridors in the City of Stoughton and Town of Rutland

Depth to Water

- 1 to 3
- 3 to 5
- > 5

Proposed Environmental Corridor

Drainage

- poorly drained
- well drained

4 Feb. 2011

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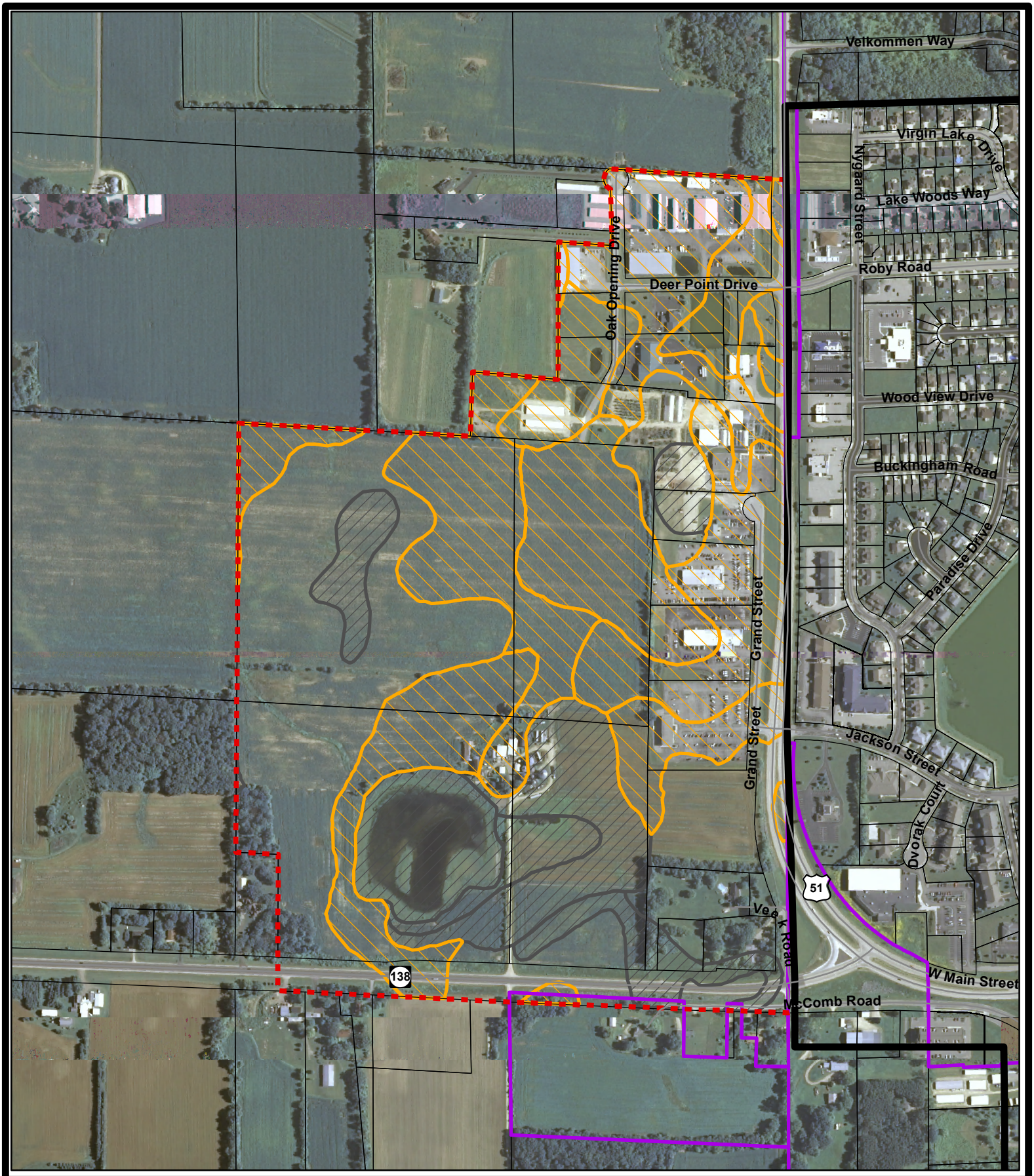
Prepared by staff of the CARPC.



Map 9 Soil Limitations

Amendment to the Stoughton Urban Service Area and Environmental Corridors in the City of Stoughton and Town of Rutland

- Existing Service Area Boundary
- Service Area to be Added
- Municipal Boundary
- Prime Farmland (94.2 acres)
- Soils with Severe Limitations to Development (36.0 acres)

4 Feb. 2011

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Feet

Prepared by staff of the CARPC.

Archaeology

The Wisconsin State Historical Society (WHS) reports that no previously recorded archaeological sites or cemeteries have been recorded for the amendment area. However, the area has never been systematically surveyed for the presence of cultural resources. The WHS requests that an on-the-ground archaeological survey be completed of the area adjacent to the kettle/wetland and associated drainages, including an area sufficient to identify sites on higher ground that may border the kettle.

