



AGENDA ITEM #9.5

REPORT TO CITY COUNCIL

Report Prepared by: Nancy Malecha

Date: January 8, 2019

Subject: Rasmussen Road Project

Report: At the December 4, 2018 City Council Meeting, the following discussion occurred regarding the Rasmussen Road Project.

Rasmussen Road Project Update

Tim Houle shared information from the Rasmussen Road Open House that was held on November 27, 2018 and presented some emails that were received with comments. Concerns included enforcement on the road, widening of the road, large truck traffic and the cost of the improvements.

Attached are the comments received to date regarding this potential project and the cost estimates from the City Engineer for the north half and south half of Rasmussen Road.

I am requesting direction from the Council on how to proceed with the Rasmussen Road Project.

Council Action Requested: Council direction on how to proceed with the Rasmussen Road Project.

RASMUSSEN ROAD PROJECT COMMENTS RECEIVED

Email Received 11/20/18

I am a resident on Rasmussen Road located at 30848. I received the invite for the meeting on November 27th but will not be able to attend due to work commitments. I did have a few thoughts on the road improvements. Besides new pavement needing to be put down, my wife and I would like for the city to consider adding in a nice, wide sidewalk along the road as many families live along this road and go for walks frequently.

Also, we would like to see more enforced speed limits along this road as many people are going way too fast. Possibly having a speedometer tracking people and reminding them of their speed similar to what is found coming into town from the 371 bypass. We have young kids so we would like to see cars slowing down on this stretch of road. Those are just a few thoughts to consider. Thanks for your time!

Email Received 11/28/18

Hello all,

I attended the Rasmussen Road Study and have a few comments

From the 4 way stop at Main and Rasmussen road, I rarely go South or North, so I have no input of existing concerns. I asked the question at the open house if traffic volume was driving this upgrade project, but Tim said traffic volume was not part of the study.

So my input and main concern is the intersection. I like the sidewalks as it aids in the walk ability of the downtown area. And adding better defined parking could be better. (I would need to look deeper into the design to see if it's better)

I have a few comments on the curbs at the intersection. It appears they would make it easier/safer for pedestrians, but also make it more difficult for plowing, buses, semis etc.

So from a person whose only vantage point is the intersection, I question if the entire project needs to happen at all. Maybe it needs it, but I just don't know. I thought the study was partly because of the potential changes at the park, Government Drive etc. But since these other areas and big picture/master plan of downtown PL is not part of this study. I would like to see what monies have to be spent on other areas before I say this is a necessary project now. But again, I don't know of issues with Rasmussen road now.

I wish I could be more helpful.

Email Received 11/28/18

Here are my comments after the presentation last night. Thank you Tim and City for putting this on for us stakeholders. My comments below.

1. Narrower roadway to deter truck traffic coming to and from Industrial Park. We need to direct trucks to access the Industrial Park from Patriot Ave. This will protect our investment, reduce maintenance costs, and keeps trucks out of a neighborhood area.
2. Move the NO TRUCKS sign south one block to Morehouse intersection.
3. Narrow the roadway back south to Morehouse when the project is built. This will also help reduce speeds along the road.
4. Extend sidewalk south to at least Tree Farm Rd, if not to Morehouse.
5. Put in a boulevard with trees and/or streetlights along the project. I suggest curb & gutter, then boulevard, then sidewalk along the West side of Rasmussen. This small additional investment will have a massive impact on the neighborhood. This narrower road with boulevard and sidewalk will induce further investment into the homes in this area. We have also already rezoned this part of town to allow greater density as we already have existing city water/sewer services here. Let's capitalize on the project by spending a fraction more on curb appeal which will induce more investment & redevelopment, which in turn creates greater tax base and better neighborhoods within the City.

From my window, I see lots of people walking dogs, running, sports teams, semi-trucks, and cars going FAST along Rasmussen. Let's keep the vision in front of us and find a way to make this space inviting, functional, and safe.

Email Received 11/29/18

Good morning!

Thank you so much for holding the open house on Tuesday evening. Tim did a great job as usual and we appreciate the opportunity to view the design and offer our input.

