

**RFP 2003785
Dye Testing Services and As-Needed Engineering
Costing Summary**

#	Items	Site ID	Site Address	MeterType	Typical Daily Average Flow (CFS)	Estimated Number of Dye Tests Per Year	Estimated Number of Dye Tests for Five Years	Applied Science Inc	
								Unit Price	Estimated Total for Five Years
#0-1	LV 1st Tier	AP-S-1	2579 Enterprise Dr	Laser Meter	0.96	1	5	\$3,575.00	\$17,875.00
#0-2	LV 1st Tier	AP-S-2	1555 Fairlane Cir	Magmeter in an inverted siphon	0.3	1	5	\$3,575.00	\$17,875.00
#0-3	LV 1st Tier	AP-S-3	14791 Moran Rd	Parshall Flume - Ultrasonic	TBD	1	5	\$3,575.00	\$17,875.00
#0-4	CSO	BC-S-2	10350 Dearborn St	Teledyne - Pulse Doppler (ISCO Pro20)	60.85	2	10	\$3,675.00	\$36,750.00
#0-5	LV 1st Tier	CL-S-1	8051 E. 8 Mile Rd	Magmeter	1.46	1	5	\$3,575.00	\$17,875.00
#0-6	HV 1st Tier	DN-S-2	2701 Greenfield Rd (Greenfield P.S.)	Magmeter	15.78	1	5	\$3,675.00	\$18,375.00
#0-7	LV 1st Tier	DN-S-4	18030 Hubbard Dr (Southfield & Hubbard)	Magmeter	0.84	1	5	\$3,575.00	\$17,875.00
#0-8	LV 1st Tier	DN-S-5	NB Southfield Service Dr, S. of Hubbard	Magmeter	0.48	1	5	\$3,575.00	\$17,875.00
#0-9	LV 1st Tier	DN-S-6	16675 Michigan Ave (Mich. Ave & Emerson)	Parshall Flume - Ultrasonic	0.02	1	5	\$3,575.00	\$17,875.00
#0-10	LV 1st Tier	DN-S-7	19300 Ford Rd; Altar & Ford Rd.	Parshall Flume - Ultrasonic	0.03	1	5	\$3,575.00	\$17,875.00
#0-11	HV 1st Tier	DN-S-8	1475 Miller Rd (Miller rd. P.S.)	Doppler area-velocity (ISCO 2150)	21.46	2	10	\$3,675.00	\$36,750.00
#0-12	HV GDRSS	DT-S-1	6375 Evergreen Rd (NW & Evergreen)	Teledyne - Pulse Doppler (ISCO Pro20)	26.06	2	10	\$3,675.00	\$36,750.00
#0-13	HV GDRSS	DT-S-3	5417 Mercury Dr (Hubbel - Southfield)	Open Channel, Multi Path-Transit Time-Accusonic	33.03	2	10	\$3,675.00	\$36,750.00
#0-14	HV GDRSS	DT-S-4	5417 Mercury Dr (Hubbel - Southfield)	Laser meter	NA	2	10	\$3,850.00	\$38,500.00
#0-15	HV GDRSS	DT-S-6	7439 Wetherby St (Wetherby & Majestic)	Open Channel, Multi Path-Transit Time-Accusonic	28.05	2	10	\$3,675.00	\$36,750.00
#0-16	HV GDRSS	DT-S-7	12264 E. Jefferson Ave (Conner Creek P. S.)	Open Channel, Multi Path-Transit Time-Accusonic	35.59	2	10	\$3,675.00	\$36,750.00
#0-17	HV GDRSS	DT-S-8	9000 E. Jefferson Ave	Teledyne - Pulse Doppler (ISCO Pro20)	148.41	2	10	\$3,850.00	\$38,500.00
#0-18	HV GDRSS	DT-S-10	2201 Franklin St (DRI @ Dubois & Franklin)	Teledyne - Pulse Doppler (ISCO AccQpulse)	TBD	2	10	\$3,850.00	\$38,500.00
#0-19	HV GDRSS	DT-S-11	5560 Mt. Elliot St (Mt. Elliot & Palmer)	Teledyne - Pulse Doppler (ISCO AccQpulse)	98.44	2	10	\$3,675.00	\$36,750.00
#0-20	HV GDRSS	DT-S-12	1982 W. Jefferson Ave	Open Channel, Multi Path-Transit Time-Accusonic	209.53	2	10	\$3,850.00	\$38,500.00
#0-21	HV GDRSS	DT-S-13	8720 Seven Mile Rd (Mt. Olivet Cemetery)	Weir w/ Ultrasonic level	9.07	1	5	\$3,575.00	\$17,875.00
#0-22	HV GDRSS	DT-S-14	8577 E. State Fair Ave (NEWTP Backwash)	Doppler area-velocity (ISCO 2150)	6.87	1	5	\$3,575.00	\$17,875.00
#0-23	LV 1st Tier	FA-S-1	22990 8 Mile Rd (8 Mile & Berg)	Parshall Flume - Ultrasonic	2	1	5	\$3,575.00	\$17,875.00
#0-24	LV 1st Tier	GK-S-1	15115 E. Jefferson Ave (Jeff. & Maryland @ P.S.)	Parshall Flume - Ultrasonic	0.32	1	5	\$3,575.00	\$17,875.00
#0-25	LV 1st Tier	GK-S-2	15115 E. Jefferson Ave (Jeff. & Maryland @ P.S.)	Magmeter	2.96	1	5	\$3,575.00	\$17,875.00
#0-26	LV 1st Tier	GP-S-1	Neff rd. P. S.	Magmeter	2.47	1	5	\$3,575.00	\$17,875.00
#0-27	LV 1st Tier	GPF-S-1	308 Chalfonte Ave (Kerby & Chalfonte)	Magmeter	4.16	1	5	\$3,575.00	\$17,875.00
#0-28	LV 1st Tier	ME-S-1	3424 Greenfield Rd (Greenfield & Wall)	Magmeter	2.36	1	5	\$3,575.00	\$17,875.00