Land Use. The proposed amendment area includes about 23 acres of existing right-of-way for US 51 and Highway 138 and a small, local road. There are approximately 45 acres of existing businesses along U.S. Highway 51 including a lumber company, a garden center, a plumbing business, a car dealership, and two rural non-farm residences are located on approximately 7 acres. The remainder of the amendment area is primarily in agricultural use or open land. A kettle-pond/wetland area of approximately 11 acres is in the southwest corner of the amendment area.

Land uses adjacent to the proposed amendment are as follows:

North: Open, agriculture (Town of Rutland)
South: Agriculture, rural residential (City of Stoughton, Town of Rutland)
East: Commercial, residential (City of Stoughton)
West: Agriculture, rural residential, woodlands (Town of Rutland)

Existing Transportation System. The major roadways serving the proposed amendment area are: (1) U.S. Highway (USH) 51, a north-south principal arterial that is four lanes, but transitions down to two lanes north of the amendment area; and (2) State Trunk Highway (STH) 138, a two-lane east-west minor arterial.

There is currently no bus service in Stoughton, but the City contracts with a private provider for shared-ride taxi service. Taxi service hours are 6 a.m. to 6 p.m. Monday-Friday, 6:30 a.m. to 5:30 p.m. Saturday, and 8 a.m. to 12 p.m. Sunday. The fare is $3.50 for adults and $2.25 for seniors and persons with a disability. Service is available to selected destinations outside the city for an additional cost. The Madison Area Transportation Planning Board's Rideshare Etc. Program provides ride-matching services for individuals interested in car-pooling or vanpooling. Dane County contracts with a private provider for limited group ride service for the elderly and persons with disabilities to nutrition sites, senior center activities, adult day care, and shopping. The Retired Senior Volunteer Driver Escort Program (RSVP) uses volunteer drivers to provide individual rides for the elderly, primarily to medical appointments.

USH 51 and STH 138 have rural cross sections without sidewalks. The roadways have paved shoulders that can accommodate bicyclists, but are still rated as least suitable for bicycling due to traffic volumes and speeds. Jackson Street, an east-west collector which currently ends at USH 51, has sidewalks on both sides except for the property on the southeast corner of the intersection.

4. Consistency or Conflict With Adopted Plans and Policies

The proposed USA amendment area is identified as part of the Planned Stoughton Urban Development Area in the *City of Stoughton Comprehensive Plan*, adopted May 31, 2005, and is designated for Planned Mixed Use. The *Comprehensive Plan* describes the Westside Mixed Use Area as planned for "a mixture of commercial uses designed to supply the day-to-day goods and services for residents living in both Stoughton and surrounding areas". The *Plan* recommends that the area be "planned to create compact, pedestrian-friendly clusters of complementary businesses, housing and civic uses". In December, 2010, the City of Stoughton Plan Commission adopted the WestEnd Commercial Center Master Plan in draft form (see Map 4), subject to the approval of the proposed USA amendment. The amendment application includes a finding by the City of Stoughton Common Council that the proposed expansion of the Stoughton Urban Service Area and the development planned for the WestEnd Commercial Center are consistent with the adopted *Comprehensive Plan*.

While the WestEnd Commercial Center Plan is consistent with *City of Stoughton Comprehensive Plan*, it is less clear that the single and multifamily residential development proposed for the remainder of the amendment area is consistent with the recommendations of the *Comprehensive Plan*. Specific plans have not been prepared or approved for the proposed residential development in Phase Two and the Future Development Area.

The Future Land Use Plan map in the *Town of Rutland Comprehensive Plan*, adopted March 6, 2007, calls for continuation of the existing commercial area and development of Medium Density Residential (1-acre lots) to the west of the existing commercial development. The development proposed by the City of Stoughton for the amendment area is not completely consistent with the Town Plan. The amendment proposal calls for additional commercial development along U.S. Highway 51, south of the existing commercial uses, and residential development to the west. The residential development proposed is a mixture of unit types, averaging 5.5 units per acre. The City expects an annexation request for at least the undeveloped eastern portion of the amendment area soon after approval of the USA expansion.

The proposed amendment presents no conflict with the *Dane County Park and Open Space Plan 2006-2011*.

The area proposed for service area expansion is contiguous with the existing Stoughton Urban Service Area to the east. Urban infrastructure for sewer and water is adjacent to the east, and can be extended to serve the amendment area.

Need. The need for the amendment is justified by the land required to accommodate anticipated growth in the Stoughton Urban Service Area over the required planning period. The addition of 75.1 developable acres proposed in the current amendment is well within the CARPC forecasted 2035 land demand for the Stoughton USA of 933 additional developable acres. The Stoughton Urban Service Area has been amended three times since 2000, adding approximately 90 developable acres. The Stoughton USA was last amended in 2008 when 50.5 acres (49.6 developable) were added on the south side of the city for the Nordic Ridge subdivision.

According to the City's calculations, approximately 450 acres within the City are currently open and potentially developable. However, none of the currently vacant land in the USA is

in areas designated for commercial development by the City's adopted Comprehensive Plan. The primary focus of the City in requesting the USA amendment is to provide expanded and enhanced economic development opportunities. The City plans for the amendment area to be developed over a 20 year time span, phased to open land for development and extend infrastructure into undeveloped areas when there is demand for the type and magnitude of the planned land uses and facilities. Phase One development is to consist of the WestEnd Commercial Center and associated stormwater management facilities in the southeast corner of the amendment area, including redevelopment of an approximately 5-acre portion of the existing commercial development to accommodate a planned extension of Jackson Street. Residential development is planned for Phase Two and beyond.