Overall, I personally like the entire design. Focusing on the curb/gutter and sidewalks within that core commercial area is good. Keeping a more rural road setting with bike lanes outside the 3 or 4 block area will save money and should address the need for space for walking and biking. Our foot traffic will most likely be concentrated in the retail/business area which includes the condos and St. Alice Church area.

I would suggest considering forgoing the boulevard look in front of Wild Daisy and the library. It would make it very cumbersome in my personal opinion as space is limited. May also help on the cost. Also additional consideration should be given in utilizing bump-outs on the corner of the 4 way stop. I know it is designed to make it more pedestrian friendly and slow

traffic, but on Government Drive where we have the painted lines, I find it very confining and almost dangerous in meeting vehicles coming through or turning on to the street. It would also eliminate some precious parking in front of Timeless Appeal if my perspective is correct.

The cost for the entire project will be a major challenge with so many other needs that we have in the City. We may wish to begin with reconstruction in the “core retail area” with overlay or reclamation in the extended portions to save money. A bike path may be all we need in the extended area as pedestrians could use the bike lane rather than having additional cost and expansion for a separate walking path.

Again, thank you for all the work on this project. I personally am excited about the retail area as that section of our city is becoming a real magnet for stores and businesses.

Verbal Comments at Open House on 11/27/18

The City has to do something. The City needs to keep investing in their roads and infrastructure if it wants to attract new businesses and residents.

The cost is too much. Scale back. Phase it.

Drainage needs to be taken care of (on either side, mainly around the Gravidahl Drive intersection).

With the hill between north and south Rae intersections, there are some sight distance concerns.

Get trucks off of Rasmussen Road. It seemed the most concern was from Main Street down to the Business / Industrial Park.

A suggestion was to move the existing “No Trucks” sign for northbound traffic presently located at roughly Tree Farm Road (it is too late by then) further south at Morehouse Drive (trucks could then go out to Patriot Avenue and around).

Having the widened shoulder makes the road feel too wide, and vehicles will feel comfortable going faster than desired, and trucks will feel like it is okay for them to use this corridor. Put the curb and gutter right at the edge of the two travel lanes. This should help with keeping speeds lower, and discourage trucks from using this corridor. Even extend the two-lane down to Morehouse Drive – i.e. re-construct the existing road from Tree Farm Road to Morehouse).

Questions and concerns on turning radius/bump outs at the Main Street intersection.

Consider extending the R/W to the west along the sidewalk for the angle parking – southwest of the Main Street intersection.

Having the widened shoulder for bicyclists and pedestrians within the curb and gutter is not safe. Put the curb and gutter right at the edge of the two travel lanes. Put a sidewalk (pedestrians only?) or a bituminous path (wider, for both bicyclists and pedestrians) behind the curb.

Questions and suggestions on changing the grass boulevard to concrete with planting rings in consideration of maintenance. The area of concern was mainly the 1/2 block north and south of the Main Street intersection where pedestrian traffic is higher.

Some residents were concerned with the proposed improvements “intruding” on their yard. These resident’s homes are relatively close to the roadway now.

There were some positive comments too. One resident even noted that is exactly the way he would have designed it.

Comment Sheets/Notes from Open House on 11/27/18

In favor of keeping up road maintenance. Recycling the bituminous sounds like a fair way to go. People might be more “open” to that. From 4 way North, needs parking! People in general are very worried about the cost. Trying to scale it back but improve partially would be a goal.

Main Street and Rasmussen:

Should “bump outs” be a part of the plan?

Should the Blvd be grass? Maybe consider permanent “maintenance free” Blvd, rather than grass.

Gravdahl Drive and Rasmussen:

Extend sidewalks all the way south to Tree Farm Rd

Rae Ave to Main St is zoned for higher redevelopment, do sidewalks, street lights now – indulge redevelopment.

N of Tree Farm on Rasmussen:

Get rid of 4’ bike path. Got 24’ curb to curb. Put sidewalk outside of curb(s).

Tree Farm Road and Rasmussen:

Run 24’ curb to curb down to Morehouse to discourage truck traffic from south.

