

Appendix D: Engineering Cost Analysis

Potential City of Pequot Lakes Costs
TH 371 Improvements

July 2007 Alternate Route Option

July 19, 2007

Segment	Item Number	Description	Cost Item	Required Cost	Recommended Cost	Optional Cost
General	1	Committee and Council Meetings and Workshops	Preliminary eng. for meetings to date (staff time not included)	\$25,000		
	5	Municipal Consent process	Future estimated preliminary engineering	\$3,500		
	6	Cost Participation Policy and estimate of City costs	Estimated preliminary engineering	\$3,500		
	10	Stoplight pre-emption equipment	Estimated future equipment for vehicles (police, fire, etc.)	\$10,000		
	11	City / County interaction	Future estimated preliminary engineering	\$2,500		
CSAH 29 - CR 168	1	Olson Road, Pow Wow Point Road, and West Twin Lake Drive acesses	Future Right-of-Way for west service road			\$125,000
	2	"	Future west service roadway costs			\$128,000
	3	West service road from CR 168 to the south	Right-of-Way		\$60,000	
	4	"	Roadway (City's Share)		\$48,000	
CR 168 - Derksen	5	West service road from CR 168 north and south - realignment with Hurtig Road	Future Right-of-Way for connection with service road			\$53,000
	6	"	Future connection roadway costs			\$40,000
	9	New Hwy 371 through the middle of the City's WWTF spray irrigation field	MPCA Permit spray irrigation field modification for Right-of-Way	\$40,000		
Industrial Park	10	Extend sanitary sewer and water utilities east across new TH 371	Sanitary sewer and watermain casings		\$90,000	
	11	"	Sanitary sewer and watermain piping under new TH 371			\$180,000
CSAH 11 Intersection	13	Extend sanitary sewer and water utilities east across new TH 371	Sanitary sewer and watermain casings		\$90,000	
	14	"	Sanitary sewer and watermain piping			\$500,000
CR 112 Intersection	15	Extend sanitary sewer and water utilities north from Trailside Estates across new TH 371	Sanitary sewer and watermain casings		\$90,000	
	16	"	Sanitary sewer and watermain piping			\$500,000
Total Estimated Potential City Costs				\$84,500	\$378,000	\$1,526,000

NOTES:

1. Priorities need to be continually worked on and the above numbers continually recalculated!
2. Estimated costs do not account for time spent by City staff or consultants in project meetings or hearings
3. Shaded cells indicate areas that should be the same under either route option.
4. Items are numbered for ease of reference, not for rank of importance.

Potential City of Pequot Lakes Costs

TH 371 Improvements

Through Town Option

July 19, 2007

Segment	Item Number	Description	Cost Item	Required Cost	Recommended Cost	Optional Cost
General	1	Committee and Council Meetings and Workshops	Preliminary eng. for meetings to date (staff time not included)	\$25,000		
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CSAH 29 - CR 168	1	Olson Road, Pow Wow Point Road, and West Twin Lake Drive accesses	Future Right-of-Way for west service road			\$125,000
	2	"	Future west service roadway costs			\$128,000
	3	West service road from CR 168 to the south	Right-of-Way		\$60,000	
	4	"	Roadway (City's Share)		\$48,000	
CR 168 - Derksen	5	West service road from CR 168 north and south - realignment with Hurtig Road	Future Right-of-Way for connection with service road			\$53,000
	6	"	Future connection roadway costs			\$40,000
	7	West service road from CR 168 north - change to backage road	Right-of-Way		\$150,000	
	8	"	Building re-orientation costs		\$500,000	
	9	Extension of CR 168 service road to Derksen Road	MPCA Permit spray irrigation field modification for Right-of-Way	\$30,000		
	10	"	Service road construction - MnDOT cost when Old TH 371 access closed		\$0	
Derksen - West Lake	11	Derksen Road area sanitary sewer and watermain casing pipes	Installation of casing pipes (now or in the future)		\$90,000	
	12	City non-acceptance of existing 24-foot wide service road south of Pillsbury Street	Added width to match MnDOT's 32-foot roads to the south and north			\$50,000
	13	Extension of sanitary sewer on west side south of West Lake Street	Installation of sanitary sewer and a lift station			\$460,000
	14	Extension of watermain on west side south from Pillsbury Street	Installation of watermain			\$160,000
	15	Upgrade of Old 371 to MnDOT service road standards	Reconstruction to 32-foot wide, 10 ton roadway			\$600,000
	16	Watermain looping and crossing west across TH 371 from Derksen Road	Installation of casing pipes		\$180,000	
	17	"	Installation of watermain and sanitary sewer piping and roadway restoration			\$432,000
	18	Watermain crossing and running parallel at and north of Pillsbury Street	Extend Casing	\$11,250		
	19	"	Put watermain that is parallel to roadway in a casing (or relocate)	\$78,000		
	20	Traffic signal at Morehouse Drive	If installed, 50% would be City because 2 out of the 4 legs are City streets			\$100,000
West Lake - Jokela	21	West side service road, West Lake to Woodman	Right-of-Way		\$48,000	
	22	"	Upgrade to curb & gutter from 32-foot wide		\$25,000	
	23	Pedestrian crossing safety	Pedestrian tunnel		\$500,000	
	24	TH 371 aesthetics	Lighting			\$10,000
	25	"	Stamped cobblestone medians/crosswalks			\$10,000
	26	"	Sidewalks			\$10,000
	27	"	Landscaping			\$10,000
	28	Watermain crossing at CSAH 11 / Main Street	Replace watermain and put in a casing	\$52,500		
	29	Sanitary sewer crossing at Sibley Street	Replace sanitary sewer and put in a casing		\$54,000	
	30	Watermain crossing at Sibley Street	Extend Casing	\$11,250		
	31	Lift station at Sibley Street possibly within MnDOT Right-of-Way	Relocate lift station out of Right-of-Way		\$200,000	
	32	Sanitary sewer within MnDOT Right-of-Way from Front Street to East Sibley Street	Put sanitary sewer that is parallel to roadway in a casing (or relocate)	\$90,000		
	33	Watermain within MnDOT Right-of-Way from Front Street to East Sibley Street	Put watermain that is parallel to roadway in a casing (or relocate)	\$90,000		
Jokela - Jenkins	34	MnDOT stormwater drainage system including capacity for future City storm sewers	City participation in expanded MnDOT storm water drainage system		\$50,000	
	35	Access to / from Langenbaugh property	Possible acquisition of property for City "green space"			\$400,000
Total Estimated Potential City Costs				\$407,500	\$1,905,000	\$2,588,000

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