NAME	Rauhorn Electric, Inc.	J. Ranck Electric, Inc.
ADDRESS	Macomb, MI	Mt. Pleasant, MI
Prime Vendor	Rauhorn Electric, Inc.	J. Ranck Electric, Inc.
Location	Macomb, MI	Mt. Pleasant, MI
Years in Business	29 years	25 years
Sign Vendor	Traffic Control Corporation	Carrier & Gable, Inc.
Location	Kalamazoo, MI	Farmington Hills, MI
Years in Business	64 years	
Traffic/Engineer	Opus International Consultants Inc.	Hubbell, Roth & Clark, Inc.
Location	West Bloomfield, MI	Bloomfield Hills, MI
Years in Business	11 years	94 years
Installation Contractor	Rauhorn Electric, Inc.	J. Ranck Electric, Inc.
Location	Macomb, MI	Mt. Plesasant, MI
Years in Business	29 years	25 years
DTE Energy	DTE Energy-Mt Clemens Service Center	TBD upon award of contract
Location	Mt Clemens, MI	
Years in Business		
Project Manager		J. Ranck Electric, Inc.
Location		Mt. Pleasant, MI
Years in Business		25 years
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NAME	Rauhorn Electric, Inc.	J. Ranck Electric, Inc.
ADDRESS	Macomb, MI	Mt. Pleasant, MI
Years providing products/services described;	Rauhorn: 20 yrs constructing transportation related	Ranck-performing MDOT wk for over 25 yrs; installed
historical narrative	projects including radar speed displays	numerous traf control devices incld vehicle detection
	Traffic Control: Since 1946 transportation and	system for pub entities as RCOC, RCMC, Detroit,
	safety solutions across 9 mid-west states with	Corps of Eng & many MDOT projects
	offices in Mich, IL, IN, MN, MO, IO	HRC-traf eng serv to SE Mich over 20 yrs, gen eng
	Opus: multi-national eng & plan consultants.	serv to MI communities 95 yrs; gen eng services to
	W Bloomfd office - traf eng/design, rd safety eng/	RH 30 yrs, incld recent Tienken Rd Corridor Study &
	trans plan/ sustainable transportation	upgrade project for MDOT for Rochester Road bet
		M59 and Tienken Rd
Responsible for Project	Rauhorn: Scheuerman, Elec Eng	Ranck-James Ranck-Prin in Charge; Rob Hentkowski-
	Opus: Bagdade-Civil Eng	Proj Mgr, Dale Berkholze-Jobsite Superintendent
	Opus: Woods-Geography/Urban Planning	HRC-Peter Roth, PE-VP-Prin in Charge; Richard
	Opus: Yassin-Civil Eng	Beaubien, PE, PTOE, Associate, Trans Dept Head,
	Opus: Myers - Civil Eng	QA/QC; Colleen Hill, PE, PTOE,, Traffic Eng; David
	Rauhorn: Underhill-Electric Digital Tech	Kelley, Sr Electrical Designer
	â	
Resources	Rauhorn:	Ranck:Hentkowski,Proj Mgr, 18 yrs
	Scheuerman, BSEE, Elec Eng, Project Mgr, 3 yrs	Berkholz, Field Spvr, 20 yrs, Electrical License
	Intelligent Trans experience	HRC: Roth, PE,VP, Prin in Chrg, 30 yrs
	Underhill, Estimate, adm coordinator, 22 yrs,	Beaubien, PE, VP, Prin in Chrg-30 yrs, Ambassador
	coordinate eng duties, suppliers, RH	Bridge, GM, airports
	Opus:	Hill, PE, PTOE, Trans Proj Eng, MDOT, 1-75, Dixie Hwy
	Bagdade, PE, Traf Eng, 10 yrs, Traf signal design	Kelley, Sr Designer, Elect & Roadway lighting,
	Woods, Trans planner, data mgmt, GIS, data collect	intelligent trans systems, MDOT, RCOC, Bl Twp
	Yassin, EIT, Trans Eng, 3 yrs, before/after studies &	Ranck: 105 field temployees, union affiliated,
	feasibility studies for radar speed displays	licensed journeyman electricians, equipmt operators
	Myers, Trans eng, 2 yrs, national speed mgmt eval	and laborers versed in traf controls systems
// (A A A A A A A A A A A A A A A A A A	study, const inspection, pre/post studies	N. W. Co.

