Syed Mohammad, Strategic Sourcing Consultant
smohammad@idoa.IN.gov
Indiana Department of Administration
Procurement Division
402 W. Washington St., Room W468

Executive Summary

2.2.1—Summary of Ability and Desire to Supply the Required Products or Services

Having managed the Indiana statewide program for several years—providing geospatial solutions since 1969, as well as operating an office in Indianapolis since 1981—Woolpert knows how valuable current, accurate geospatial data is at both state and local government levels. Having this intimate awareness positions us well to provide the services and products that the state of Indiana currently requires, and which will lead to success. Given our history providing the State high-quality geospatial services, we hereby propose taking the Indiana Imagery and Lidar Program to the next level by continuing to invest with the State through our experience, solutions and knowledge. Sharing these with local governments will result in a higher degree of outreach and participation.

With the use of geospatial data fundamental to the operation of state and local governments, maintaining accurate and current statewide orthoimagery and aerial lidar datasets is crucial not only for day-to-day business, but also the long-term health of the state's economy, development, safety to its citizens and planning to name a few. Procuring these datasets is a large commitment and requires a vendor capable of providing not just the required products, but one that has also shown a history of engaging the GIS community to expand the footprint of the program to all corners of the state. Being on a statewide scale, the vendor also needs to demonstrate a history of meeting schedule milestones, coming within budget, and providing high-quality deliverables.

Why should the State of Indiana Consider Woolpert? In addition to our extensive history of providing state and local government geospatial solutions, there are key reasons why the state of Indiana will benefit from partnering with Woolpert.

- **Statewide 25 Points Per Square Meter (PPSM) Aerial Lidar and 3-Inch Aerial Imagery.** Having dual ports, our aircraft will perform co-collection of aerial lidar and imagery, allowing us to provide Indiana with statewide 25 ppsm 3DEP QL1 high-density aerial lidar and aerial imagery capable of producing statewide 3-inch orthoimagery. This combination provides the state with an unprecedented opportunity at a very competitive price. Although the required statewide 6-inch orthoimagery is a compelling foundational dataset, statewide 3-inch orthoimagery is unparalleled in the GIS community and unique among other states. And, having both 25 ppsm high-density aerial lidar and 3-inch orthoimagery will provide Indiana with the best possible datasets to be used for future feature extraction utilizing artificial intelligence and machine learning, as the AI/ML process is heavily dependent upon the quality of the input datasets.
- **History of Completing Statewide Programs.** Having worked with the state of Indiana, along with other states including Ohio, Maine, Tennessee, Illinois and Wyoming, Woolpert has the knowledge and

experience to deliver successful programs. One of the key reasons for the success of these state programs is collaboration with local government and their organizations, which is an ongoing challenge as substantial time and effort are required to educate and support them.

- **Innovation.** When we first started working with the Indiana GIO's Office, digital sensor technology was just emerging and has exponentially improved. This is especially true concerning developments with aerial lidar, as current technologies allow for high-density collection meeting the USGS QL1 specification, while collecting and processing more efficiently.
    - *AI/ML*—Leaning on our use of technology, we have invested in both our existing staff, software, hardware and have recently acquired Allvision—a firm primarily focused on the application of AI/ML technology—all to support our clients and meet the needs of value added geospatial solutions.
    - *Lidar Sensor Development*—With many years of sensor development (i.e., BULLDOG, BuckEye), we have designed a solution that will provide the state of Indiana with a cost effective yet highly accurate solution.
    - *Image/Lidar Hosting*—In addition to our Online Redlining Client QC Tool (SmartView® Connect), Woolpert has also designed long-term hosting solutions for both orthoimagery (Stream:Raster™) and aerial lidar (Geocirrus).
- **Long-time Collaboration with Subcontractors.** Woolpert has a long history working with WBE, MBE and/or IVOSB. Within Indiana, we have worked alongside the Resolution Group, Inc., a WBE firm for many years. In addition, we have brought on Keystone Aerial Surveys, to support the Indiana Imagery and Lidar Program. We have collaborated with them successfully for many years on our statewide efforts and they will support us again by providing aerial imagery for the out-of-cycle imagery areas of interest (AOI), while Woolpert focuses on the core AOIs.