Redevelopment and Infill. The City of Stoughton is currently supporting three infill/redevelopment initiatives, including:

- The Railroad Corridor Redevelopment Project – A 57 acre redevelopment effort to revitalize an aging industrial area and increase housing opportunities in the near southeast side of downtown.
- Hamilton Place. A redevelopment project which will increase an existing 18 unit residential site to 35 units with a mix of condominiums and market rate apartments.
- Elven Sted. A 2.5 acre brownfield redevelopment site along the river creating 33 dwelling units.

The City has invested millions of dollars into improvements supporting the City's downtown, and recognizes the importance of maintaining a vibrant and viable downtown environment. However, the City believes that the scale and character of the downtown and the limited business areas along Stoughton's Main Street do not provide the complete range of goods and services desired by area residents. The City anticipates that the WestEnd Commercial Center proposed for the amendment area will enhance the business climate in the community as a whole by providing shopping opportunities with a broader selection of goods and services, allowing area residents to do more of their shopping close to home.

Goals and Objectives. The adopted 14 major goals of the *Dane County Land Use and Transportation Plan*, as updated in 2008, can be found on pages 1 and 2 of the Goals and Objectives update document on the CARPC website at: http://danedocs.countyofdane.com/webdocs/PDF/capd/LUTP_GandO_adopted_2.28.08.pdf.

The amendment proposal supports the following seven CARPC goals:

1. Promote the development of balanced communities throughout the county with sufficient commercial, industrial, residential, and open space land to meet the needs of existing and future residents.

   The development proposal for the amendment area calls for a mix of commercial (retail, dining, office and services) and residential (single family and multifamily) uses.

2. Promote compact urban development in new areas adjacent to existing urban areas and in the redevelopment or infill development of existing neighborhoods.

A density of 5.5 units per acre is proposed for the residential development in the amendment area. This density exceeds the current residential density in the Stoughton Urban Service Area of 5.1 units per acre.

3. Provide a full range of safe and affordable housing opportunities and choices for all residents throughout the county.

   The residential component of the amendment is proposed to include a range of housing types including single family and multifamily units, and may include housing units in a mixed use building including a small neighborhood service uses.

4. Promote an economic development strategy that will provide suitable employment opportunities and a stable and diversified economic base.

   The City of Stoughton notes in their USAA application that the primary focus of the USA addition is to expand and enhance economic development opportunities benefitting current and future residents of the City and surrounding areas. Phase One of the proposed development is projected to include 265,000 square feet (GFA) of commercial uses with an estimate of 390 to 504 potential employees. (see City of Stoughton USAA application, Exhibit 5 at: http://danedocs.countyofdane.com/webdocs/PDF/capd/2011_postings/2011_SAs/Stoughton_Mabie/submittal/USAA_FINAL_Stoughton_Mabie.pdf)

5. Promote the development of functionally and visually distinct communities encouraging compact, mixed-use neighborhoods and the efficient provision of a full range of public services.

   The City proposes compact, mixed-use development intended to provide community scale commercial development providing goods and services with pedestrian connections and places for people to gather and interact, and expanding the range of goods and services available to the residents of Stoughton within their own community.

6. Promote planning and design that preserves and restores environmental functions and protects important environmental, cultural and historic resources.

   The City's master plan for the WestEnd Commercial Center calls for the preservation and enhancement of the wetland as part of an approximately 33 acre open space and stormwater management system. The plan indicates that the condition of the kettle/wetland area will be improved with the elimination of grazing activities and restoration as part of the stormwater management facilities. The City envisions the restored kettle pond/wetland area and the proposed infiltration basins be an attractive diverse wildlife habitat linked by walking paths for recreational enjoyment.

7. Promote, conserve and restore all water resources in the region as to both quality and quantity.

   Preservation and enhancement of the kettle/wetland area will improve water quality.

The proposed amendment is neutral with regard to the following six CARPC goals:

1. Provide an integrated, all-mode transportation system which offers the efficient, effective and safe movement of people and goods, and provides mode choice wherever possible while enhancing and, where relevant, preserving the character and livability of the neighborhoods and residential areas where transportation facilities are located.

2. Encourage concentration of employment and activity centers at nodes and along transit corridors to maximize the efficiency of the existing and future transportation system.
3. Support and maintain the central urban core as the region's major activity center and seek greater diversity and vitality in that area.
4. Develop and promote a county-wide system of open space corridors as a framework to protect the natural environment and scenic values, and provide outdoor recreation opportunities.
5. Promote a sustainable capital area region. A sustainable region is one that is far-seeing enough, flexible enough, and wise enough to maintain and enhance its physical, environmental, and social systems of support.
6. The CARPC shall work with communities to update the Dane County Water Quality Plan. In addition to the elements required by NR121 of the Wisconsin Administrative Code, the Water Quality Plan shall also define areas that should be protected from development based on provisions to protect water quality as contained in NR 121 of the Wisconsin Administrative Code. The Plan shall also define areas that can be developed with measures to protect, restore or minimize degradation of water quality. (goal continues with description of FUDA plans)

The proposed amendment has mixed or offsetting effects with respect to the following CARPC goal:

1. Protect agricultural lands and limit non-farm developments in order to maintain the county as one of the nation's most productive agricultural areas.