## PROPOSALS TABULATION

NAME	Rauhorn Electric, Inc.	J. Ranck Electric, Inc.
ADDRESS	Macomb, MI	Mt. Pleasant, MI
Work Plan	Kick Off Meeting/Identify Locations/Dat Require-	1-Prel Evaluation/Pre-Implementation Report, Outside
	ments/ Design the Locations/Perform Pre-	Agency/Govt mtgs, site location determinations,
	Installation Study/Installation/Construction	design eng, DTE coordination, permits, product
	Inspection/Identify Times for Selective	approval. 2-progress reporting, software, outside
	Enforcement/Post Installation/Prepare a Sign	agency/govt permit approvals, DTE approvals.
	Inventory and Maintenance Requirements/Post-	3-progress reporting (mo), sign inventory, eval
The second secon	Installation Condition Review and Speed	of exist conditions/products/speed datum install
	Evaluation/Final Study Report/Prepare Progress	inspection, speed studies. 5-Final eval studies by
	Reports	site: intermediate report & post-implementation
		report
Start and Completion Date	Study & Design - 3/10-2/11	April 2010 to November 2011
	Installation - 3/11-8/11	
	Post Installation - 9/11-11/11	
· · · · · · · · · · · · · · · · · · ·		
Similar Public Sector Clients	Rauhorn:	Ranck:
	Ann Arbor-various traffic signals & ITS projects	MDOT-dynamic mess signs, closed circuit TV I-96
	Farmington Hills-Radar Speed Display and	MCRC-Total Traf Mgmt System-3 main corridors
	traffic signals	Blue Water Bridge, fiber, CCTV, traf detection
	Livonia-School Zone Signs	Fed Govt-fiber, digital message signs
	Canton Twp	MSU-traf control signals, st lighting, video traf detect
	Rd Comm of Oakland County	HRC:
	Opus:	RH, Roch, Troy, BH, SH, Wixom, Stfd, Warren, Fenton,
	AAA Michigan/Detroit/Wisconsin Dept of	Ann Arbor, Howell, Oakland Cty, Macomb Cty,
	Transportation/State Farm Insurance	MDOT-dynamic mess signs, closed circuit TV I-96
		Rochester-Design/const eng for radar detection
		speed signs

RESTRICTION OF THE STREET

## PROPOSALS TABULATION

NAME	Rauhorn Electric, Inc.	J. Ranck Electric, Inc.
ADDRESS	Macomb, MI	Mt. Pleasant, MI
-		
Experience	Rauhorn-installed 4 sites incl. Radar speed displays	Ranck: Traffic Mgmt Systems, license plate readers,
4	in FH & several school zone site in metro Detroit	radio frequency identification, variable message
	Opus: Bagdade City of Detroit project to install	signs, closed circuit television cameras, ITS towers,
	radar speed displays at several school zones,	multiple communication devices, lighting,
	feasibility study for potential locations; design	traffic maintenance contracts signalized intersections
	of installations, before-after study of effectiveness	and flashing beacon locations, communication dishes,
	of several sign locations	traffic signal modernization
	WI Dept of Trans-feasibility study install of radar	HRC-traffic engineering, studies, school crossing
A CONTRACTOR OF THE CONTRACTOR	speed sign on Highway 164	reviews, school road safety, traffic circulation
	Lead eng compnent of large speed messaging study	analysis, corridor studies, safety studies, MDOT
	for Nat Highway Traf Safety Admin (NHTSA)	communications design build, upgrade OC MTSIS
	Bagdade-involvement w/ Nat Committee on Uni-	system, speed advisory signs for I-75, I-275 vehicle
77-10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-07   10-0	form Traf Control Devices-assist w/ development	detection system, CCTV
	of MUTCD standards for radar speed displays.	
Full Scope of in-house services	Opus-multi-national eng consulting firm. West	Ranck-elect work intelligent trans systems, vehicle
	Bloomfield offices provides: Traf Eng, Rd Safety,	detection systems, dynamic message signs, software
	Trans Design, Trans Plan, Asset Mgmt and Urban	connection to MDOT ctrs, Ig comm towers, maint
	Planning	HRC- full-serv eng, before/after study, traf data
		collection, plans & specs for sign install/permitting
Projects currently in progress	Opus:	Ranck: extensive list of current projects throughout
	Roch Rd Corridor RSA/MDOT/in RH/ - \$25,000	Mich; incld MDOT Hamlin Rd signs & MDOT M-59
	RSA Training/MDOT/Statewide-\$25,000	signs in RH
	On-Call Traffic Eng/FH/cost varies	HRC: 7 offices, 180 staff, key personnel assigned
	On-Call Traffic Safety Eng/ WI Dept Trans \$500,000	to project will be committed to RH for
	On-Call Traf Safety Eng-FHWA-Office of Safety	successful completion of project
	On-Call Serv/FHWA-Nat Highway Institute	
	Speed Mgmt Demo/NHTSA/Arizona \$250,000	

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NAME	Rauhorn Electric, Inc.	J. Ranck Electric, Inc.
ADDRESS	Macomb, MI	Mt. Pleasant, MI
Subcontractors	None	None
Methods of Communication	Monthly progress reports and email as needed	Meet regular basis, mo progress reports, electronic
		file exchange, design ph-bi-wkly conf calls, const
		ph-bi-wkly conf calls, FTP site, face-to-face mtgs
		and conference calls to discuss issues
Policy regarding errors/omissions in plans/specs	Quality Mgmt System. For this project budget	Issues brought to City's attn, Ranck takes direction
	control/Schedule Control/Technical Content	from City, formulate a plan to complete work as
	Internal Team Review/ Quality Mgmt Documentation	requested using mutually agreed method.
		HRC-professional liability insurance
Full Time Employees	Rauhorn:105; Opus:2300/6 in W Bloomfield	Ranch: 105 full time/4 part time employees
Part Time Employees		
Litigation	Information Provided	Information Provided
Billing Procedures	Monthly Invoices based on percent of job	Billed monthly using preapproved schedule of
	completed	values & specified forms for progress billings - as
		per mutually acceptable agreement
Compliance Forms - Attachment B	No	No
Required for Federal Projects		