2.2.2—Signature of Authorized Representative

As Senior Vice President and Managing Principal of the Government Solutions market at Woolpert, I, Jeff S. Lovin, CP, PS, will serve as the team's Project Principal and authorized signatory for this Statewide Program. I can certify that the information offered in the proposal meets all general conditions of the RFP (including the information requested in Section 2.3.4) and accept responsibility for the thoroughness and correctness of our financial information provided in this submittal. My contact information is as follows:

- Jeff Lovin, CP, PS, Senior Vice President
  4454 Idea Center Boulevard, Dayton, OH 45430-1500
  Direct: 513.527.2600; Cell: 937.609.5627; Email: jeff.lovin@woolpert.com

Ryan E. Bowe, MGIS, GISP, PMP, will serve as the team's Project Manager and principal point of contact throughout the life of this program. Ryan will work closely with Brian Stevens, the team's designated Program Manager, and will be able to address any questions the State may have regarding our submittal. Ryan is no stranger to the state of Indiana or this program. She has worked extensively on multiple statewide contracts, including both the Indiana ortho program and lidar program from 2016 to 2020, as

both a technical expert and a manager. Her experience with statewide contracts ranges from planning acquisition to delivery, including data acquisition.

Ryan is also in the presidential track of Indiana Geographic Information Council (IGIC), with her presidency starting in May of 2024. During her tenure with IGIC, she championed the Partnerships Committee, chaired (and currently co-chairs) the Elevation Working Group, co-chaired the 2023 Geospatial Coordinator's Forum, and regularly attends numerous other working groups and committees.

Ms. Bowe is available during regular business hours, i.e., 8:00AM to 4:30PM, as well as outside business hours if needed. Ryan's contact information is as follows**:**

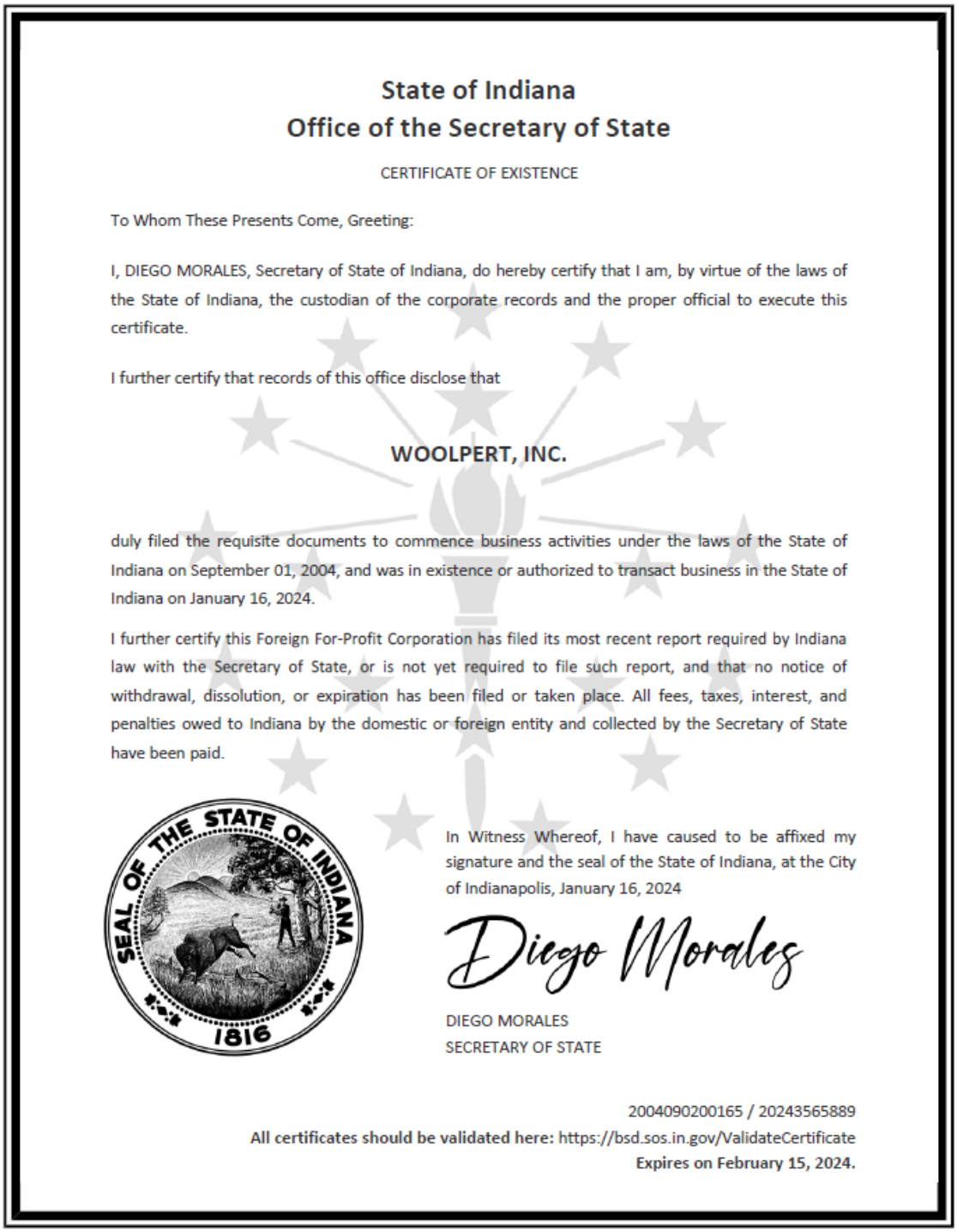
- Ryan E. Bowe, MGIS, GISP, PMP, Associate, Geospatial Project Manager
  4454 Idea Center Boulevard, Dayton, OH 45430-1500
  Direct: 937.531.1266; Cell: 859.533.1872; Email: ryan.bowe@woolpert.com

