

Genesee County Drain Commissioner - Division of Water and Waste Services

ESTIMATE OF ENGINEERING FEES SUMMARY

Rowe Professional Services Company

Contract S.4006 - Raw Water Transmission Main from Jefferson Road to the Planned GCDC-WWS WTP at Stanley and Marathon Roads

Date: June 6, 2013

Revised: June 25, 2013

Task Description	Basic Services Hours	Basic Services Labor	Administration & Expenses	Subconsultants	Allowance	Total	% of Total
Preliminary Design Phase	2,922	\$349,434	\$3,000	\$0	\$139,900	\$492,334	47.8%
Final Design Phase	3,883	\$451,200	\$0	\$0	\$20,000	\$471,200	45.7%
Bidding Phase	502	\$66,860	\$0	\$0	\$0	\$66,860	6.5%
TOTALS	7,307	\$867,494	\$3,000	\$0	\$159,900	\$1,030,394	

Project Schedule Basis of Estimate

Task Description	Duration (weeks)	Start Date	Completion Date
Preliminary Design Phase	15	24-Jun-13	8-Oct-13
Site Data Review and Investigations	4	24-Jun-13	24-Jul-13
Supplemental Survey	4	1-Jul-13	1-Aug-13
Geotechnical Investigations	6	1-Jul-13	15-Aug-13
30% Design Documents	11	22-Jul-13	8-Oct-13
Final Design Phase	17	10-Oct-13	4-Feb-14
60% Design Documents	4	10-Oct-13	10-Nov-13
90% Design Documents	4	25-Nov-13	25-Dec-13
100% Design Documents	4	6-Jan-14	4-Feb-14
Bidding Phase	12	11-Mar-14	4-Jun-14

Genesee County Drain Commissioner - Division of Water and Waste Services

ESTIMATE OF PRELIMINARY DESIGN PHASE ENGINEERING FEES

Rowe Professional Services Company

Contract S.4006 - Raw Water Transmission Main from Jefferson Road to the Planned GCDC-WWS WTP at Stanley and Marathon Roads

Date: June 6, 2013

Revised: June 25, 2013

	Principal \$155	Project Manager \$135	Review Engineer \$125	Pipeline Engineer \$120	Road Engineer \$120	Water Res. Engineer \$110	Environmental Engineer \$110	Design Engineer \$104	Design Engineer \$104	Eng. Tech \$92	Admin \$75	Svy PM \$110	Survey Tech \$92	Svy Crew \$155	Total Hours	Total Cost
Project Management																
Meetings and Coordination	60	150		60	60			60	60		40	60			550	\$66,030
Administration and Reporting		150									40				190	\$23,250
Scheduling		60						60							120	\$14,340
Site Investigations																
Review Data Provided by PRM	20	60		40	40										160	\$20,800
Supplemental Survey		20										60	160	240	480	\$61,220
Supplemental Mapping	1	5								24		12	20		62	\$6,198
Geotechnical Investigations	10	40		40											90	\$11,750
Utility Investigations		6								40		24			70	\$7,130
Site Visits		24		20	12			12	12						80	\$9,576
30% Design																
Plans and Specifications				200	200			200	200						800	\$89,600
QA/QC			60												60	\$7,500
Cost Estimate		20		20	40			60							140	\$16,140
Environmental Permitting Support	0	20		20											40	\$5,100
Prepare Alternative Evaluations		80													80	\$10,800
	91	635	60	400	352			392	272	64	80	156	180	240	2,922	
	\$14,105	\$85,725	\$7,500	\$48,000	\$42,240			\$40,768	\$28,288	\$5,888	\$6,000	\$17,160	\$16,560	\$37,200		\$349,434

Multipliers / Markups

Engineering Services	2.14
Administration and Expenses	0.0%
Subconsultants	15.0%
Profit	15.0%

Costs Summary

Total Base Labor	\$349,434
Administration and Expenses	\$3,000
Total Subconsultants with Markup	\$0
Total Allowances	\$139,900
Total Preliminary Design Phase Costs	\$492,334

Expenses

MDEQ Preapplication Meeting	\$0
Primevara Software	\$3,000
Total Expenses	\$3,000

Average Hourly Rate

\$119.59

Allowances

Geotechnical	\$139,900
Environmental	\$0
Total Allowances	\$139,900

Assumptions/Comments:

- Assumes that separate plans for road reconstruction will not be needed
- Assumes that scheduled meetings, reviews, and approvals by Owner and PM will not be delayed
- Assumes Environmental Permit applications not included (Addendum 1 indicates Environmental Coordinator responsible in one section and designer responsible in another section).
- Assumes that designer will choose project route and Environmental Coordinator will permit the route chosen by designer
- Assumes that all requirements to be included to address permitting will be provided to designer in advance of 60% submittal
- Assumes that survey for additional right-of-way, easement descriptions, etc. is by others
- Does not include survey of wetlands or hydraulic surveys.

