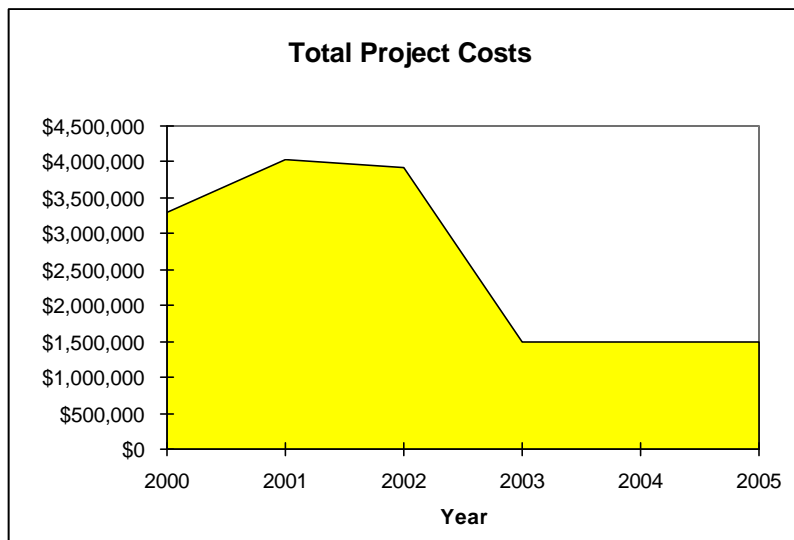


**2000
Capital Budget
Capital Improvement Program**

Agency Name: **Engineering - Stormwater**

Agency Number: **53**

Project Name	Capital Budget	Future Year Estimates				
	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>
1 Accompanying Storm Sewer	\$ 450,000	\$ 450,000	\$ 450,000	\$ 450,000	\$ 450,000	\$ 450,000
2 Greenway Improvements	100,000	150,000	150,000	150,000	150,000	150,000
3 Priority Watershed Projects	994,175	0	0	0	0	0
4 EPA / NPDES Permit	75,000	85,000	85,000	85,000	85,000	85,000
5 Stormwater Basins	300,000	0	0	0	0	0
6 Odana Pond Dredging	0	200,000	100,000	100,000	100,000	100,000
7 Inter-Municipal Storm Sewers	50,000	2,240,000	2,240,000	50,000	50,000	50,000
8 Tiedemann Pond Pump Station	25,000	25,000	25,000	25,000	25,000	25,000
9 Storm Box Replacement / Cleaning	100,000	100,000	100,000	100,000	100,000	100,000
10 Major Roadway Culvert Crossings	0	100,000	100,000	100,000	100,000	100,000
11 Assessable Drainage Improvements	175,000	175,000	175,000	175,000	175,000	175,000
12 Shorelines	150,000	150,000	150,000	150,000	150,000	150,000
13 Local Drainage Problems	100,000	100,000	100,000	100,000	100,000	100,000
14 Knollwood / Arboretum Storm Sewer	70,000	0	0	0	0	0
15 Hoard Street Sewer Replacements	325,000	250,000	250,000	0	0	0
16 Madison-Sun Prairie Detention Pond	375,000	0	0	0	0	0
Total	\$ 3,289,175	\$ 4,025,000	\$ 3,925,000	\$ 1,485,000	\$ 1,485,000	\$ 1,485,000



**2000
Capital Budget
Expenditure Categories and Funding Sources**

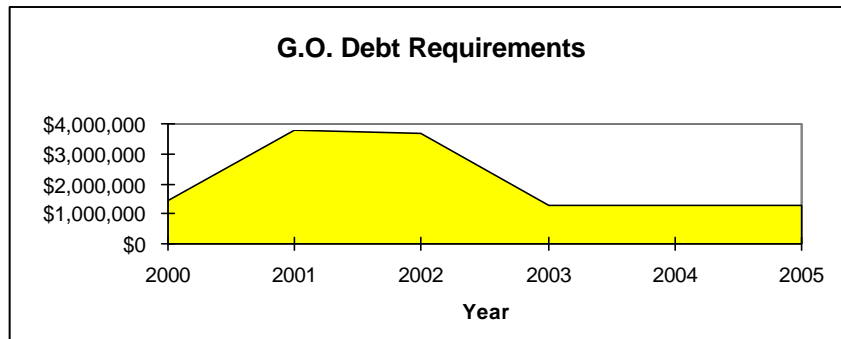
Agency Name: **Engineering - Stormwater**