2.2.3—Respondent Notification

Knowing that the State will be communicating by email, if there is any change to Ryan Bowe's contact information, Woolpert will notify the Indiana Procurement Division and provide the appropriate contact information.

2.2.4—Secretary of State

Woolpert is authorized to transact business in the state of Indiana and maintains a current registration with the office of the Indiana Secretary of State.



State of Indiana
Office of the Secretary of State

CERTIFICATE OF EXISTENCE

To Whom These Presents Come, Greeting:

I, DIEGO MORALES, Secretary of State of Indiana, do hereby certify that I am, by virtue of the laws of the State of Indiana, the custodian of the corporate records and the proper official to execute this certificate.

I further certify that records of this office disclose that

WOOLPERT, INC.

duly filed the requisite documents to commence business activities under the laws of the State of Indiana on September 01, 2004, and was in existence or authorized to transact business in the State of Indiana on January 16, 2024.

I further certify this Foreign For-Profit Corporation has filed its most recent report required by Indiana law with the Secretary of State, or is not yet required to file such report, and that no notice of withdrawal, dissolution, or expiration has been filed or taken place. All fees, taxes, interest, and penalties owed to Indiana by the domestic or foreign entity and collected by the Secretary of State have been paid.

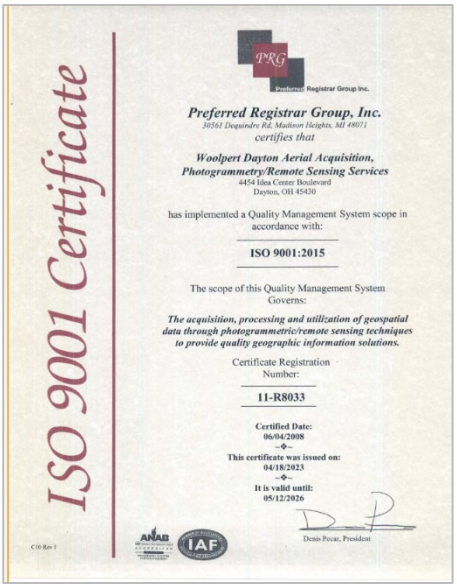
SEAL OF THE STATE OF INDIANA 1816

In Witness Whereof, I have caused to be affixed my signature and the seal of the State of Indiana, at the City of Indianapolis, January 16, 2024

Diego Morales

DIEGO MORALES
SECRETARY OF STATE

2004090200165 / 20243565889
All certificates should be validated here: https://bsd.sos.in.gov/ValidateCertificate
Expires on February 15, 2024.