NAME	Rauhorn Electric, Inc.	J. Ranck Electric, Inc.	
ADDRESS	Macomb, MI	Mt. Pleasant, MI	
COST PROPOSAL:			
Sign/Post Vendor			
Radar Speed Displays-Complete for Installation	Quantity 38; Unit Cost \$9600; Total \$364,800	Quantity 38; Unit Cost \$4166; Total \$158,308	,,,,,,
	(Hardware & Installation only-no engineering)		
Replacement Radar Speed Signs-Unit for replmt			
Accessories:	Slow Down Sign-not used in base bid; 38 @ \$750=	Unit Cost \$4800	
i .	\$28,500		
	GPS Clock-not used in base bid; 38 @ \$500=\$19,000		
Posts	W/foundation 38@ \$1750 = \$66,500	[20 F].	
		ites should be a second of the	
Portable Radar Speed Display Units	2 @ \$4760 = \$9520	2 @ \$4850 = \$9700	Section 2011
Annual Maint Contract for Radar Speed Displays	1st year included in base/Future Yrs-TBD	lst year \$1500; Future Years \$1500	
Annual Software Maintenance & Support Contract	1st year included in base/Future Yrs-TBD	1st year \$2500; Future Years \$2500	
Software Licenses 3-4 Users	See Attached		
		A 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
Installation Contractor	3 person/overhead crew \$400/hr 4 min=\$1600	Foreman \$74/hr x 500 hrs \$37,0	000
	2 person/overhead crew \$300/hr 4 min=\$1200	Journeyman \$68/hr x 450 hrs \$30,60	00
	3 person/undergrd crew \$450/hr 4 min=\$1800	Operator \$58/hr x 500 hrs \$29,0	000
		Apprentice \$50/hr x 610 hrs \$30,5	00
Traffic Consultant/Engineer	Trans Eng, Sr \$175/hr 1 hr = \$175.00	Associate \$141/hr x 18 hrs \$ 2,5	38
·	Trans Eng, 91 917 5/11 1 hr = \$115.00	Project Eng \$90/hr x 106 hrs \$ 9,54	
	Trans Eng, Standard \$115/hr 1 hr = \$115.00	Sr Designer \$112.95/hr x 92 hrs \$10,39	
	11ans Eng, Standard 3113/11 1 11 - 3113.00	Graduate Eng \$70.50/hr x 172 hrs \$12,12	
		GIS Specialist \$75/hr x 76 hrs \$ 5,70	
		Sr CAD Technician \$74.25/hr x 104 hrs \$ 7,722	
Reimbursables	Mileage \$500	51 CAD (Commercial) \$17.20/10 × 104 (115 \$ 7,722	
VEH HING 1990162			
	Misc \$250		

NAME	Rauhorn Electric, Inc.	J. Ranck Electric, Inc.
ADDRESS	Macomb, MI	Mt. Pleasant, MI
DTE Energy	Not Applicable	NTE \$38,000
Prime Vendor/Project Manager	Project Mgr \$100/hr 1 hr = \$100.00	Ranck: \$100/hr x 100 hrs \$10,000
	Misc \$500.00	
Total Cost Breakdown		
Sign/Post Vendor	\$160,000	\$168,000
Installation Contractor	\$112,000	\$207,000
Traffic Consultant/Engineer Incl Reimbursables	\$133,700	\$50,000
DTE Energy	\$17,500	\$38,000
Prime Vendor/Project Mgr Incl Reimbursables	\$15,000	\$10,000
TOTAL PROJECT COST	\$438,200	\$473,000
Phase I: Pre-Implementation Study and Design	\$90,000	\$125,000
Phase II: Installation	\$308,200	
Phase III: Post Installation	\$40,000	\$330,000 \$18,000
Meet Insurance Requirements	Yes	Yes
Exceptions:	Portable Sign Based on Tripod Design for the	Reduce eng costs by using Oakland County
	base bid if trailer is required add \$6500 per sign	Aerial Imagery
	If solar powered of sites that do not already have	Recommend use of solar power - est \$403,000
	existing power deduct \$42,850 from base bid for	w/ average cost of \$10,605 per sign
	a new project costs of \$395,350.	Solar power opt has lower maintenance costs and
A7 A4A4134 A4A		monthly savings for power & the fee associated.
		Solar opt allow City to install 28 signs for current
		budget of \$293,000 as oposed to 23 signs using the
		DTE option