#0-29	HV 1st Tier	NES-DWP	11036 E. 8 Mile Rd (Discharge from NES Dew. Pump)	Magmeter	0.03	2	10	\$3,575.00	\$35,750.00
#0-30	HV 1st Tier	NES-S-1	11036 E. 8 Mile Rd (Discharge from NES Pump 1)	Magmeter	0.4	2	10	\$3,675.00	\$36,750.00
#0-31	HV 1st Tier	NES-S-2	11036 E. 8 Mile Rd (Discharge from NES Pump 2)	Magmeter	40.94	2	10	\$3,675.00	\$36,750.00
#0-32	HV 1st Tier	NES-S-4	11036 E. 8 Mile Rd (Discharge from NES Pump 4)	Magmeter	0.52	2	10	\$3,675.00	\$36,750.00
#0-33	HV 1st Tier	NES-S-5	11036 E. 8 Mile Rd (Discharge from NES Pump 5)	Magmeter	21.85	2	10	\$3,675.00	\$36,750.00
#0-34	HV 1st Tier	NES-S-6	11036 E. 8 Mile Rd (Discharge from NES Pump 6)	Magmeter	4.25	2	10	\$3,675.00	\$36,750.00
#0-35	HV 1st Tier	OC-S-1	18155 Westhaven Ave (8 Mile & southfield)	Magmeter	54.67	2	10	\$3,675.00	\$36,750.00
#0-36	HV 1st Tier	SE-S-1	20405 Conant St (8 Mile & dequinder)	Magmeter	72.5	2	10	\$3,675.00	\$36,750.00
#0-37	WRRF	SFE-24	9300 W. Jefferson Ave	Magmeter	3.48	0	0	\$3,575.00	\$0.00
#0-38	WRRF	SFE_48	9300 W. Jefferson Ave	Full Conduit, Multi Path-Transit Time-Accusonic	12.96	2	10	\$3,675.00	\$36,750.00
#0-39	WRRF	SFE_60	9300 W. Jefferson Ave	Full Conduit, Multi Path-Transit Time-Accusonic	22.71	2	10	\$3,675.00	\$36,750.00
#0-40	HV 1st Tier	WC-S-1	195 S. Fort St (S. Fort & Oakwood)	Full Conduit, Multi Path-Transit Time-Accusonic	62.92	2	10	\$3,675.00	\$36,750.00
#0-41	HV 1st Tier	WC-S-2	5665 Evergreen Rd (Ford & Evergreen)	ADFM Pro20 - Insertion probe	27.63	2	10	\$3,675.00	\$36,750.00
#0-42	HV 1st Tier	WC-S-3	NB Southfield Service Dr, S. of Hubbard	ADFM Pro20 - Insertion probe	9.67	2	10	\$3,575.00	\$35,750.00
#0-43	HV 1st Tier	WM-S-1	308 Chalfonte Ave (Kerby P.S.)	Magmeter	19.52	2	10	\$3,675.00	\$36,750.00
#0-44	HV 1st Tier	WM-S-2	1204 Bishop Rd	Laser meter	48.99	2	10	\$3,675.00	\$36,750.00
#0-45	WRRF	PS-1	Pump Curve Development for all 8 pumps based on testing at three wet well levels each (24 Tests plus special PS-1 Analysis)	None	554.8	10	50	\$4,000.00	\$200,000.00
#0-46	WRRF	PS-2A	Discharge Piping of each PS-2A Pumps (Pricing applies to each meter)	Magmeter	384.6	2	10	\$4,000.00	\$40,000.00
#0-47	WRRF	DR0 or RRO Meters	Outfall	TBD /Full Conduit, Multi Path-Transit Time	900-2600	2	10	\$7,500.00	\$75,000.00
#0-48	TBD	TBD	TBD; Line Item reflects costs for any additional low flow rate test site	TBD	0.1-10	10	50	\$3,575.00	\$178,750.00
#0-49	TBD	TBD	TBD; Line Item reflects costs for any additional mid-range flow rate test site	TBD	10.1-100	10	50	\$3,675.00	\$183,750.00
#0-50	TBD	TBD	TBD; Line Item reflects costs for any additional High flow rate test site	TBD	100.1-350	10	50	\$3,850.00	\$192,500.00
#0-51								Subtotal - Dye Testing Services	\$2,134,875.00
								As-Needed Engineering Services	\$500,000.00
								NTE Total	\$2,634,875.00

Hourly Rates

Title	Quantity Required	Overhead Rate (For Indirect costs)	Profit Mark-Up (Direct Labor)	Profit Markup (Indirect Costs)	Hourly Rate
Principal	1	1.45	0.15	0.15	\$180.00
Senior Project Manager	1	1.45	0.15	0.15	\$165.00
Project Manager	1	1.45	0.15	0.15	\$130.00
Staff Engineer	1	1.45	0.15	0.15	\$95.00
Crew Leader	1	1.45	0.15	0.15	\$95.00
Engineering Technician	1	1.45	0.15	0.15	\$75.00
Construction Management	1	1.45	0.15	0.15	\$165.00
Construction Inspection Engineer	1	1.45	0.15	0.15	\$110.00
Construction Inspection Technician	1	1.45	0.15	0.15	\$95.00
Geotechnical Engineer	1	1.45	0.15	0.15	\$166.00
Structural Engineer	1	1.45	0.15	0.15	\$176.00
Electrical Engineer	1	1.45	0.15	0.15	\$163.00