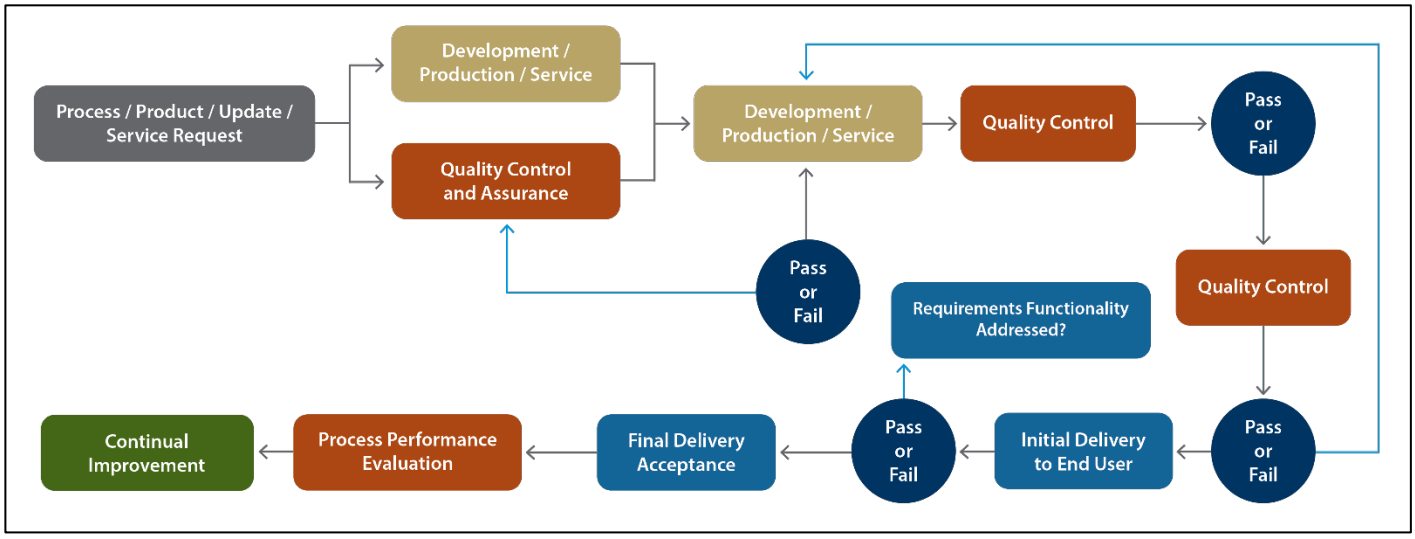


2.2.5—Other Information

ISO Certification and Quality Control Processes

Woolpert is committed to a culture of quality, developing quality processes and procedures throughout our operations, supporting continuous improvement, all while maintaining a focus on complete customer satisfaction.

Our geospatial teams follow standardized processes, integrating quality control and assurance procedures throughout the project lifecycle—beginning with focused requirement definition and optimized planning for acquisition, through production operations and delivery of final products and services. Our ISO 9001:2015 certified Quality Management System (QMS) (certification reference #: 11-R8033) guides our processes to ensure the products and services delivered meet all specifications, acceptance criteria, and client expectations. Our QMS is fully supported by management and implemented by project management and production teams with documented processes and procedures. Through this system we establish lines of authority and communication, levels of management oversight, and coordination between teams and approved subcontractors. We implement quality planning and processes throughout our procedures, enact document control and status tracking, and identify any required technical experience and training needs. We consistently monitor performance across multiple Key Performance Indicators (KPIs) to assure our processes are operating as expected, generating “first time right” products and services delivered on time.