   Prime agricultural soils comprise approximately 49 percent of the proposed amendment area (approximately 97 acres). Roughly half of the amendment area is currently in agricultural use. Although the proposed amendment will remove this area from agriculture, the Town of Rutland's Comprehensive Plan also calls for development of the undeveloped portion of the area. While the Town Plan calls for one-acre residential lots, the amendment proposal plans a more efficient use of farmland with 5.5 units per acre.

5. Proposed Urban Services

Public Water System. The Stoughton Water Utility will provide public water service to the amendment area through the extension of existing water mains. The Water Utility plans to serve Phase 1 of the development by connecting to the existing water main on the east side of US Highway 51 at Jackson Street, continuing south through the proposed WestEnd Commercial Center, and looping back to the existing water main at US Highway 51 and McComb Road. When public water service is required by the existing businesses north of Jackson Street, the Water Utility plans to interconnect this new main with the existing main on Roby Road.

Groundwater is the sole source of the water provided by the Stoughton Water Utility. The Utility operates four water supply wells which pumped an average of 1.24 million gallons per day in 2009. The water systems firm capacity (with the largest pump out of service) is 3,080 gallons per minute (gpm). The water system currently has a total storage volume of

1.3 million gallons, including 400,000 gallons of pumped ground-level storage and 900,000 gallons of elevated storage.

The City projects that the development in the proposed amendment area will require approximately 143,355 gallons per day (gpd) of potable water with an estimated peak hour demand of 301 gpm. This estimate is reasonable based on historical water use rates for similar land use types in the City of Stoughton. Strand Associates performed a water demand model calculation for the Water Utility in April 2009. These calculations projected the current flow available for the proposed amendment area to be approximately 4,400 gpm.

The Water Utility is capable of meeting the CARPC criterion of providing 2,500 gpm for 2 hours for firefighting purposes in addition to the peak water demand in the proposed amendment area with the largest well out of service.

Wastewater. The proposed sanitary sewer system will consist of a new public gravity main extending west from the existing City sanitary sewer main in Jackson Street. The existing 12" diameter sewer main in Jackson Street has a capacity of 1.47 cubic feet per second (cfs). The City estimates that the proposed amendment area, including the West End Commercial Center, residential and commercial development in the Phase Two and Future Development areas, as well as the existing properties to the north, will have an estimated average daily flow rate of 143,355 gallons per day (gpd) and a peak hour flow rate of 0.67 cfs. This estimate is reasonable based on historical wastewater generation rates for similar land use types in the City of Stoughton.

The Sanitary Sewer System Study prepared by Strand Associates (2004), reported the existing capacity of the existing 18" sanitary sewer interceptor on Jackson Street at Kings Lynn Road (approximately 2,600 feet east and downstream from the WestEnd Commercial Center) to be 4.7 cfs. The existing peak flow, including the allowance for inflow and infiltration (I/I), was 1.84 cfs. This interceptor serves existing development east of US 51 and was designed to serve development in the proposed amendment area. The City projects wastewater generation in Phase One of the proposed USAA area is projected to be 49,500 GPD or 0.19 CFS. Including an allowance for infiltration and inflow (I/I) the projected flow in the Jackson Street Interceptor at Kings Lynn Road is estimated to be 2.03 CFS – or 43% of current interceptor capacity. The collection system has adequate capacity to serve the proposed development.

Treatment

The City of Stoughton will provide wastewater treatment for the proposed amendment area. The City's wastewater treatment plant has an average annual design flow of 1.65 million gallons per day (mgd) and currently has 300,000 gpd of unutilized treatment capacity. The facility is a conventional activated sludge plant with anaerobic sludge digestion, and land spreading of biosolids. The facility is in compliance with its discharge permit, and has adequate capacity to treat wastewater generated by the proposed development.

Stormwater Management System. The preliminary stormwater management plan for the amendment area includes oil and grease control and infiltration facilities on individual lots. Runoff from individual lots and streets will flow via storm sewer to a wet detention basin for sediment and peak flow control prior to discharging to the wetland. Water levels in the wetland will be maintained by pumping excess runoff volumes to a central constructed wet

prairie infiltration facility. A pump that discharges to an existing detention facility and ultimately discharges to the Yahara River will provide an emergency outlet in the event of system failure or rain events in excess of the 100-year 24-hour storm.

Performance Standards

The City of Stoughton proposes stormwater management performance measures to meet or exceed standards required by the State of Wisconsin (NR 151), Dane County (Chapter 14), and City of Stoughton (Chapter 10 Article IV) stormwater regulations, as follows:

1. Post-construction sediment control prior to discharge to the wetland (reduce total suspended solids by at least 80%) for the average annual rainfall (State of Wisconsin standard) and the 1-year 24-hour design storm (Dane County and City of Stoughton standard).