Summary of All Comments

Something needs to be done along Rasmussen Road for safety of pedestrians, bikers and residents. A solution would be narrowing the road by adding the curb/gutter sidewalk or bike path along the roadway and expand it to at least Tree Farm Road or Morehouse on the South end. “Truck” traffic needs to be diverted from using Rasmussen Road, better signage needs to instruct where to enter the Industrial Park via Patriot Avenue. There needs to be more parking along the road, especially north of Main Street in the business district. There were concerns on cost, which the suggestion would be to do the project in phases. Residents do not want the proposed improvements “intruding” on their yard, these homes are relatively close to the roadway now.

COMMENTS RECEIVED AFTER DECEMBER 4, 2018 CITY COUNCIL MEETING

Email Received 12/03/2018

I would say continue to fill the potholes. I don't see traffic getting heavier on this road. As for pedestrians, the trail is only a block away.

How about a public beach? We finally found a really nice public beach in Baxter (Whipple beach). I cannot believe with all the lakes around that there are very few public beaches around. I don't know what we would do without Baxter. Sure would be nice to have something closer.

Email Received 12/03/2018

My wife and I live at 30658 Rasmussen Road. We retired here full time 4 yrs. ago. Thank you for the information supplied at the meeting last Tue. evening. We know everything is in the very preliminary stages, and would like to make a couple of general comments.

-- In the aerial photo / map, it appears that all the other private driveway entrances along Rasmussen show a 'improved apron'. There does not appear to be one at our driveway. If this project were to proceed we would appreciate that being added.

-- Cost concerns re: project financing. It appears that in the majority of Pequot's residential neighborhoods, that there really isn't a lot of curb and gutter thruout town, so we doubt there will be a lot of support for tax money being spent on this 'one street' project. Will we, the individual private property owners along Rasmussen, have to bear the financial cost for this? We live on a fixed income, so we don't have access to 'unlimited funds' to pay out.

Thank you again for the presentation last week.

Email Received 12/04/2018

After attending the meeting regarding Rasmussen Road on November 27, 2018 at the Cole Memorial Building I would like to include the following documented information. I did discuss it with staff that were attending the meeting and would be willing to discuss it further if a site visit were requested.

I live at 30766 Gravdahl Drive. The west side of my property runs along Rasmussen Road. I live at the "bottom of the hill" am very concerned about the water drainage. When we get rain it leaves the street and runs through my yard, pooling close to the southwest corner of my house. It runs through my yard across my driveway heading east and heading north. It also runs across Gravdahl Drive towards the big ditch across the street to the north of my house.

When the "big ditch" fills up the water runs out the east end and onto Gravdahl Drive to the point that it is unsafe to drive through as it is so deep at that corner.

The water also pools at the intersection of Rasmussen and north Rae at the southwest corner of my property and is deep to drive through and takes several days to drain away.

This water drainage is very significant and needs to be addressed.

I have installed rain gutters on my house to help divert the water from my roof away from the south side of my house but there is still a lot of water when it rains.

Thru traffic of semi-trucks and other big trucks currently traveling at high speeds along Rasmussen Road should be directed to Patriot Avenue. Weight restrictions and speed limits should be enforced in the residential area of Rasmussen Road.

I also am very concerned about how this project is going to be funded and how this will impact me financially. I purchased my house through the Central Minnesota Housing Partnership. A property assessment will be a hardship.

Thank you for your consideration of this property owners input.