Quality Control and Assurance Overview

Quality Management System (QMS)

Our comprehensive quality program, based on ISO 9001:2015 standards, is focused on deliverable requirements and serves as the foundation of all quality planning efforts. We plan and implement actions to address risks and opportunities to maximize outcomes, achieve project goals, and prevent negative

impacts. As we strive to deliver practical solutions for all requirements, we prioritize continuous improvement to ensure we meet and exceed client expectations with superior quality workflows, products, and performance.

Product Quality. We implement quality reviews throughout production, focusing on defect/error prevention and mitigating negative impacts versus a reactive resolution approach. We maintain controlled documentation of all procedures, workflows, and checklists, specifically aligned to project requirements. We track performance at the production unit level to identify trends and outliers, providing feedback to our teams to support continual improvement.

Project Quality. We employ a standardized management approach, rooted in PMP principals, and supplemented with project specific requirements to ensure scope, schedule, and budget meet expectations and deliver quality outputs consistently. We obtain performance metrics at project milestones to verify our customer focus and solicit external quality feedback to ensure we are aligned to all requirements and expectations.

Process Quality. Our processes are guided by controlled documentation aligned to statutory and regulatory requirements, accepted industry standards, and individual project specifications. We support continuous improvement of our processes based on evaluation and quality inspection. We measure and monitor process performance to ensure operation within defined thresholds and regularly reassess those parameters to drive improvement, automation, and efficiency updates. We identify deficiency root causes, develop corrective actions to prevent recurrence, and examine the entire process to verify all impacts have been fully considered and opportunities for improvement addressed.

Leadership and Commitment. Management is actively involved in implementing our QMS, is accountable for its overall effectiveness, and fully supports the strategic direction for its sustainability and enhancement. Team leadership supports these quality policies and objectives; provides direction for integration of QMS requirements into each business process; and is committed to promoting process approach and risk-based thinking. Our QMS is maintained and continually improved using quality objectives, internal and external audit results, analysis of data, corrective action, and scheduled management review.

Documented ISO Processes. As stated above, Woolpert's quality procedures are developed in accordance with ISO 9001:2015 standards and requirements. ISO certification verifies our QMS is designed to maintain quality standards using controlled documentation, evaluation, inspection, and verification of deliverables at all stages of production to assure the following:

- Development, implementation, and maintenance of controlled documentation to guide production operations, integrating quality processes to ensure all requirements and acceptance criteria are met. To include:
    - A quality manual defining the scope, policies, and objectives for our QMS.
    - Performance evaluation regarding specific procedures and requirements.
    - Data use or disclosure is subject to the restriction on the title page of this proposal.
    - A standardized process to identify, document, investigate, and resolve any nonconformance via planned corrective action and continual improvement tasking.
- Use of controlled documentation (procedures, checklists, forms, reports) designed around project requirements and verified during production.

- Traceability and verification of all designated processes and validation inspections completed per project requirements.
- Regular evaluation and analysis of process performance to assure controlled operations and drive continual improvement.
- Scheduled assessment of controlled documentation, processes, and supporting materials to assure consistent alignment to project, program, and client goals.

To receive and maintain our ISO certification, management representatives and production teams participate in an annual internal audit program, mirroring our certification requirements and addressing any nonconformities. External surveillance audits are performed annually with recertification audits conducted every three years by independent third-party auditors.

Continual Improvement and Post-Delivery Quality Processes

The goal of our process monitoring, KPI tracking, and quality metrics is to identify areas where our teams can improve. We set annual and semi-annual performance goals and focus on how we can achieve them by preventing errors and increasing the accuracy and overall efficiency/effectiveness of our production operations. We regularly leverage data generated internally as well as feedback from our clients to support continual improvement actions.

At regularly scheduled intervals and project specified milestones, each production team participates in a directed 'Lessons Learned' session with quality management. Quality metrics generated during project specific QC/QA operations drive the focus of these meetings. Our goal is to identify best practices, challenges to be addressed, and continual improvement actions at the production team level. The resulting outputs drive improvements of our workflow procedures, supporting documentation, QC/QA inspection processes, and overall production operations. These actions are documented within our QMS and prioritized for completion based on their potential impact on team performance and product quality.