2. Post-construction peak runoff rate control for the 1-, 2-, 10-, and 100-year, 24-hour design storms to "pre-development" peak runoff rates prior to discharge to the wetland. This is a more stringent standard than either the Dane County Ordinance or NR 151, which require a smaller range of design storms.

3. Post-development stay-on volume of at least 90% of pre-development stay-on volume prior to discharge to the wetland. This is more protective than the stay-on standard currently required by State of Wisconsin, and Dane County regulations.

4. Control the wetland water level bounce for the 1-, 2-, and 10-year, 24-hour design storms to within 0.5 feet of existing conditions.

5. Provide a maximum drawdown time within the kettle wetland of 24-hours for the 1- and 2-year, 24-hour storms and 72-hours for the 10- and 100-year, 24-hour storms.

6. Post-development stay-on volume of 100% of pre-development stay-on volume for design storms up to and including the 100-year, 24-hour event before discharge from the amendment area.

7. Construction site erosion control with the installation of best management practices prior to land disturbing activities in accordance with state and local ordinances.

8. Oil and grease control from parking lots in accordance with local ordinances.

The preliminary stormwater management plan for Phase One of the amendment area determined that it is feasible to meet these performance standards with the proposed best management practices.

Environmental Corridors. The amendment proposal includes 42.1 acres of Environmental Corridors. This includes approximately 22.7 acres of Environmental Corridors in Phase One for wetlands and the proposed stormwater management facilities. An additional 19.4 acres of the environmental corridors will be for stormwater management facilities within the future residential areas, in configurations not yet determined.

The City's master plan for the WestEnd Commercial Center calls for the preservation and enhancement of the wetland as part of an approximately 33 acre open space and

stormwater management system. The plan indicates that the condition of the kettle/wetland area will be improved with the elimination of grazing activities and restoration as part of the stormwater management facilities. The City envisions the restored kettle pond/wetland area and the proposed infiltration basins be an attractive diverse wildlife habitat linked by walking paths for recreational enjoyment.

Public Safety Services. The City of Stoughton Police Department provides police protection services to the City of Stoughton and will provide services to the lands of the amendment area as they are annexed to the City in the future. Lands in the Town of Rutland will continue to receive services from the Dane County Sheriff's Department.

The Stoughton Police Department is headquartered at 321 S. 4th Street, approximately 1.8 miles from the proposed amendment. The City Police Department consists of 20 sworn police officers, or about 1.5 officers per 1,000 residents based on the City's estimated January 1, 2010 population of 12,820. This level of service exceeds the CARPC guideline of one officer per 1,000 residents.

The Stoughton Fire Department provides fire protection services for the City of Stoughton and also contracts to provide protection for the Town of Rutland. The Fire Station is located at 401 E. Main Street, approximately 1.8 miles from the amendment area, and response time to the amendment area is estimated to be approximately 8 minutes. The Department includes 3 full time and 39 volunteer firefighters. Four firefighters also have Emergency Medical Technician (EMT) certification. The Department's ISO rating of 3 is within the CARPC fire protection guidelines.

Emergency medical services are provided to the City of Stoughton and the Town of Rutland by the Stoughton Area Emergency Medical Service, an all volunteer force of 43 certified EMTs. The EMS station is located at 516 S. 4th Street, approximately 1.8 miles from the amendment area. Estimated response time to the area is eight minutes.

Streets and Sanitation Services. The City of Stoughton will provide a full range of municipal services to areas within amendment area as they annex to the city. Services include street maintenance services and refuse collection and recycling. Commercial uses must contract for private refuse collection and recycling.

School and Park Facilities. The amendment area is entirely within the Stoughton Area School District. The schools currently serving the area are Fox Prairie Elementary School, located 0.6 miles away, River Bluff Middle School, 1.6 miles away, and Stoughton High School, 0.7 miles away.

Virgin Lake Park, located one-quarter mile from the amendment area, is the nearest existing neighborhood park. It is anticipated that residential areas in the later phases of development of the amendment area will include open space and park facilities to serve the future population.

Urban Transportation System. The conceptual plan for the area proposes to extend Jackson Street, a collector, west of USH 51 through the planned commercial center. Hults Road is planned to be realigned to the west away from the USH 51/Jackson Street intersection and extended south to STH 138. The submittal notes that intersection improvements are anticipated to be needed at USH 51/Jackson Street and Jackson

Street/Hults Road as part of first phase development of the commercial center. The developer is in the process of preparing a traffic impact analysis for the commercial center to determine the design of the intersections and any other needed capacity improvements. The area to STH 138 just west of the stormwater facility/open space area. It would intersect Jackson Street extended. A multi-use path is proposed around the wetland and stormwater management area west of the commercial center that would connect to a network of internal streets/drives and sidewalks through the center. Jackson Street will include sidewalks along both sides of the street.

The Wisconsin Department of Transportation (WisDOT) is in the process of completing an environmental impact study of the USH 51 corridor from the Beltline south through the City of Stoughton, which will make recommendations for short-term and long-term improvements to the roadway corridor. Among the more immediate short-term improvement needs already identified is a traffic signal at USH 51 and Roby Road/Deer Point Drive north of the amendment area, however due to limits on funding of stand-alone signals the project is not programmed.

