

Response to RFQ

Network Operations Center (NOC) Services for the City of Superior, Wisconsin (Bid #24-42-IT)

1. Introduction and Company Profile

northlandia networks is honored to present this proposal to provide Network Operations Center (NOC) services for the City of Superior's new city-owned open access fiber network. With combined experience of over 60 years in network architecture, engineering, management and operations, we have a proven track record of success as a trusted provider of continuous, high-availability service across diverse infrastructure projects.

Our experience, qualifications and technical capabilities are tailored to meet the complex needs of municipal networks such as ConnectSuperior, and our extensive experience ensures seamless integration, reliability, and scalability. Our expertise with technology infrastructure in the northland and our physical presence in the Twin Ports would allow us to be more effective with our role in ConnectSuperior.

We have a proven track record of managing critical IT infrastructure and network systems for public and private clients. We specialize in critical infrastructure that requires 24/7/365 uptime, monitoring services, and maintain a proactive approach to troubleshooting and repairs that utilize automation and machine learning to reduce impacts and improve recoverability. We are confident that our expertise will support the City of Superior in delivering exceptional services to its community.

2. Team Structure

Our team comprises highly qualified personnel, collectively having over 60 years of experience in architecture, engineering, and operating large-scale networks, with significant experience in NOC management and support for similar public-sector clients. Key team members include:

- **Abhi Devireddy** – Technical resource with significant experience in network architecture, NOC design, responsible for overseeing project execution and resource allocation.
- **Nick Stevermer** – Technical resource who is an expert in networking systems, deploying and maintaining network infrastructure, and troubleshooting IP Core, OLTs, and ONTs.
- **Anthony Fridlington** – Technical expert involved with event and incident management, with expertise in monitoring and issue resolution.
- **Michael Waggoner** – NOC Technician and physical infrastructure specialist, with expertise in troubleshooting complex networking environments.

3. Relevant Experience & Past Projects

The team has successfully managed and deployed projects with over 45,000 endpoints, providing high-availability network and monitoring services for large-scale networks over the last ten (10) years. Notable examples include:

- **Large multistate enterprise:** Managed a fiber network with 50,000 endpoints, ensuring 99.985% uptime, coordinating change management, and providing break/fix support. Our

work on this project closely aligns with the requirements of the City of Superior's fiber network.

- **Technology infrastructure for a government entity:** Provided incident management, change management, and proactive monitoring for a government entity with over 200 employees. Managed expectations and provided ongoing reports for the infrastructure, like the requirements laid out in the RFQ for the City of Superior.

These projects highlight our capabilities in handling large-scale NOC operations, our familiarity with Nokia systems, and our track record of delivering reliable network services.

4. Scope of Services

northlandia networks is committed to providing innovative, proactive services that leverage technology and automation to enhance customer and user experiences. We focus on preventing issues before they arise and use advanced monitoring and predictive analytics to ensure that network performance meets and exceeds expectations. Our approach is guided by the following principles:

Customer Experience & Proactive Support: We prioritize customer and user satisfaction, ensuring seamless and efficient experiences. Our proactive approach includes:

- **Proactive Monitoring:** Leveraging AI-driven tools to predict potential issues before they escalate, reducing downtime and optimizing service performance.
- **Automation:** Automating routine tasks such as ticket generation, network scans, and diagnostics to ensure quick resolutions and minimal human error.
- **User-Centric Design:** Providing intuitive dashboards and regular communication updates to ensure transparency and accessibility for ConnectSuperior staff and stakeholders.

Innovative Technologies: **northlandia networks** continuously integrates new technologies into our processes to enhance efficiency and service quality:

- **AI & Machine Learning:** Using AI to enhance event correlation and reduce noise in alerting, ensuring that only relevant, actionable incidents are escalated.
- **Automation Tools:** Employing automation to streamline workflows, from service provisioning to incident management, enabling faster response times and reducing operational costs.

Collaborative Change Management: We care deeply about minimizing any negative impacts on users during network changes:

- **Stakeholder Involvement:** Engaging stakeholders in the change management process to align on objectives and timelines, ensuring everyone is informed and prepared.
- **Continuous Improvement:** Leveraging data from previous changes to refine processes and reduce disruption in future upgrades and maintenance activities.

