



**Exhibit B**  
**Scope of Preliminary Project Improvements**  
**Grass Lake Township Local Road Improvement Millage Proposal**



Grass Lake Charter Township Hard Surface Roads					
Road Name	From	To	Length (mi.)	Recommended Improvement	Estimated Cost
Barber Rd.	Phal Rd.	Grass Lake Rd.	2.000	RECONSTRUCTED	\$720,000
Bohne Rd.	Mt. Hope Rd.	Francisco Rd.	3.310	RECONSTRUCTED	\$1,191,600
Burtch Rd.	Phal Rd.	Grass Lake Village Limits	2.210	RECONSTRUCTED	\$795,600
Cedar Knoll Dr.	W. Twp Line	Mt. Hope Rd.	2.470	RECONSTRUCTED	\$889,200
Coy Dr.	Clear Lake Rd.	Road End	0.250	RECONSTRUCTED	\$90,000
Deer Run	Mt. Hope Rd.	Willow Creek Ln.	0.563	RECONSTRUCTED	\$202,773
Fishville Rd.	Curtis Rd.	Grass Lake Rd.	2.860	RECONSTRUCTED	\$1,029,600
Grand View Dr.	Nelson St.	Rowena St.	0.182	RECONSTRUCTED	\$65,455
Greenwood Rd.	W. Twp Line	Willis Rd.	1.120	RECONSTRUCTED	\$403,200
Grey Tower Rd.	Lee Rd.	Page Ave.	0.990	RECONSTRUCTED	\$356,400
Grosvenor Rd.	Wolf Lake Rd.	Burtch Rd.	0.500	RECONSTRUCTED	\$180,000
Harvest Dr.	Norvell Rd.	Road End	0.458	RECONSTRUCTED	\$164,727
Hayball Rd.*	Page Ave.	Michigan Ave.	0.900	RECONSTRUCTED	\$324,000
Homestead Blvd.	Tims Lake Blvd.	Mt. Hope Rd.	0.269	CMHO3.5	\$96,818
Huckleberry Ln.	Pinnacle Dr.	Road End	0.498	RECONSTRUCTED	\$179,455
Island Heights Dr.	Mt. Hope Rd.	Road End (Loop)	0.946	RECONSTRUCTED	\$340,636
Kalmbach Rd.	Michigan Ave.	Maute Rd.	2.370	RECONSTRUCTED	\$853,200
Keane Dr.	Wolf Lake Rd.	Road End	0.454	RECONSTRUCTED	\$163,500
Knight Rd.	W. Twp Line	Mt. Hope Rd.	2.390	RECONSTRUCTED	\$860,400
Knight Rd.	Mt. Hope Rd.	Maute Rd.	1.540	RECONSTRUCTED	\$554,400
List Rd.	Cedar Knoll Dr.	N. Twp Line	0.970	RECONSTRUCTED	\$349,200
Mack Island Rd.	Wolf Lake Rd.	Eastwood Beach Dr. (Pvt)	0.660	RECONSTRUCTED	\$237,600
Marquedat Dr.	Keane Dr.	Keane Dr.	0.277	RECONSTRUCTED	\$99,545
Maute Rd.	Grass Lake Rd.	Knight Rd.	3.010	RECONSTRUCTED	\$1,083,600
Morrissey Rd.	Mt. Hope Rd.	Maute Rd.	1.590	RECONSTRUCTED	\$572,400
Nelson St.	Grass Lake Rd.	Road End	0.168	RECONSTRUCTED	\$60,614
North Burgett Ln.	Wolf Lake Rd.	South Burgett Ln.	0.381	RECONSTRUCTED	\$137,045
North Way Dr.	Kalmbach Rd.	Road End	0.161	RECONSTRUCTED	\$58,091
Nylen Dr.	Burtch Rd.	Road End	0.160	RECONSTRUCTED	\$57,682
Old Farm Ln.	Norvell Rd.	Harvest Dr.	0.988	RECONSTRUCTED	\$355,500
Orban Rd.*	Wolf Lake Rd.	Norvell Rd.	1.480	RECONSTRUCTED	\$532,800
Page Ave.	Hayball Rd.	Wolf Lake Rd.	1.673	RECONSTRUCTED	\$602,172
Phal Rd.	Norvell Rd.	Fishville Rd.	1.910	RECONSTRUCTED	\$687,600
Pinnacle Dr.	Mt. Hope Rd.	Huckleberry Ln.	0.432	RECONSTRUCTED	\$155,455
Prairie Ridge Dr.	Sand Hill Dr. (W-E)	Sand Hill Dr. (S-N)	0.233	RECONSTRUCTED	\$84,000
Rowena St.	Norvell Rd.	Road End	0.183	RECONSTRUCTED	\$65,864
Sager Rd.	Kalmbach Rd.	Bohne Rd.	1.420	RECONSTRUCTED	\$511,200
Sand Beach	Pavement Change	S. Twp Line	0.114	RECONSTRUCTED	\$40,909
Sand Hill Dr. (S-N)	Sand Hill Dr. (W-E)	Tall Grass Dr.	0.337	RECONSTRUCTED	\$121,432
Sand Hill Dr. (W-E)	Mt. Hope Rd.	End Certified Road	0.395	RECONSTRUCTED	\$142,227
Sarossy Lake Rd.	Michigan Ave.	Bohne Rd.	1.820	RECONSTRUCTED	\$655,200
South Burgett Ln.	Wolf Lake Rd.	Road End	0.234	RECONSTRUCTED	\$84,205
South Way Dr.	Michigan Ave.	Road End	0.159	RECONSTRUCTED	\$57,273
Suncrest Dr.	Mt. Hope Rd.	Road End	0.198	RECONSTRUCTED	\$71,386
Tall Grass Dr.	Sand Hill Dr. (W-E)	Bohne Rd.	0.249	RECONSTRUCTED	\$89,727
Tims Lake Blvd.	Knight Rd.	Road End	0.836	RECONSTRUCTED	\$300,818
Warrior Trl.	Norvell Rd.	End Certified Road	0.384	RECONSTRUCTED	\$138,409
Willis Rd.	Cedar Knoll Dr.	N. Twp Line	1.000	RECONSTRUCTED	\$360,000
Willis Rd.	Michigan Ave.	Knight Rd.	3.000	RECONSTRUCTED	\$1,080,000
Willow Creek Ln.	Mt. Hope Rd.	Deer Run	0.192	RECONSTRUCTED	\$69,136
Winegar Rd.	Willis Rd.	Grass Lake Village Limits	0.600	RECONSTRUCTED	\$216,000
<b>Total Local Mileage:</b>			<b>51.495</b>	<b>Total Local Roads:</b>	<b>\$18,538,054</b>