6. Impacts or Effects of Proposal

Surface Water Impacts. Development typically creates impervious surfaces (i.e., streets, parking areas, and roofs) and alters the natural drainage system (e.g., natural swales are replaced by storm sewers) resulting in increased stormwater runoff rates and volumes, as well as reduced infiltration. Development can also cause substantial short-term soil erosion and off-site siltation from construction activities. Scientific research has well documented that without effective mitigation measures, the potential impacts of development on receiving water bodies can include the following:

- Flashier stream flows (i.e., sudden higher peaks)
- Increased frequency and duration of bankfull flows
- Reduced groundwater recharge and stream base flow
- Greater fluctuations in water levels in wetlands
- Increased frequency, level (i.e., elevation), and duration of flooding
- Additional nutrients and urban contaminants entering the receiving water bodies
- Geomorphic changes in receiving streams and wetlands

Natural drainage systems attempt to adapt to the dominant flow conditions. In the absence of mitigation measures, the frequency of bank-full events often increases with urbanization, and the stream attempts to enlarge its cross section to reach a new equilibrium with the increased channel forming flows. Higher flow velocities and volumes increase the erosive force in a channel, which alters streambed and bank stability. This can result in channel incision, bank undercutting, increased bank erosion, and increased sediment transport. The results are often wider, straighter, sediment laden streams, greater water level fluctuations, loss of riparian cover, and degradation of shoreland and aquatic habitat.

Stormwater runoff carries soil particles, nutrients, and contaminants that can change the ecological balance of the receiving water body. Changes in the volume, rate, frequency, or duration of stormwater entering or discharging from the water body can also change the ecological integrity. Alterations to the ecological integrity of a wetland often result in changes in the functional capacity, fish and wildlife habitat, replacement of native

vegetation with invasive and disturbance-tolerant plant species, and/or other impacts to the wetland's functions and values.

If left unmanaged, these changes in hydrology combined with increased urban pollutant loading, can have a dramatic effect on the aquatic ecosystem of streams. It is important to realize that flow is a major determinant of the physical habitat in a stream, which in turn determines the biotic composition of stream communities. A growing body of literature documents that channel geomorphology, habitat structure, and complexity are determined by prevailing flow conditions, which in turn determine the biota that can inhabit the area. This is true for the fish as well as the aquatic insects upon which they feed. Studies of streams affected by urbanization have shown that fish populations either disappear or become dominated by rough fish that can tolerate the associated lower water quality levels.

The City proposes to mitigate the urban non-point source impacts of the proposed development by implementing various stormwater best management practices that are designed and constructed in accordance with performance standards that meet or exceed current minimum standards. This will mitigate the likely impacts of the proposed development on the receiving waters and wetland.

Groundwater Impacts. As natural areas are converted to urban development the ground/surface water balance in streams and wetlands can shift from a groundwater-dominated system to one dominated more and more by surface water runoff, with subsequent reductions in stream quality and transitions to more tolerant biological communities. Maintaining pre-development groundwater recharge helps to maintain baseflow and mitigate this impact. CARPC staff recommends maintaining the pre-development annual recharge rate of 9 inches per year for this area as estimated by the Wisconsin Geological and Natural History Survey. Modeling has shown that this criterion is generally met when the volume control standard is achieved by infiltration practices.

Transportation System Impacts. The amendment area is proposed for 31 acres of new commercial development (Phase 1) and 39.5 acres of residential development (Phase 2) consisting of a mix of single-family and multi-family housing with an estimated total of 213 units. The commercial development is proposed to consist of 212,000 square feet of retail development, a restaurant, and 30,000 square feet of office space with an estimated total of 400-500 employees. The residential development is anticipated to include a small neighborhood service area.

When fully developed, the amendment area could be expected to generate an estimated 13,600 one-way vehicle trips on an average weekday after deducting for pass-by trips to the commercial uses and trips internal to the area.

In 2009, the average daily traffic (ADT) volume on U.S. Highway (USH) 51 was 9,200 north of State Trunk Highway (STH) 138 and 13,100 south of STH 138. The 2006 ADT volume on STH 138 west of USH 51 was 8,900. A traffic count is not available for 2009.

Traffic volumes on USH 51 north of Jackson Street where it transitions down to two lanes indicate that it is experiencing congestion during peak periods. Traffic volumes on STH 138 indicate it is also beginning to experience congestion during peak periods. The commercial center is anticipated to add around 12,000 additional vehicle trips per weekday, mostly on USH 51. As noted in the application, this will certainly require improvements to the USH

51/Jackson Street intersection, including a signal, turn lanes, and pedestrian facilities to allow for safe crossing of USH 51. Improvements will also be needed to the Jackson Street/Hults Road and Hults Road extended/STH138 intersections as well as the STH 138/Oak Opening Drive extended intersection when the second phase of development occurs. Additional capacity improvements, including through lane travel capacity on USH 51 north of Jackson Street, will likely be needed in the future as the amendment area develops and area and regional traffic increases.