Agency No.: 53

All Projects	Capital Budget	Future Year Estimates				
	2000	2001	2002	2003	2004	2005
Expenditures:						
Planning Studies	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000
Eng / Design	212,500	182,500	167,500	167,500	167,500	167,500
Land Acquisition	125,000	0	0	0	0	0
Land Development	0	0	0	0	0	0
Construction	2,851,675	3,732,500	3,647,500	1,207,500	1,207,500	1,207,500
Remodelling	0	0	0	0	0	0
Equipment/Furnish	0	0	0	0	0	0
Cost Applied	25,000	25,000	25,000	25,000	25,000	25,000
Other	0	10,000	10,000	10,000	10,000	10,000
Total Costs	\$ 3,289,175	\$ 4,025,000	\$ 3,925,000	\$ 1,485,000	\$ 1,485,000	\$ 1,485,000

Funding Sources:						
Available Funds	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Federal Sources	0	0	0	0	0	0
State Sources	1,000	1,000	1,000	1,000	1,000	1,000
County Contrib	0	0	0	0	0	0
Private Contrib	0	0	0	0	0	0
TIF	0	0	0	0	0	0
Revenue Bonds	0	0	0	0	0	0
Utility Reserves	0	0	0	0	0	0
Special Assessments	225,000	225,000	225,000	225,000	225,000	225,000
Other	1,619,175	0	0	0	0	0
Total "Other"	\$ 1,845,175	\$ 226,000	\$ 226,000	\$ 226,000	\$ 226,000	\$ 226,000

G.O. Debt	\$ 1,444,000	\$ 3,799,000	\$ 3,699,000	\$ 1,259,000	\$ 1,259,000	\$ 1,259,000
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Capital Budget

Engineering - Stormwater

Accompanying Storm Sewer Project No. 1 Fund No. CW53 / 810079

(B) \$ 400,000 This project is for the design and installation of storm sewer systems that 'accompany' street
(O) 50,000 projects. This is a continuing program to provide mainline storm sewer improvements,
\$ 450,000 replacements, and rehabilitation in conjunction with City streets being reconstructed and
resurfaced. Additionally, this project consists of installing various conduits to serve streets
being improved with curb and gutter and bituminous pavement, as directed by the Common
Council. Other funding is from special assessments. Total cost is based upon prior years
expenditures. This item also includes the annual 'Waterway Repairs' Contract that makes
several smaller drainage related repairs on City streets throughout the City.

Greenway Improvements Project No. 2 Fund No. CW53 / 810080

(B) \$ 100,000 This is an annual drainage improvement program. Open channels (greenways) are used to
(O) 0 transport stormwater runoff. This program includes acquisition, if necessary, and
\$ 100,000 construction of new greenways and various types of channel improvements to existing
greenways. Known projects include piping a greenway in Sun Gardens (off Clove Drive) and
a concrete cunette repair in a greenway near Piping Rock Road. This item also includes the
annual Restoration / Landscaping Contract that makes miscellaneous, minor greenway-
related repairs throughout the City as the need arises.