Genesee County Drain Commissioner - Division of Water and Waste Services

ESTIMATE OF FINAL DESIGN PHASE ENGINEERING FEES

Rowe Professional Services Company

Contract S.4006 - Raw Water Transmission Main from Jefferson Road to the Planned GCDC-WWS WTP at Stanley and Marathon Roads

Date: June 6, 2013

Revised: June 25, 2013

	Principal Manager \$155	Project Engineer \$135	Review Engineer \$125	Pipeline Engineer \$120	Road Engineer \$120	Water Res. Engineer \$110	Environmental Engineer \$110	Design Engineer \$104	Design Engineer \$104	Eng. Tech \$92	Admin. \$75	Svy PM \$110	Svy Crew \$155	Total Hours	Total Cost
Project Management															
Meetings and Coordination	68	170		85	85			85	85					578	\$71,570
Administration and Reporting		170												170	\$22,950
Scheduling		60		120										180	\$22,500
60% Design															
Plans and Specifications	20	60		150	150			150	150	50	40	20	12	802	\$90,060
QA/QC	10		60											70	\$9,050
Cost Estimate	10	40		40				40		50				180	\$20,510
Permitting		6		40				40	40					126	\$13,450
Environmental Permitting Support		10		10										20	\$2,550
90% Design															
Plans and Specifications	20	60		100	100			100	100	50	40			570	\$63,600
QA/QC			60											60	\$7,500
Cost Estimate	10	40		20	20			40						130	\$15,910
Permitting		6		40	15			80	40					181	\$19,410
100% Design															
Plans and Specifications	20	60		100	100			100	100	40	40			560	\$62,680
QA/QC			20											20	\$2,500
Cost Estimate	10	40		40	20			40						150	\$18,310
Permitting		6						40	40					86	\$8,650
	168	728	140	745	490			555	595	310	120	20	12	3,883	
	\$26,040	\$98,280	\$17,500	\$89,400	\$58,800			\$57,720	\$61,880	\$28,520	\$9,000	\$2,200	\$1,860		\$451,200

Multipliers / Markups	
Engineering Services	2.14
Administration and Expenses	0.0%
Subconsultants	15.0%
Profit	15.0%

Allowances	
Additional Geotechnical	\$ 20,000
Total Allowances	\$ 20,000

Expenses	
Total Expenses	\$ -

Costs Summary	
Total Base Labor	\$451,200
Administration and Expenses	\$0
Total Subconsultants with Markup	\$0
Total Allowances	\$20,000
Total Preliminary Design Phase Costs	\$471,200

Average Hourly Rate	\$116.20
---------------------	----------

Assumptions/Comments:

- Assumes that separate plans for road reconstruction will not be needed
- Assumes that scheduled meetings, reviews, and approvals by Owner and PM will not be delayed
- Assumes Environmental Permit applications not included (Addendum 1 indicates Environmental Coordinator responsible in one section and designer responsible in another section).
- Assumes that designer will choose project route and Environmental Coordinator will permit the route chosen by designer
- Assumes that all requirements to be included to address permitting will be provided to designer in advance of 60% submittal
- Assumes that survey for additional right-of-way, easement descriptions, etc. is by others
- Does not include survey of wetlands or hydraulic surveys.
- Assumes that survey for additional right-of-way, easement descriptions, etc. is by others
- Does not include survey of wetlands or hydraulic surveys.

Genesee County Drain Commissioner - Division of Water and Waste Services

ESTIMATE OF BIDDING PHASE ENGINEERING FEES

Rowe Professional Services Company

Contract S.4006 - Raw Water Transmission Main from Jefferson Road to the Planned GCDC-WWS WTP at Stanley and Marathon Roads

Date: June 6, 2013

Revised: June 25, 2013

	Principal \$160	Project Manager \$140	Review Engineer \$130	Pipeline Engineer \$125	Road Engineer \$125	Water Res. Engineer \$110	Environmental Engineer \$110	Design Engineer \$109	Design Engineer \$109	Eng. Tech \$97	Admin \$80	Svy PM \$115	Svy Crew \$160	Total Hours	Total Cost
Project Management															
Meetings and Coordination	46	120		60	60									286	\$39,160
Administration and Reporting		120												120	\$16,800
Scheduling														0	\$0
															\$0
Bid Phase Assistance															\$0
Bid Questions and Addenda	4	20		20							0			44	\$5,940
Bid Review and Recommendation	4	8									40			52	\$4,960
															\$0
	54	268	0	80	60			0	0	0	40	0	0	502	
	\$8,640	\$37,520	\$0	\$10,000	\$7,500			\$0	\$0	\$0	\$3,200	\$0	\$0		\$66,860

Multipliers / Markups

Engineering Services	2.14
Administration and Expenses	0.0%
Subconsultants	15.0%
Profit	15.0%

Allowances

Additional Geotechnical	\$0
Total Allowances	\$0

Expenses

Total Expenses	\$0
----------------	-----

Costs Summary

Total Base Labor	\$66,860
Administration and Expenses	\$0
Total Subconsultants with Markup	\$0
Total Allowances	\$0
Total Preliminary Design Phase Costs	\$66,860

Average Hourly Rate \$133.19

Assumptions/Comments:

Assumes that separate plans for road reconstruction will not be needed

Assumes that scheduled meetings, reviews, and approvals by Owner and PM will not be delayed

Assumes Environmental Permit applications not included (Addendum 1 indicates Environmental Coordinator responsible in one section and designer responsible in another section).

Assumes that designer will choose project route and Environmental Coordinator will permit the route chosen by designer

Assumes that all requirements to be included to address permitting will be provided to designer in advance of 60% submittal