



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	CIPR	\$720,000
Bohne Rd.	Mt. Hope Rd.	Francisco Rd.	3.310	CIPR	\$1,191,600
Burtch Rd.	Phal Rd.	Grass Lake Village Limits	2.210	CIPR	\$795,600
Cedar Knoll Dr.	W. Twp Line	Mt. Hope Rd.	2.470	CIPR	\$889,200
Coy Dr.	Clear Lake Rd.	Road End	0.250	CSC3.5	\$90,000
Deer Run	Mt. Hope Rd.	Willow Creek Ln.	0.563	CSC3.5	\$202,773
Fishville Rd.	Curtis Rd.	Grass Lake Rd.	2.860	CIPR	\$1,029,600
Grand View Dr.	Nelson St.	Rowena St.	0.182	CSC3.5	\$65,455
Greenwood Rd.	W. Twp Line	Willis Rd.	1.120	CIPR	\$403,200
Grey Tower Rd.	Lee Rd.	Page Ave.	0.990	CIPR	\$356,400
Grosvenor Rd.	Wolf Lake Rd.	Burtch Rd.	0.500	CIPR	\$180,000
Harvest Dr.	Norvell Rd.	Road End	0.458	CSC3.5	\$164,727
Hayball Rd.*	Page Ave.	Michigan Ave.	0.900	CIPR	\$324,000
Homestead Blvd.	Tims Lake Blvd.	Mt. Hope Rd.	0.269	CMHO3.5	\$96,818
Huckleberry Ln.	Pinnacle Dr.	Road End	0.498	CSC3.5	\$179,455
Island Heights Dr.	Mt. Hope Rd.	Road End (Loop)	0.946	CSC3.5	\$340,636
Kalmbach Rd.	Michigan Ave.	Maute Rd.	2.370	CIPR	\$853,200
Keane Dr.	Wolf Lake Rd.	Road End	0.454	CSC3.5	\$163,500
Knight Rd.	W. Twp Line	Mt. Hope Rd.	2.390	CIPR	\$860,400
Knight Rd.	Mt. Hope Rd.	Maute Rd.	1.540	CIPR	\$554,400
List Rd.	Cedar Knoll Dr.	N. Twp Line	0.970	CIPR	\$349,200
Mack Island Rd.	Wolf Lake Rd.	Eastwood Beach Dr. (Pvt)	0.660	CSC3.5	\$237,600
Marquedat Dr.	Keane Dr.	Keane Dr.	0.277	CSC3.5	\$99,545
Maute Rd.	Grass Lake Rd.	Knight Rd.	3.010	CIPR	\$1,083,600
Morrissey Rd.	Mt. Hope Rd.	Maute Rd.	1.590	CIPR	\$572,400
Nelson St.	Grass Lake Rd.	Road End	0.168	CSC3.5	\$60,614
North Burgett Ln.	Wolf Lake Rd.	South Burgett Ln.	0.381	CSC3.5	\$137,045
North Way Dr.	Kalmbach Rd.	Road End	0.161	CSC3.5	\$58,091
Nylen Dr.	Burtch Rd.	Road End	0.160	CSC3.5	\$57,682
Old Farm Ln.	Norvell Rd.	Harvest Dr.	0.988	CSC3.5	\$355,500
Orban Rd.*	Wolf Lake Rd.	Norvell Rd.	1.480	CIPR	\$532,800
Page Ave.	Hayball Rd.	Wolf Lake Rd.	1.673	CIPR	\$602,172
Phal Rd.	Norvell Rd.	Fishville Rd.	1.910	CIPR	\$687,600
Pinnacle Dr.	Mt. Hope Rd.	Huckleberry Ln.	0.432	CSC3.5	\$155,455
Prairie Ridge Dr.	Sand Hill Dr. (W-E)	Sand Hill Dr. (S-N)	0.233	CSC3.5	\$84,000
Rowena St.	Norvell Rd.	Road End	0.183	CSC3.5	\$65,864
Sager Rd.	Kalmbach Rd.	Bohne Rd.	1.420	CIPR	\$511,200
Sand Beach	Pavement Change	S. Twp Line	0.114	CSC3.5	\$40,909
Sand Hill Dr. (S-N)	Sand Hill Dr. (W-E)	Tall Grass Dr.	0.337	CSC3.5	\$121,432
Sand Hill Dr. (W-E)	Mt. Hope Rd.	End Certified Road	0.395	CSC3.5	\$142,227
Sarossy Lake Rd.	Michigan Ave.	Bohne Rd.	1.820	CIPR	\$655,200
South Burgett Ln.	Wolf Lake Rd.	Road End	0.234	CSC3.5	\$84,205
South Way Dr.	Michigan Ave.	Road End	0.159	CSC3.5	\$57,273
Suncrest Dr.	Mt. Hope Rd.	Road End	0.198	CSC3.5	\$71,386
Tall Grass Dr.	Sand Hill Dr. (W-E)	Bohne Rd.	0.249	CSC3.5	\$89,727
Tims Lake Blvd.	Knight Rd.	Road End	0.836	CSC3.5	\$300,818
Warrior Trl.	Norvell Rd.	End Certified Road	0.384	CSC3.5	\$138,409
Willis Rd.	Cedar Knoll Dr.	N. Twp Line	1.000	CIPR	\$360,000
Willis Rd.	Michigan Ave.	Knight Rd.	3.000	CIPR	\$1,080,000
Willow Creek Ln.	Mt. Hope Rd.	Deer Run	0.192	CSC3.5	\$69,136
Winegar Rd.	Willis Rd.	Grass Lake Village Limits	0.600	CSC3.5	\$216,000
Total Local Mileage:			51.495	Total Local Roads:	\$18,538,054

