FEE PROPOSAL FOR City of Ann Arbor RFP # 23-15

Solar and Energy Storage Installations for City Sites Updated November 3, 2023 following meeting on October 31, 2023

Submitted To

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Submitted By

NOVA Consultants, Inc. 21580 Novi Road, Suite 300 Novi, MI 48375

NOVA Consultants hourly rates

Position/Classification	Year	Year	Year
	2023	2024	2025
Program Director – Sunil Agrawal	\$140.00	\$145.60	\$151.42
Program Manager – Sachit Verma	\$135.00	\$140.40	\$146.02
Senior Project Manager – Jeff Eckhout	\$131.25	\$136.50	\$141.96
Electrical Engineer – Clayton Cox, Jerry Young	\$110.25	\$114.66	\$119.25
Civil/Structural Engineer – Paul Baluja, Mark Mahajan	\$110.25	\$114.66	\$119.25
Field Inspector – John Gembarksi, John Witte	\$78.75	\$81.90	\$85.18
AutoCAD – Rick Marble, Bruce Dickieson	\$68.25	\$70.98	\$73.82
Admin – Joe Ruffing, Sushma Agrawal	\$36.75	\$38.22	\$39.75

While recent inflation has been approximately 7% to 8%, NOVA is restricting annual increases to a very low 4% to cover increasing operational costs incurred by the company for gas, utilities, insurance, healthcare and employee benefits.

Preliminary designs for the solar facilities have been provided earlier. The associated good-faith estimates for **final design only** are presented in accordance with the design strategy discussed during the meeting at City Hall on October 31, 2023.

Design Strategy

- 1. City Hall/Justice Center to be designed for solar PV system only
- 2. Bicentennial Park PV system size has been restored to the original proposal following e-mail discussions on November 2, 2023. Battery storage to be eliminated.
- 3. Fire Station No. 6 to be designed for battery storage only
- 4. Fire Station No. 1 and No. 3 to be "battery-ready". Possibility to include battery storage installation as part of this project to be evaluated based on budget, schedule, and other factors.
- 5. All sites to be equipped with EV chargers

Scope of work

- 1. Site visit(s) by NOVA personnel.
- 2. 3D scan of roof areas and electrical room to ensure accurate drawings
- 3. Assess suitability of various onsite locations for installation of PV system(s) with regard to shading, roof condition, size, and other factors.
- 4. Record details of existing electrical service, such as service voltage, peak demand, and annual usage.
- 5. Analyze site electric usage data and determine optimum PV size.

- 6. Evaluate the suitability of existing electrical switchgear to receive the power generated from the proposed PV system for use at the facility
- 7. Discuss PV system design and layout options for ballasted rooftop systems.
- 8. Perform structural analysis of the roof to confirm it can take the additional loads expected from the installation of the PV system. NOVA assumes that roof structural drawings are available to assist in the structural calculations.
- 9. Preliminary design of the PV system using Helioscope.
- 10. Energy generation modeling using software such as Helioscope.
- 11. Review requirements from the local electric utility for grid interconnection
- 12. Submit interconnection application to DTE and follow up as necessary
- 13. Design Engineering (Submittals at 60%, 90%, 100% completion) that meet all state and local AHJ requirements
- 14. Design will address MIOSHA requirements for accessing existing equipment;
- 15. Consider Michigan/Regional/US sourced materials as feasible and prudent;
- 16. Meetings, conference calls, etc. as needed.

Cost Proposal

NOVA can provide the above scope of work for a fixed fee of \$135,000. This includes all deliverables, meetings, travel, etc. associated with the scope of work mentioned above. This engineering cost is estimated to be about 5% of the project budget of approximately \$2,500,000. Changes to scope of work will be billed on a time and materials (T&M) basis per the hourly rates above. Mileage will be billed at applicable IRS rates currently in effect.

NOVA understands that there will be another contract for Owner's Engineer Services including but not limited to:

- 1. construction administration
- 2. project oversight
- 3. field inspection
- 4. witness startup
- 5. prepare punch lists
- 6. project closeout
- 7. training
- 8. as-built drawings
- 9. meetings, conference calls as needed