ENGINEER'S ESTIMATE
RASMUSSEN ROAD IMPROVEMENTS - NORTH OF MAIN ST
PEQUOT LAKES, MN
SEPTEMBER, 2018

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED UNIT PRICE	ESTIMATED QUANTITY	TOTAL COST
ROADWAY					
1	MOBILIZATION	LUMP SUM	\$100,000.00	1	\$100,000.00
2	COMMON EXCAVATION	CU YD	\$7.00	2100	\$14,700.00
3	REMOVE WATERMAIN PIPE	LIN FT	\$15.00	935	\$14,025.00
4	REMOVE SANITARY SEWER PIPE	LIN FT	\$12.00	1350	\$16,200.00
5	REMOVE BITUMINOUS PAVEMENT	SQ YD	\$3.00	7450	\$22,350.00
6	REMOVE CONCRETE PAVEMENT	SQ YD	\$3.00	35	\$105.00
7	REMOVE SANITARY MANHOLE	EACH	\$1,000.00	6	\$6,000.00
8	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	\$3.00	570	\$1,710.00
9	SAWING CONCRETE PAVEMENT (FULL DEPTH)	LIN FT	\$40.00	30	\$1,200.00
10	CONCRETE CURB AND GUTTER B624	LIN FT	\$18.00	3325	\$59,850.00
11	4" CONCRETE WALK	SQ FT	\$7.00	6150	\$43,050.00
12	6" CONCRETE DRIVEWAY PAVEMENT	SQ YD	\$150.00	415	\$62,250.00
13	TRUNCATED DOMES	SQ FT	\$45.00	96	\$4,320.00
14	AGGREGATE BASE CLASS 5	TON	\$23.00	3065	\$70,495.00
15	TYPE SP 9.5 WEARING COURSE MIXTURE (2,C)	TON	\$70.00	1750	\$122,500.00
16	STRIPING (4" BROKEN LINE PAINT)	LIN FT	\$0.60	670	\$402.00
17	STRIPING (4" SOLID LINE PAINT)	LIN FT	\$3.00	3415	\$10,245.00
18	STRIPING (6" SOLID LINE PAINT)	LIN FT	\$4.00	425	\$1,700.00
19	SIGNS	LUMP SUM	\$2,000.00	1	\$2,000.00
20	TRAFFIC CONTROL	LUMP SUM	\$3,000.00	1	\$3,000.00
21	STREET SWEEPER	HOUR	\$150.00	20	\$3,000.00
22	COMMON LABORERS	HOUR	\$80.00	20	\$1,600.00
23	SILT FENCE	LIN FT	\$2.50	4000	\$10,000.00
24	EROSION CONTROL BLANKET	SQ YD	\$1.75	4000	\$7,000.00
25	STABILIZED CONSTRUCTION EXIT	EACH	\$1,000.00	4	\$4,000.00
26	EROSION CONTROL SUPERVISOR	LUMP SUM	\$1,000.00	1	\$1,000.00
27	TREES	EACH	\$500.00	25	\$12,500.00
28	STREET LIGHTING	EACH	\$6,500.00	25	\$162,500.00
29	SCREENED TOPSOIL BORROW	CU YD	\$35.00	850	\$29,750.00
30	FERTILIZER TYPE 1	POUND	\$2.00	320	\$640.00
31	SEEDING	ACRE	\$550.00	1.6	\$880.00
32	SEED MIXTURE 25-151	POUND	\$3.75	320	\$1,200.00
33	HYDRAULIC TYPE MULCH MATRIX	POUND	\$1.50	4000	\$6,000.00
SUBTOTAL					\$796,000.00
STORM SEWER COLLECTION SYSTEM					
STORM SEWER MAIN					
34	STORM DRAIN INLET PROTECTION	EACH	\$175.00	12	\$2,100.00
35	INSULATION FOR WATERMAIN	LUMP SUM	\$5,000.00	1	\$5,000.00
36	12" RC PIPE SEWER	LIN FT	\$50.00	685	\$34,250.00