Woolpert actively solicits external quality feedback for all project deliverables. Our QMS includes an established process to receive, review, and respond to all information provided by our clients. If nonconformities are identified in any deliverable, our corrective action process begins by conducting root cause analysis to determine how the issue occurred, how it will be efficiently addressed, what changes will be made to prevent recurrence, and what inspections will be implemented to verify the effectiveness of our resolution. Supporting documentation is updated and revised versions are approved for operational use. All corrective actions, their supporting resolution plans, and evaluation of their effectiveness are documented and reviewed quarterly by sector leadership. We value the external feedback we receive and use it to continually improve our processes and procedures.

Safety

The Woolpert team has a strong culture of safety that permeates all facets of the organization. It is our policy to conduct all activities in a manner that ensures a healthy and safe work environment for all employees, partners, client, and the general public. Safety is a component of all project plans and is actively managed and monitored like all other project risk.

Our comprehensive aviation safety policies include a U.S. FAA risk assessment, rigorous flightpath planning procedures, limits to flight crew hours, and tailored emergency response plans.

Mobilization Activities—Team Deployment

Effective mobilization planning is essential to facilitate rapid, successful deployment of data collection resources to multiple locations simultaneously if needed. Key success factors in meeting this requirement include developing a deployment strategy for posturing and dispatching equipment; aircraft; and technical staff with appropriate local/regional knowledge. A key tool in our mobilization planning process is our internal online system that allows us to monitor our team resources and capacities. This dispatching approach enables our team to assign the appropriate aircraft and sensor package for mission deployment into the AOI. Each request received will be assessed, risks identified, and security and airspace requirements evaluated.

In determining the best approach, factors such as project location and size; type and duration of data collection; delivery timeframe; and team resource availability are considered. A formalized mobilization decision will be made based on these logistical variables and an optimal solution developed that meets project requirements and timelines. A logistical mobilization plan will be developed to ensure the appropriate aircraft, sensor, and personnel are deployed based on location and data collection requirements. A mobilization planning checklist will be used to aid in developing a plan that will promote a low-risk, cost-effective mobilization approach.

Our survey crews collect high-quality geospatial data with both conventional and GPS/RTK survey techniques to provide unique survey solutions in all terrains and to all specifications. Our survey party chiefs are highly skilled in all aspects of land surveying and are equipped with the latest geospatial technology. In addition to the team's technical capabilities, we maintain regional survey offices to maintain and quickly mobilize field survey crews to project locations across the country. The party chiefs and survey staff in each office are skilled at tailoring teams to meet clients' dynamic and intricate needs. In addition to assembling and coordinating field survey crews, the party chiefs frequently assist in developing project scopes, budgeting, scheduling, and implementing QA/QC measures. Our innovative data collection and field/office reviews are key components of our team's ability to work together on large and/or fast-track tasks with multiple subcontractors. Field survey and safety procedures are followed by all the team's field survey staff to maintain consistency between multiple field survey crews.

Aerial Acquisition

Aircraft are maintained and operated under FAA regulations and are certified to a service ceiling with operating load of no less than the highest altitude required for each project.

Woolpert and our acquisition teaming partner (Keystone Aerial Surveys) are experienced in obtaining authorization for and executing flights in controlled and restricted airspace.

Sensor layout in the aircraft will have an unobstructed field of view that is shielded from effluence, exhaust and turbulence, and any sensor port glass will be free of blemishes that could impact the resolution or the accuracy of the sensor.

Lidar systems are fully compliant and certified under the U.S. Department of Health and Human Services standard CDHR 1040. The lidar instruments in the aircraft that may be deployed will have all appropriate labeling and certification plates in plain view. Additionally, manufacturers have provided several engineering and operational controls within our systems that exceed American National Standards Institute (ANSI) requirements for safety.

Flight crews follow strict safety guidelines for the operation of all lidar systems. We understand the safety concerns associated with use of Class IV laser devices, and we develop and execute projects in accordance with ANSI guidelines Z136.1.

Per Section 2.2.2 above, I, Jeff Lovin, am authorized to commit to Woolpert's representations and can certify that the information offered in this proposal meets all general conditions, including the information requested in Section 2.3.4.

Woolpert, Inc.

Jeff S. Lovin, CP
Senior Vice President and *Authorized Signatory*