Grass Lake Charter Township Gravel Roads					
Road Name	From	To	Length (mi.)	Recommended Improvement	Estimated Cost
Bellman Rd.	Burtch Rd.	Norvell Rd.	0.990	RECONSTRUCTED	\$356,400
Burtch Rd.	Orban Rd.	Phal Rd.	1.230	RECONSTRUCTED	\$442,800
Craft Rd.	Michigan Ave.	Road End	1.730	RECONSTRUCTED	\$622,800
Edna Rd.	List Rd.	Pleasant Dr.	0.315	RECONSTRUCTED	\$113,455
Fishville Rd.	Curtis Rd.	S. Twp Line	1.540	RECONSTRUCTED	\$554,400
Francisco Rd.	Fishville Rd.	Grass Lake Rd.	1.530	RECONSTRUCTED	\$550,800
Fry Dr.	Lake Shore Dr.	N. Twp Line	0.121	RECONSTRUCTED	\$43,636
Grey Tower Rd.	Lee Rd.	Road End	1.000	RECONSTRUCTED	\$360,000
Jill Dr.	Island Heights Dr.	Road End	0.073	RECONSTRUCTED	\$26,250
Katz Rd.	Mt. Hope Rd.	N. Twp Line	0.500	RECONSTRUCTED	\$180,000

Lake Shore Dr.	Pleasant Dr.	Road End	0.192	RECONSTRUCTED	\$69,068
Leach Rd.	Maute Rd.	Clear Lake Rd.	1.360	RECONSTRUCTED	\$489,600
Mack Island Rd.	Eastwood Beach Dr. (Pvt)	Road End	0.139	RECONSTRUCTED	\$50,040
Mack St.	Mack Island Rd.	Road End	0.047	RECONSTRUCTED	\$17,045
Maute Rd.	Road End (North of I-94)	N. Twp Line	0.840	RECONSTRUCTED	\$302,400
Morris Dr.	Burkhart Rd.	Road End	0.160	RECONSTRUCTED	\$57,614
Morris Dr.	Morris Dr.	Vatra Ave.	0.045	RECONSTRUCTED	\$16,364
Pleasant Dr.	Lake Shore Dr.	Road End	0.261	RECONSTRUCTED	\$94,023
Prospect Hill Rd.**	Curtis Rd.	S. Twp Line	1.030	RECONSTRUCTED	\$370,800
Rank Rd.**	Grass Lake Rd.	Michigan Ave.	1.900	RECONSTRUCTED	\$684,000
Reiman Rd.	Francisco Rd.	Washtenaw Co. Line	0.640	RECONSTRUCTED	\$230,400
Sand Beach	Mack Island Rd.	Pavement Change	0.161	RECONSTRUCTED	\$57,955
Vatra Ave.	Burkhart Rd.	Road End	0.227	RECONSTRUCTED	\$81,818
<b>Total Local Mileage:</b>			<b>16.032</b>	<b>Total Gravel Roads:</b>	<b>\$5,771,667</b>