37	18" RC PIPE SEWER	LIN FT	\$65.00	600	\$39,000.00
38	27" RC PIPE SEWER	LIN FT	\$80.00	700	\$56,000.00
39	27" RC PIPE APRON W/ RIPRAP	EACH	\$2,000.00	1	\$2,000.00
40	48" DRAINAGE STRUCTURE W/ CASTING	LIN FT	\$375.00	72	\$27,000.00
41	60" DRAINAGE STRUCTURE W/ CASTING	LIN FT	\$500.00	11	\$5,500.00
SUBTOTAL					\$171,000.00
STORM SEWER SERVICE					
42	18" RC PIPE SEWER	LIN FT	\$65.00	50	\$3,250.00
43	RC PIPE SEWER PLUG	EACH	\$300.00	4	\$1,200.00
SUBTOTAL					\$4,500.00
WATER TREATMENT PLANT ROAD REMOVALS/RESTORATION & POND GRADING					
44	REMOVE BITUMINOUS PAVEMENT	SQ YD	\$3.00	1000	\$3,000.00
45	REMOVE STORM SEWER	LF	\$10.00	250	\$2,500.00
46	ADJUST WATERMAIN	EACH	\$1,500.00	2	\$3,000.00
47	CLEAR & GRUBB	LUMP SUM	\$5,000.00	1	\$5,000.00
48	ADJUST WATERMAIN	EACH	\$1,500.00	2	\$3,000.00
49	COMMON EXCAVATION	CU YD	\$5.00	2000	\$10,000.00
50	AGGREGATE BASE CLASS 5	TON	\$23.00	350	\$8,050.00
51	TYPE SP 9.5 WEARING COURSE MIXTURE (2,C)	TON	\$70.00	250	\$17,500.00
52	TURF RESTORATION	LUMP SUM	\$10,000.00	1	\$10,000.00
SUBTOTAL					\$62,000.00
SUBTOTAL					\$237,500.00
SANITARY SEWER COLLECTION SYSTEM					
53	CONNECT TO EXISTING PVC SANITARY SEWER	EACH	\$750.00	1	\$750.00
54	SANITARY SEWER MANHOLE	EACH	\$3,000.00	6	\$18,000.00
55	MANHOLE EXCESS DEPTH	LIN FT	\$200.00	35	\$7,000.00
56	8" PVC SEWER PIPE	LIN FT	\$35.00	1300	\$45,500.00
57	6" PVC SEWER SERVICE PIPE	LIN FT	\$35.00	140	\$4,900.00
58	4" PVC SEWER SERVICE PIPE	LIN FT	\$35.00	350	\$12,250.00
59	8" x 6" PVC WYE	EACH	\$600.00	4	\$2,400.00
60	8" x 4" PVC WYE	EACH	\$600.00	10	\$6,000.00
61	6" SERVICE CLEANOUTS W/ CASTINGS	EACH	\$750.00	4	\$3,000.00
62	4" SERVICE CLEANOUTS W/ CASTINGS	EACH	\$750.00	10	\$7,500.00
SUBTOTAL					\$107,500.00
WATER DISTRIBUTION SYSTEM					
63	CONNECT TO EXISTING PVC WATERMAIN	EACH	\$750.00	4	\$3,000.00
64	8" PVC WATERMAIN PIPE (MAINLINE)	LIN FT	\$35.00	1330	\$46,550.00
65	6" PVC WATERMAIN PIPE	LIN FT	\$30.00	40	\$1,200.00
66	1" COPPER SERVICE PIPE	LIN FT	\$75.00	550	\$41,250.00
67	8" GATE VALVE & BOX w/ ADAPTOR (MAINLINE)	EACH	\$2,000.00	4	\$8,000.00
68	6" GATE VALVE & BOX w/ ADAPTOR	EACH	\$2,000.00	1	\$2,000.00
69	1" CORPORATION STOP	EACH	\$350.00	18	\$6,300.00
70	1" CURB STOP AND BOX	EACH	\$1,000.00	18	\$18,000.00
71	HYDRANT	EACH	\$4,500.00	1	\$4,500.00
72	DI FITTINGS	POUND	\$4.00	685	\$2,740.00
SUBTOTAL					\$133,500.00