School System Impacts. The residential component proposed for the later phases of development of the amendment area would add an estimated 121 students to the Stoughton Area School District. The District has experienced enrollment decline of 7% since the high of 3,663 students in the 2002-03 school year. Stoughton school enrollment declined every year but one since 2002-03. Enrollment in the 2009-10 school year was 3,392 students, 271 fewer than the 2002-03 peak. The Stoughton Area School District is one of three of the 15 suburban Dane County school districts experiencing a net decline in enrollment over the seven year period. In light of the recent declines in enrollment, the Stoughton Area School District is likely to have sufficient capacity to absorb the additional students and should be positively impacted by the new enrollments.

7. Alternatives

The projected population growth warrants expansion of the Stoughton Urban Service Area, and the City has identified the amendment area as a potential growth area. Although potential alternative locations for expansion of the Stoughton USA exist, the proposed amendment area is adjacent to the existing service area and the City has identified the commercial portion of this location as having near term potential for development. The proposed expansion of the service area also provides the opportunity for existing commercial development to be served by public sewer and water services, although the City does not currently provide such services to parcels that are not in the city.

A possible alternative is to add only the planned WestEnd Commercial Area to the Urban Service Area. This alternative would keep the commercial area on private services in the Town of Rutland, and allow the undeveloped areas to be developed in the future as low density residential home sites served by on-site wastewater systems in accordance with the Town's adopted plan. This alternative would be inconsistent with the City's plans for the area and would result in less efficient use of the land in serving future growth of the area. It is uncertain if this approach would prevent the annexation of existing commercial parcels, since new development generally encourages more intense development of adjacent existing developed parcels, promoting annexation to receive city services.

A more collaborative and harmonious approach would be for the City and the Town to create a joint planning and development area which includes the existing development, and jointly develop a clear framework for decision-making and revenue-sharing. Revenue sharing can also be considered if an agreement can be reached that prevents the annexation of existing commercial parcels for a defined time period.

8. Controversies, Comments Received, Unresolved Issues

A public hearing before the Capital Area Regional Planning Commission is scheduled for March 10, 2011. At the time of this report, no comments have been received.

The City of Stoughton made a presentation of this USA amendment request to the CARPC on January 13, 2011. At that time, CARPC commissioners raised concerns about the impacts of the amendment on the Town of Rutland, and expressed a desire that there be improved communications and cooperation between the City and Town. CARPC staff and commissioners have offered to facilitate meetings between the City and the Town.

The City of Stoughton reports that the Town of Rutland wants the proposed USAA area to remain in the town, and would like the currently undeveloped areas to develop as low density, residential home sites served by on-site systems in accordance with the Town's adopted plan. (The Town of Rutland has not commented directly to the CARPC on the amendment at the time of this report.) The City has expressed willingness to meet with CARPC staff and the Town to identify and discuss issues of mutual concern. However, the City believes that the addition of the area, including the existing commercial development, is appropriate for good planning and does not want discussions to delay consideration and action on the USAA application. (see USAA application, p. 8-9, http://danedocs.countyofdane.com/webdocs/PDF/capd/2011_postings/2011_SAs/Stoughton_Mabie/submittal/USAA_FINAL_Stoughton_Mabie.pdf)

9. Conclusions and Staff Recommendation

The proposed amendment provides the full range of urban services and is well within the twenty-year service area land demand for the Stoughton Urban Service Area. The area proposed for service area expansion abuts the existing service area, and is adjacent to existing urban services. The proposed development fulfills regional goals of promoting the development of balanced communities, promoting compact development, promoting functionally and visually distinct communities encouraging mixed-use neighborhoods, providing diverse housing options, providing employment opportunities and a diversified economic base, and restoring water quality and natural resources.

Prime agricultural soils comprise approximately 49 percent of the proposed amendment area (approximately 97 acres). The area has been identified by the City of Stoughton as a planned growth area.

The City of Stoughton has proposed performance standards for the amendment area that are more stringent in some areas than those in the City's existing stormwater ordinance, NR 151, and the Dane County Chapter 14. The proposed amendment includes peak flow rate control and volume control for a wide range (1-yr, 24-hr to 100-yr, 24-hr) of design storms. This standard will mitigate the potential adverse impacts from the proposed development, due to development in a closed basin. The City of Stoughton has also proposed stormwater management standards to protect the wetland hydrology by maintaining a suitable wetland water level bounce and duration of inundation in addition to requiring sediment, peak flow rate, and volume control of stormwater runoff prior to discharge to the wetland.

Infiltration and groundwater recharge is necessary to maintain base flow discharge to downstream water resources. Staff recommends a performance standard based on the WGNHS study pre-development groundwater recharge rates for the amendment area of 9 inches per year. Experience has shown that this criterion is generally met when the volume control standard is achieved by infiltration practices.

The amendment area includes Radford silt loam and Salter wet sandy loam soils, which have hydric inclusions and are somewhat poorly drained. These soils can have limited suitability for buildings with basements due to their seasonal high water table (zone of soil saturation) that can cause problems with groundwater induced flooding. Only some of the area with these soils types has been included in the environmental corridors (see Map 8). Staff recommends that on-site soils investigations in accordance with COMM 85.60 be conducted in areas with these soil classifications to determine the actual extent of seasonal high groundwater in the amendment areas and potential problem areas. Staff also recommends that in confirmed problem areas the City require that the lowest level of any structure must be built at a minimum of one foot above the groundwater table and that the restriction is recorded on the plat. This type of restriction is being used in several communities in the region and in some counties in Wisconsin, and will reduce the potential for basement wetness and flooding, as well as its associated stormwater impacts.