Village of Grass Lake Roads					
Road Name	From	To	Length (mi.)	Recommended Improvement	Estimated Cost
Arthur	S. Union St	School	0.369	RECONSTRUCTED	\$132,840
Brown	N. Lake St	Dead End	0.542	RECONSTRUCTED	\$195,120
Burtch	Village Line	South St	0.272	RECONSTRUCTED	\$97,920
Church	Michigan Ave	East Ave	0.448	RECONSTRUCTED	\$161,280
Clark E-W	Wolf Lake	Clark St	0.180	RECONSTRUCTED	\$64,800
Clark N-S	village preserve	Michigan Ave	0.138	RECONSTRUCTED	\$49,680
Drake	South St	Michigan Ave	0.113	RECONSTRUCTED	\$40,680
East	S. Union St	Michigan Ave	0.277	CMHO3.5	\$99,720
Lafayette	South St	Michigan Ave	0.127	RECONSTRUCTED	\$45,720
N Lake	Michigan Ave	Simpson St	0.595	RECONSTRUCTED	\$214,200
S. Lake	South St	Michigan Ave	0.233	CMHO3.5	\$83,880
Lakeview Heights	Simpson St	Dead End	0.188	RECONSTRUCTED	\$67,680
Maple	South St	Michigan Ave	0.110	RECONSTRUCTED	\$39,600
Portage	Brown St	N. Union St	0.327	RECONSTRUCTED	\$117,720
Ridgeview	Michigan Ave	End Cert	0.228	CMHO3.5	\$82,080
Simpson	Brown St	Dead End	0.159	RECONSTRUCTED	\$57,240
South	S. Lake St	S. Union St	0.420	RECONSTRUCTED	\$151,200
Village Preserve	Clark St	Dead End	0.189	CMHO3.5	\$68,040
Walnut	Church St	Michigan Ave	0.093	RECONSTRUCTED	\$33,480
Water	Clark St	N. Lake St	0.179	RECONSTRUCTED	\$64,440
Watson	Wate St	Michigan Ave	0.087	RECONSTRUCTED	\$31,320
Wimple	N. Lake St	Brown St	0.840	HMA2.0	\$35,805
Wolf Lake	Village limit	Michigan Ave	0.219	HMA2.0	\$47,523
<b>Total Local Mileage:</b>			<b>6.333</b>	<b>Total Local Roads:</b>	<b>\$1,981,968</b>

\*Border road with adjacent township.

\*\*County border road

<b>Total Village Project Cost</b>	<b>\$1,981,968</b>
<b>Total Township Share (70%)</b>	<b>\$17,016,805</b>
<b>Total JCDOT Share (30%)</b>	<b>\$7,292,916</b>
<b>Total Project Cost</b>	<b>\$26,291,689</b>

**TOTAL MILEAGE 73.860**

Definitions of Improvements	
Improvement	
RECONSTRUCTED	This will be either a CIPR - Pulverize the existing roadway, aggregate base while injecting hot liquid asphalt, creating a new bound aggregate base (typically 6-8" thick). Then add 2-3" of new HMA. This is JCDOT's new recycling machine. Or a CSC3.5 - Crush existing roadway, shape & compact, then resurface with 3.5" of new HMA.
HMA2.0	Place 2 inches of new HMA on existing roadway
CMHO3.5	Mill 3.5" of existing roadway to along the edge of curb and resurface with 3.5" of HMA (This is done where curb and gutter is along the edge

Key to Proposed Improvements
<b>HMA</b> = Hot Mix Asphalt.
<b>CSC</b> = Crush, Shape and Compact
<b>CIPR</b> = Cold In Place Recycling
<b>CMHO</b> = Cold Mill Hot Overlay
<b>2.0</b> = 2 inches of new asphalt placed
<b>3.5</b> = 3.5 inches of new asphalt placed

micro	87500.00	paser 7-8	10
hma1.5	118416.09	paser 5-6	11
hma2.0	177330.40		12
hma2.5	220283.33		15
hma3.0	230090.00	paser 3-4	15
RECONSTRUCTED	299663.33	paser 1-2	20
cmho1.5	197220.11		11
cmho2.0	270863.00		12
regravel	43750.00		5
	43750.00		5