NOTES:

1 R/W ACQUISITION WAS CALCULATED AT 125% OF ESTIMATED TAX VALE (\$30,000 PER ACRE)

ESTIMATED CONSTRUCTION COST:	\$1,274,500.00
CONTINGENCIES (15%):	\$191,175.00
SUBTOTAL:	\$1,465,675.00
ENGINEERING (15%):	\$219,851.25
R/W ACQUISITION PLACEHOLDER (1):	\$98,000.00
LEGAL AND OTHER COSTS (2%):	\$29,313.50
ADMINISTRATION (2%):	\$29,313.50
ESTIMATED TOTAL PROJECT COST:	\$1,842,000.00

COST PER FOOT \$1,842,000/2,325 LF: \$790.00

ENGINEER'S ESTIMATE
RASMUSSEN ROAD IMPROVEMENTS - SOUTH OF MAIN ST
PEQUOT LAKES, MN
SEPTEMBER, 2018

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED UNIT PRICE	ESTIMATED QUANTITY	TOTAL COST
ROADWAY					
1	MOBILIZATION	LUMP SUM	\$100,000.00	1	\$100,000.00
2	COMMON EXCAVATION	CU YD	\$7.00	1380	\$9,660.00
3	REMOVE WATERMAIN PIPE	LIN FT	\$15.00	675	\$10,125.00
4	REMOVE SANITARY SEWER PIPE	LIN FT	\$12.00	60	\$720.00
5	REMOVE BITUMINOUS PAVEMENT	SQ YD	\$3.00	5200	\$15,600.00
6	REMOVE CONCRETE PAVEMENT	SQ YD	\$3.00	170	\$510.00
7	REMOVE SANITARY MANHOLE	EACH	\$1,000.00	1	\$1,000.00
8	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	\$3.00	650	\$1,950.00
9	SAWING CONCRETE PAVEMENT (FULL DEPTH)	LIN FT	\$40.00	100	\$4,000.00
10	CONCRETE CURB AND GUTTER B624	LIN FT	\$18.00	8500	\$153,000.00
11	4" CONCRETE WALK	SQ FT	\$7.00	6100	\$42,700.00
12	6" CONCRETE DRIVEWAY PAVEMENT	SQ YD	\$150.00	640	\$96,000.00
13	TRUNCATED DOMES	SQ FT	\$45.00	100	\$4,500.00
14	AGGREGATE BASE CLASS 5	TON	\$23.00	3800	\$87,400.00
15	TYPE SP 9.5 WEARING COURSE MIXTURE (2,C)	TON	\$70.00	2200	\$154,000.00
16	STRIPING (4" BROKEN LINE PAINT)	LIN FT	\$0.60	1100	\$660.00
17	STRIPING (4" SOLID LINE PAINT)	LIN FT	\$0.60	4675	\$2,805.00
18	STRIPING (6" SOLID LINE PAINT)	LIN FT	\$4.00	2350	\$9,400.00
19	SIGNS	LUMP SUM	\$2,000.00	1	\$2,000.00
20	TRAFFIC CONTROL	LUMP SUM	\$3,000.00	1	\$3,000.00
21	STREET SWEEPER	HOURLY	\$150.00	20	\$3,000.00
22	COMMON LABORERS	HOURLY	\$80.00	20	\$1,600.00
23	SILT FENCE	LIN FT	\$2.50	2000	\$5,000.00
24	EROSION CONTROL BLANKET	SQ YD	\$1.75	2000	\$3,500.00
25	STABILIZED CONSTRUCTION EXIT	EACH	\$1,000.00	6	\$6,000.00
26	EROSION CONTROL SUPERVISOR	LUMP SUM	\$1,000.00	1	\$1,000.00
27	TREES	EACH	\$500.00	20	\$10,000.00
28	STREET LIGHTING	EACH	\$6,500.00	15	\$97,500.00
29	SCREENED TOPSOIL BORROW	CU YD	\$35.00	920	\$32,200.00
30	FERTILIZER TYPE 1	POUND	\$2.00	340	\$680.00
31	SEEDING	ACRE	\$550.00	1.7	\$935.00
32	SEED MIXTURE 25-151	POUND	\$3.75	340	\$1,275.00
33	HYDRAULIC TYPE MULCH MATRIX	POUND	\$1.50	4250	\$6,375.00
SUBTOTAL					\$868,000.00
STORM SEWER COLLECTION SYSTEM					
STORM SEWER MAIN					
34	STORM DRAIN INLET PROTECTION	EACH	\$175.00	20	\$3,500.00
35	ISULATION FOR WATERMAIN	LUMP SUM	\$8,000.00	1	\$8,000.00
36	12" RC PIPE SEWER	LIN FT	\$45.00	1300	\$58,500.00