Priority Watershed Projects Project No. 3 Fund No. CW53 / 810081

(B) \$ 0 Water quality improvement plans have been formulated by Dane County agencies to be
(O) 994,175 administered by the Wisconsin Department of Natural Resources. This plan identifies
\$ 994,175 specific projects and needs within the Yahara-Monona drainage basin and the Lake Mendota
drainage basin that will improve the quality of stormwater runoff. Other funding of \$994,175
includes the receipt of State of Wisconsin Priority Watershed grants totaling a minimum of
\$447,088 (50% local match) and a maximum of \$675,925 (30% local match). Preliminary
indications are that the smaller amount will be granted, requiring the larger "local" match.
However, it is still possible that the larger amount will be granted (with smaller local match).
The local match will come from funding sources other than the general borrowing. These
sources include the stormwater detention fund, previously budgeted under "Shorelines" and
"Greenways" (reallocated to these specific projects), TIF funding, and possibly available
funding from the creation of a drainage utility. The specific projects will be prioritized and
implemented until all funding from "other" sources has been exhausted. It is probable that the
"other" sources will be expended before full utilization of the granted amounts, thus forfeiting
those portions of the grant and spending less than the total shown in this budget. The highest
priority is Wexford retention pond (\$356,175). Second tier priority projects include:
Highway 51/Cottage Grove Wetland (\$188,000); Jenni-Kyle drainage stabilization
(\$100,000); and Triangle Park retention land purchase (\$100,000). Lower tier priority
projects include: Starkweather Creek stabilization (\$150,000) and Wingra Creek stabilization
(\$100.00).

EPA / NPDES Permit

Project No. 4 Fund No. CW53 / 810197

- (B) \$ 74,000 This is a continuing program and permit process to comply with the U. S. Environmental
(O) 1,000 Protection Agency and NPDES regulations promulgated on November 16, 1990. It is
\$ 75,000 anticipated that this funding will be needed to continue the monitoring requirements of the
permit. Additionally, the Wisconsin Department of Natural Resources assesses an annual
permit fee of \$10,000. Other funding is an USGS Grant. The selected monitoring project is
for continued stormwater monitoring, modeling, and planning in the Badger Mill Creek /
Sugar River Watershed. This study was begun in 1998.

Stormwater Basins

Project No. 5 Fund No. CW53 / 810082

- (B) \$ 0 This program provides stormwater detention / retention and stormwater quality improvements
(O) 300,000 to regional basins at various locations throughout the City. Potential projects include:
\$ 300,000 construction of a wet pond retrofit in the Wexford detention basin; and purchase and
construction of regional retention facilities downstream of Nesbitt Road (near Maple Grove
Road) and at Nelson Road near the landfill. Other funding is from the Detention Trust Fund
(old Fund #676). Another possible project, the land purchase and construction of a regional
retention facility in the Southeast Planning area (near McFarland), is an eligible project cost
under TID #24. It is anticipated that the District would reimburse the borrowed money in the
future. This item would also include repair work (concrete cunettes) in the Stonefield Basin
and the Whitetail Ridge Basin.

Odana Pond Dredging

Project No. 6 Fund No.

- (B) \$ 0 Preliminary and final design, including permitting and disposal requirements associated with
(O) 0 the proposed dredging of the Retention Pond at Odana Hills Golf Course. This dredging
\$ 0 request is the highest priority dredging project among several City sites that are presently in
need of dredging. It is anticipated that this will be a continuing project for the other sites,
annually, on a prioritized basis. Other sites known to be in need of dredging include
Strickers Pond Forebay, Morningside Retention Basin, and Warner Park Lagoon outlet
channel. All other City ponds are being monitored for siltation and shall be incorporated into
the schedule accordingly.

Inter-Municipal Storm Sewers

Project No. 7 Fund No. CW53 / 810198

- (B) \$ 50,000 This item is for resolving drainage problems within neighboring municipalities. Typically
(O) 0 these problems are on the fringes of new City development and are at least partially
\$ 50,000 attributable to City stormwater increases. The City Engineer attempts to resolve these
problems by participating in the funding, on a 50/50 basis or prorated based on drainage
area, previous agreement, or other reasonable method of split. Potential projects could
include: Rambling Acres Pipe / Greenway (Town of Blooming Grove) - \$50,000 and Lake
Forest Detention Basin (Town of Madison) - \$35,000. Additionally, a study has been
completed with the Village of Shorewood to determine storm sewer deficiencies in the
University-Midvale area. A large, capital improvement project (multi-million dollar) was
recommended in that study. Financing requests are deferred pending agreement with
Shorewood.

Tiedemann Pond Pump StationProject No. **8** Fund No. CW53 / 810221

- (B) \$ 25,000 Stricker and Tiedemann Ponds receive runoff from the City of Madison (60%) and the City of
(O) 0 Middleton (40%). The ponds have operated for years as 'infiltration' ponds, but are no longer
\$ 25,000 infiltrating in adequate capacity to prevent water levels from rising, to the point of flooding
trees, parklands, and threatening some private residences in Middleton. The City of
Middleton proposes installing a pump station / force main solution, with cost participation on a
60 / 40 basis. Madison's share is estimated to be \$250,000, paid over 10 years.