CARPC staff recommends approval of this amendment, based on the land uses, services, and mitigation standards proposed by the City of Stoughton. The City of Stoughton agrees to pursue the following:

1. Submit a detailed stormwater management plan for CARPC and DCL&WCD staff review and approval prior to any land disturbing activities in the amendment area. The stormwater management plan will include the following:

    a. Install stormwater and erosion control practices prior to other land disturbing activities. Protect infiltration practices from compaction and sedimentation during land disturbing activities.

    b. Control peak rates of runoff for the 1, 2, 10, and 100-year 24-hour design storms to "pre-development" levels (i.e. maximum Runoff Curve Number = 68 for agricultural land use and hydrologic soil group B) prior to discharge to the wetland.

    c. Maintain the post development stay-on volume to at least 90% of the pre-development stay-on volume for the one-year average annual rainfall period, as defined by WDNR prior to discharge to the wetland.

    d. Maintain the post development stay-on volume of 100% of the pre-development stay-on volume for up to and including the 100-year 24-hour design storm prior to discharge from the amendment area to maintain the current closed basin hydrology.

    e. Provide an emergency outlet to safely pass the 100-year 24-hour storm in the event of system failure.

    f. Maintain suitable wetland hydrology by controlling the wetland water level bounce for the 1-, 2-, and 10-year, 24-hour design storms to within 0.5 feet of existing conditions and providing a maximum drawdown time within the wetland of 24-hours for the 1- and 2-year, 24-hour storms and 72-hours for the 10- and 100-year, 24-hour storms.

    g. Maintain pre-development groundwater recharge rates from the Wisconsin Geological and Natural History Survey's 2009 report, *Groundwater Recharge in*

Dane County, Wisconsin, Estimated by a GIS-Based Water-Balance Model (an average of 9 in./yr. for the amendment area) or by a site specific analysis.

h. At least 80% sediment control in accordance with existing ordinances, prior to discharge to the wetland.

i. Oil and grease control from parking lots in accordance with local ordinances.

j. Stormwater practices should have perpetual legal maintenance agreements with the City, to require the City to maintain facilities if owners fail to do so.

2. Restrict the lowest level of any structure to a minimum of one foot above the seasonal high water table, based on site soil evaluations conducted in accordance with COMM 85.60. The on site soil evaluations will be conducted where ever the NRCS Soil Survey of Dane County indicate seasonal zone of water saturation within 5 feet of the ground surface and hydric, very poorly drained, poorly drained, or somewhat poorly drained soils.

3. All stormwater management facilities will be designated as environmental corridors, and stormwater easements will be provide for the facilities. Final environmental corridor delineations will be based on CARPC criteria and wetland delineations.

It is also recommended that the City of Stoughton pursue the following:

1. Work with interested stakeholders to develop and implement a wetland restoration plan for the wetlands within the amendment area.

2. Require a field archaeological survey to be completed by a qualified archaeologist of the area adjacent to the kettle/wetland and associated drainages. The archaeological investigations should include an area sufficient to identify sites on higher ground that may border the kettle. Please send three copies of the report to CARPC, which will forward two copies to the office of the State Archaeologist at the Wisconsin State Historical Society.

3. Require an inventory by a certified arborist of the two acres of woods located in the southwestern corner of the proposed amendment area to evaluate the quality, function, and sensitivity of the woodland. Consider requiring a tree protection plan if the quality of the trees and the function of the woodland warrant such an action.

4. Work closely with the developers to carefully design the interior street/driveway and sidewalk layout of the commercial center to reduce pedestrian/bicyclist and motor vehicle conflicts. Sidewalks should be provided along both sides of Hults Road extended and all interior streets/drives. Sidewalks should also be required on the north side of STH 138 in conjunction with development of the commercial center.

5. The conceptual plan shows multiple driveway access points to the commercial center from STH 138. Access to this arterial roadway should be limited to one or two streets with no driveway access to maintain good traffic flow and safety in the future.

6. The extension south of Oak Opening Drive should be officially mapped to ensure that this important future north-south collector street be constructed. Both Jackson Street and Oak Opening Drive should be constructed with bike lanes.

7. Work with WisDOT to plan for and address short- and long-term pedestrian and bicyclist facility and safety needs in the USH 51 and STH 138 corridors in the vicinity of the amendment area as the City's west side develops. Given that the WestEnd commercial center is being designed to "supply day-to-day goods and services for residents", safe pedestrian and bicycle access to the center from the existing neighborhoods east of USH 51 and future surrounding neighborhoods is important. Consideration should be given to converting these state roadways to urban cross-sections when they are reconstructed in the future.

8. Consider extension of the trail system to connect to the City's existing trail system and recreation facilities nearby.

9. Meet with the Town of Rutland to identify and discuss issues of mutual concern. CARPC staff and commissioners are available to assist in this endeavor.