37	18" RC PIPE SEWER	LIN FT	\$55.00	1270	\$69,850.00
38	30" RC PIPE SEWER	LIN FT	\$75.00	250	\$18,750.00
39	30" RC PIPE APRON W/ RIPRAP	EACH	\$2,000.00	5	\$10,000.00
40	48" DRAINAGE STRUCTURE W/ CASTING	LIN FT	\$375.00	85	\$31,875.00
41	60" DRAINAGE STRUCTURE W/ CASTING	LIN FT	\$500.00	10	\$5,000.00
42	CONTROL STRUCTURE	EACH	\$5,000.00	2	\$10,000.00
SUBTOTAL					\$215,500.00
STORM SEWER SERVICE					
43	18" RC PIPE SEWER	LIN FT	\$55.00	60	\$3,300.00
44	RC PIPE SEWER PLUG	EACH	\$300.00	3	\$900.00
SUBTOTAL					\$4,000.00
GRAVDAHL DRIVE REMOVALS/RESTORATION					
45	REMOVE BITUMINOUS PAVEMENT	SQ YD	\$3.00	800	\$2,400.00
46	AGGREGATE BASE CLASS 5	TON	\$23.00	270	\$6,210.00
47	TYPE SP 9.5 WEARING COURSE MIXTURE (2,C)	TON	\$70.00	190	\$13,300.00
48	TURF RESTORATION	LUMP SUM	\$2,500.00	1	\$2,500.00
49	ADJUST WATERMAIN	EACH	\$2,500.00	1	\$2,500.00
SUBTOTAL					\$27,000.00
EXISTING GRAVDAHL POND EXCAVATION/RESTORATION					
50	COMMON EXCAVATION	CU YD	\$5.00	500	\$2,500.00
51	INSULATE SANITARY SEWER	LUMP SUM	\$1,500.00	1	\$1,500.00
52	TURF RESTORATION	LUMP SUM	\$5,000.00	1	\$5,000.00
SUBTOTAL					\$9,000.00
PROPOSED GRAVDAHL POND EXCAVATION/RESTORATION					
53	CLEAR & GRUB	ACRE	\$8,000.00	0.75	\$6,000.00
54	FORCEMAIN PIPING REROUTE	LUMP SUM	\$20,000.00	1	\$20,000.00
55	COMMON EXCAVATION	CU YD	\$5.00	2000	\$10,000.00
56	TURF RESTORATION	LUMP SUM	\$10,000.00	1	\$10,000.00
SUBTOTAL					\$46,000.00
SUBTOTAL					\$301,500.00
SANITARY SEWER COLLECTION SYSTEM					
57	CONNECT TO EXISTING PVC SANITARY SEWER	EACH	\$750.00	2	\$1,500.00
58	SANITARY SEWER MANHOLE	EACH	\$3,000.00	1	\$3,000.00
59	MANHOLE EXCESS DEPTH	LIN FT	\$200.00	5	\$1,000.00
60	8" PVC SEWER PIPE	LIN FT	\$35.00	60	\$2,100.00
SUBTOTAL					\$7,500.00
WATER DISTRIBUTION SYSTEM					
61	CONNECT TO EXISTING PVC WATERMAIN	EACH	\$750.00	2	\$1,500.00
62	8" PVC WATERMAIN PIPE (MAINLINE)	LIN FT	\$35.00	1550	\$54,250.00
63	6" PVC WATERMAIN PIPE	LIN FT	\$30.00	60	\$1,800.00
64	1" COPPER SERVICE PIPE	LIN FT	\$75.00	390	\$29,250.00
65	8" GATE VALVE & BOX W/ ADAPTOR (MAINLINE)	EACH	\$2,000.00	4	\$8,000.00
66	6" GATEVALVE & BOX W/ ADAPTOR	EACH	\$2,000.00	2	\$4,000.00
67	1" CORPORATION STOP	EACH	\$350.00	13	\$4,550.00
68	1" CURB STOP AND BOX	EACH	\$1,000.00	13	\$13,000.00
69	HYDRANT	EACH	\$4,500.00	2	\$9,000.00
70	DI FITTINGS	POUND	\$4.00	765	\$3,060.00
SUBTOTAL					\$128,500.00

NOTES:
1 R/W ACQUISITION WAS CALCULATED AT 125% OF ESTIMATED TAX VALE (\$30,000 PER ACRE)

ESTIMATED CONSTRUCTION COST:	\$1,305,500.00
CONTINGENCIES (15%):	\$195,825.00
SUBTOTAL:	\$1,501,325.00
ENGINEERING (15%):	\$225,198.75
R/W ACQUISITION PLACEHOLDER (1):	\$71,000.00
LEGAL AND OTHER COSTS (2%):	\$30,026.50
ADMINISTRATION (2%):	\$30,026.50
ESTIMATED TOTAL PROJECT COST:	\$1,857,500.00

COST PER FOOT \$1,857,500/2,540 LF: \$730.00