Storm Box Replacement / CleaningProject No. **9** Fund No. CW53 / 810085

- (B) \$ 100,000 This is a continuing program to systematically replace aged and failing storm sewer box
(O) 0 culverts. Many areas have been identified from emergency repairs and previous problems.
\$ 100,000 These include: East Washington Avenue, East Dayton Street, Bassett Street, Speedway
Road, Miller Avenue, and Railroad Street. Additionally, many storm boxes that are
structurally sound are in need of maintenance in the form of cleaning. Sediment has
accumulated in the storm sewers, cutting conveyance efficiencies by up to 50% or more.
Many segments of storm sewer have been identified as needing this cleaning and
maintenance with the highest priority being the Owen Park box culverts from Forsythia to
Rosa Road. This item shall fund either a cleaning project or a replacement project, or a
combination of both, depending on priorities and available funding.

Major Roadway Culvert CrossingsProject No. **10** Fund No.

- (B) \$ 0 This project is for major (large size) stormwater culvert crossings under roadways in areas of
(O) 0 new development or in areas impacted by new development. When the crossing is entirely
\$ 0 within a newly platted street, it is proposed that the City pay only for the proportion of the total
project cost that can be attributed to a culvert end area in excess of 64 square feet. No
known locations are scheduled for 2000.

Assessable Drainage ImprovementsProject No. **11** Fund No. CW53 / 810087

- (B) \$ 0 This item anticipates the need for major improvements to the stormwater management system
(O) 175,000 in outlying, newly developing areas where the upstream lands are not fully developed and can
\$ 175,000 justifiably be charged for these improvements as they develop. Additionally, these projects
could include planning, particularly when wetlands and floodplains are involved.

ShorelinesProject No. **12** Fund No. CW53 / 810088

- (B) \$ 150,000 The shoreline Improvement Program is for large-scale improvements to the shoreline of
(O) 0 lakes, creeks, and rivers. Requested projects include (if not completed in 1999) a canoe
\$ 150,000 launch on Starkweather at Dixon Greenway, and Yahara River shoreline repair from
Sherman Avenue to 500 feet South (West Bank). Other known areas of need include:
Wingra Creek, Starkweather Creek, and Monona Bay. Other funding uses include
underwater video inspections and surveys of the shoreline of the Monona Terrace
Convention Center structure.

Local Drainage ProblemsProject No. **13** Fund No. CW53 / 810199

(B) \$ 100,000
 (C) 0
\$ 100,000

In 1993, the City experienced a rainfall event that had a probability of occurring about once every 10 years. In 1996, the City experienced an even heavier flooding event on the magnitude of a 25 to 100 year recurrence interval. Both storm events revealed many local drainage problems (flooding) that both caused property damage and presented a significant safety concern. City Engineering maintains a database of the identified drainage problems (over 100 in number), and plans for solutions as time allows. This budget item would begin to implement solutions to the drainage problems on a prioritized basis, as determined by the City Engineer and the Common Council. Severe problems at the top of the list include: Dean Avenue (\$25,000); Remington at railroad tracks (\$25,000); and Silver Lane Overflow at Richard Street (\$50,000).

Knollwood / Arboretum Storm SewerProject No. **14** Fund No. CW53 / 810222

(B) \$ 70,000
 (C) 0
\$ 70,000

This budget item is for participation in a joint solution for a stormwater management problem affecting the City of Madison Knollwood Park, the UW-Arboretum, the City of Fitchburg, and the Harlan Hills Subdivision in the City of Fitchburg. All parties are contributing towards a joint solution for better stormwater management with the following goals: 1) better conveyance of stormwater from Dunn's Marsh and Seminole Highway through the Arboretum to allow preservation of the Prairie or restoration of another type of natural environment; 2) diversion of runoff away from Knollwood Park to preserve oak trees and return the conservancy park to a more usable condition; and 3) safe conveyance of stormwater from the Harlan Hills Plat to the East. Dane County will also participate by granting an easement for needed construction. The total cost for the entire joint solution is estimated at \$200,000. City Parks shall contribute \$20,000 (separate in Parks budget) and City Engineering shall contribute \$70,000.