Grass Lake Charter Township Gravel Roads					
Road Name	From	To	Length (mi.)	Recommended Improvement	Estimated Cost
Bellman Rd.	Burtch Rd.	Norvell Rd.	0.990	CSC3.5	\$356,400
Burtch Rd.	Orban Rd.	Phal Rd.	1.230	CSC3.5	\$442,800
Craft Rd.	Michigan Ave.	Road End	1.730	CSC3.5	\$622,800
Edna Rd.	List Rd.	Pleasant Dr.	0.315	CSC3.5	\$113,455
Fishville Rd.	Curtis Rd.	S. Twp Line	1.540	CSC3.5	\$554,400
Francisco Rd.	Fishville Rd.	Grass Lake Rd.	1.530	CSC3.5	\$550,800
Fry Dr.	Lake Shore Dr.	N. Twp Line	0.121	CSC3.5	\$43,636
Grey Tower Rd.	Lee Rd.	Road End	1.000	CSC3.5	\$360,000
Jill Dr.	Island Heights Dr.	Road End	0.073	CSC3.5	\$26,250
Katz Rd.	Mt. Hope Rd.	N. Twp Line	0.500	CSC3.5	\$180,000

Lake Shore Dr.	Pleasant Dr.	Road End	0.192	CSC3.5	\$69,068
Leach Rd.	Maute Rd.	Clear Lake Rd.	1.360	CSC3.5	\$489,600
Mack Island Rd.	Eastwood Beach Dr. (Pvt)	Road End	0.139	CSC3.5	\$50,040
Mack St.	Mack Island Rd.	Road End	0.047	CSC3.5	\$17,045
Maute Rd.	Road End (North of I-94)	N. Twp Line	0.840	CSC3.5	\$302,400
Morris Dr.	Burkhart Rd.	Road End	0.160	CSC3.5	\$57,614
Morris Dr.	Morris Dr.	Vatra Ave.	0.045	CSC3.5	\$16,364
Pleasant Dr.	Lake Shore Dr.	Road End	0.261	CSC3.5	\$94,023
Prospect Hill Rd.**	Curtis Rd.	S. Twp Line	1.030	CSC3.5	\$370,800
Rank Rd.**	Grass Lake Rd.	Michigan Ave.	1.900	CSC3.5	\$684,000
Reiman Rd.	Francisco Rd.	Washtenaw Co. Line	0.640	CSC3.5	\$230,400
Sand Beach	Mack Island Rd.	Pavement Change	0.161	CSC3.5	\$57,955
Vatra Ave.	Burkhart Rd.	Road End	0.227	CSC3.5	\$81,818
Total Local Mileage:			16.032	Total Gravel Roads:	\$5,771,667

Village of Grass Lake Roads					
Road Name	From	To	Length (mi.)	Recommended Improvement	Estimated Cost
Arthur	S. Union St	School	0.369	CSC3.5	\$132,840
Brown	N. Lake St	Dead End	0.542	CSC3.5	\$195,120
Burtch	Village Line	South St	0.272	CSC3.5	\$97,920
Church	Michigan Ave	East Ave	0.448	CSC3.5	\$161,280
Clark E-W	Wolf Lake	Clark St	0.180	CSC3.5	\$64,800
Clark N-S	village preserve	Michigan Ave	0.138	CSC3.5	\$49,680
Drake	South St	Michigan Ave	0.113	CSC3.5	\$40,680
East	S. Union St	Michigan Ave	0.277	CMHO3.5	\$99,720
Lafayette	South St	Michigan Ave	0.127	CSC3.5	\$45,720
N Lake	Michigan Ave	Simpson St	0.595	CSC3.5	\$214,200
S. Lake	South St	Michigan Ave	0.233	CMHO3.5	\$83,880
Lakeview Heights	Simpson St	Dead End	0.188	CSC3.5	\$67,680
Maple	South ST	Michigan Ave	0.110	CSC3.5	\$39,600
Portage	Brown St	N. Union St	0.327	CSC3.5	\$117,720
Ridgeview	Michigan Ave	End Cert	0.228	CMHO3.5	\$82,080
Simpson	Brown St	Dead End	0.159	CSC3.5	\$57,240
South	S. Lake St	S. Union St	0.420	CSC3.5	\$151,200
Village Preserve	Clark St	Dead End	0.189	CMHO3.5	\$68,040
Walnut	Church ST	Michigan Ave	0.093	CSC3.5	\$33,480
Water	Clark ST	N. Lake St	0.179	CSC3.5	\$64,440
Watson	Wate St	Michigan Ave	0.087	CSC3.5	\$31,320
Wimple	N. Lake St	Brown St	0.165	HMA2.0	\$35,805
Wolf Lake	Village limit	Michigan Ave	0.219	HMA2.0	\$47,523
Total Local Mileage:			5.658	Total Local Roads:	\$1,981,968

*Border road with adjacent township.

**County border road

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

TOTAL MILEAGE 73.185

Existing roads	
All existing roads will have a CSC3.5, CIPR or a CMHO3.5.	

Definitions of Improvements	
Improvement	
CSC3.5	Crush existing roadway, shape & compact, then resurface with 3.5" of new HMA.
CIPR	Pulverize the existing roadway, aggregate base while injecting hot liquid asphalt, creating a new bound aggregate base (typically 6-8" thick).
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	
HMA = Hot Mix Asphalt.	
CSC = Crush, Shape and Compact	
CIPR = Cold In Place Recycling	
CMHO = Cold Mill Hot Overlay	
3.5 = 3.5 inches of new asphalt placed	