Hoard Street Sewer ReplacementsProject No. **15** Fund No. CW53 / 810223

(B) \$ 0
 (C) 325,000
\$ 325,000

This project shall replace all sanitary and storm sewers on Hoard Street from Kedzie to Starkweather Creek. In 1993 and again in 1996, residents in this area (several blocks centering around Hoard at Kedzie) suffered sanitary sewerage flooding into their basements. Subsequently, the City performed a detailed study to seek solutions to lessen the chance of future flooding. Implementation for this area began with the replacement of the sewer interceptor on Johnson Street (1997). Further recommendations (prioritized) include replacement of both the storm and sanitary sewers identified with this project, as the poor condition of both facilities allows the storm sewer to 'leak' into the sanitary during rainfall events. Replacement of both facilities will necessitate replacement of the street in its entirety. Future phases shall replace similar problem lines on the following: Kedzie from Hoard to Fairfield; Fairfield from Kedzie to Maywood; Dayton from North to Kedzie; and Kedzie from East Lawn Court to East Washington. Total cost is split equally between storm and sanitary budgets. Funding in the Engineering-Stormwater section of the capital budget (this section) is to be derived from the proposed Stormwater Utility. Implementation of this project is therefore contingent upon both the creation of the new Utility, and the provision of funding for this project.

Madison-Sun Prairie Detention Pond Project No. **16** Fund No. CW53 / 810224

- (B) \$ 375,000 In 1996, the Cities of Madison and Sun Prairie entered into an agreement to purchase open
- (C) 0 space land separating the two municipalities in the vicinity of Hoepker Road and USH 151.
- \$ 375,000 As part of the agreement, the City is obliged to construct an approximately 20 acre retention pond for stormwater management for both municipalities, which is to be operational by December 1, 2000. As an alternative, the City of Madison may elect to return to the City of Sun Prairie cash or land (or a combination of both) associated with property acquired in the Madison-Sun Prairie open space.

**2000
Capital Budget
Summary**

Agency Name: **Engineering - Stormwater**

Agency Number: **53**

Project Name	Agency Request	CIRC	Executive	Adopted		
				G.O. Debt	Other Funding	Total
1 Accompanying Storm Sewer	\$ 450,000	\$ 450,000	\$ 450,000	\$ 400,000	\$ 50,000	\$ 450,000
2 Greenway Improvements	150,000	100,000	100,000	100,000	0	100,000
3 Priority Watershed Projects	0	0	0	0	994,175	994,175
4 EPA / NPDES Permit	85,000	75,000	75,000	74,000	1,000	75,000
5 Stormwater Basins	300,000	300,000	300,000	0	300,000	300,000
6 Odana Pond Dredging	200,000	0	0	0	0	0
7 Inter-Municipal Storm Sewers	50,000	50,000	50,000	50,000	0	50,000
8 Tiedemann Pond Pump Station	25,000	25,000	25,000	25,000	0	25,000
9 Storm Box Replacement / Cleaning	100,000	100,000	100,000	100,000	0	100,000
10 Major Roadway Culvert Crossings	0	0	0	0	0	0
11 Assessable Drainage Improvements	175,000	175,000	175,000	0	175,000	175,000
12 Shorelines	150,000	150,000	150,000	150,000	0	150,000
13 Local Drainage Problems	100,000	100,000	100,000	100,000	0	100,000
14 Knollwood / Arboretum Storm Sewer	70,000	70,000	70,000	70,000	0	70,000
15 Hoard Street Sewer Replacements	325,000	325,000	325,000	0	325,000	325,000
16 Madison-Sun Prairie Detention Pond	375,000	375,000	375,000	375,000	0	375,000
Unallocated Reduction	0	(314,000)	0	0	0	0
Total	<u>\$ 2,555,000</u>	<u>\$ 1,981,000</u>	<u>\$ 2,295,000</u>	<u>\$ 1,444,000</u>	<u>\$ 1,845,175</u>	<u>\$ 3,289,175</u>