Service Desk Capabilities: Our NOC service desk is operational 24/7, providing real-time event and incident management. We monitor the Nokia IP Core and Subscriber Access, generating alerts for anomalies and exceeding operational thresholds. Our service desk is equipped to:

- Create, assign, and track incident response tickets based on generated alerts or notifications.
- Provide granular notifications about outages and other service impacts to ConnectSuperior staff.
- Maintain a public operational dashboard for incident status and regular updates.

Change Management: We manage change through an established process that ensures transparency and minimizes service disruptions:

- **Maintenance Scheduling:** Work with ConnectSuperior to define maintenance windows and track change control tickets.
- **Notification and Status Reporting:** Provide targeted notifications to stakeholders, ensuring they are well-informed about planned outages or changes.
- **Reporting:** Maintain an online change management portal accessible to ConnectSuperior staff.

5. Break/Fix Capabilities

Our break/fix team consists of engineers trained in troubleshooting the specific components deployed in the ConnectSuperior network. Services include:

- **24/7 Monitoring and Repair:** Monitor deployed components and configurations, identify deviations, and undertake corrective measures to restore normal functionality.
- **Incident Escalation:** If a problem cannot be resolved remotely, our team will escalate to ConnectSuperior's on-ground staff while participating in documentation and training to ensure the NOC team can handle recurring issues in the future.
- **Proven Experience:** We have handled similar break/fix scenarios involving both physical impairments and configuration issues, working closely with vendors and stakeholders to ensure swift restoration.

6. Security & Operational Systems

northlandia networks hosts all its systems in a SOC 2 certified facility, ensuring that we meet the highest standards of information security, confidentiality, and privacy. Our commitment to security is reflected in every aspect of our operations, providing our clients with assurance that their data and network infrastructure are protected by industry-leading practices.

We employ a comprehensive back-office system that integrates ticketing, monitoring, alerting, SLA tracking, and configuration management. Our approach ensures high availability, with secure geographically distributed instances maintained through a regular backup rotation. Key elements include:

- **Security Measures:** Our systems are hosted in a SOC 2 certified facility, ensuring a secure operating environment that adheres to rigorous standards for data protection and integrity. Security plans are developed in collaboration with ConnectSuperior to address issues such as ransomware, DDoS attacks, and zero-trust architecture implementation. We continuously monitor, evaluate, and update our security measures to stay ahead of evolving threats.
- **Business Continuity:** We conduct regular failover and disaster recovery drills to ensure operational resilience, and we maintain a current continuity of business plan for all services provided.

7. Service Level Agreements (SLAs)

We propose the following SLA metrics, which will be further customized in collaboration with ConnectSuperior:

- **Response Times:** Severity-based response times ranging from 15 minutes for critical issues to 1 hour for lower-priority incidents.
- **Service Management:** 24/7 service with escalation options during outages. Service levels will include key performance metrics such as Mean Time to Repair (MTTR).
- **Exceptions & Limitations:** Detailed description of any limitations or exceptions, ensuring transparency regarding the scope of our SLAs can be provided with a formal proposal.

8. Training & Documentation

northlandia networks takes pride in our comprehensive approach to training and documentation, ensuring that both our team and ConnectSuperior staff are fully prepared to operate the NOC efficiently and effectively. Our training and documentation services include:

Detailed Documentation Creation: We create extensive documentation that covers all aspects of the NOC operations, including runbooks, network configurations, troubleshooting guides, and standard operating procedures. This documentation is continuously updated to reflect any changes in the system architecture or operational procedures.

API Exposure for Automation: To enable efficient automation and integration with other systems, we provide detailed API documentation that allows ConnectSuperior to leverage our automation capabilities. This includes exposing APIs for incident management, change management, and monitoring data, enabling seamless integration with existing systems.

Modern Training Capabilities: Our training programs incorporate both in-person and virtual sessions to accommodate different learning styles. We utilize modern tools such as video tutorials, interactive modules, and real-time simulations to provide a hands-on experience for trainees. This ensures that all staff are well-versed in using NOC tools, handling incidents, and executing change management processes.

Comprehensive Knowledge Transfer: We conduct in-depth training sessions aimed at empowering ConnectSuperior staff to independently manage and troubleshoot the network. This

includes role-based training for different user groups, ensuring that each team member has the appropriate level of expertise needed for their specific responsibilities.

Run Books and Playbooks: Our run books and playbooks are meticulously developed to provide step-by-step guides for recurring issues, emergency response, and routine maintenance. These documents are crucial for ensuring consistency in response and minimizing downtime during incidents.

Real-Time Support and Access to Documentation: All documentation is hosted on a secure, web-accessible platform that allows ConnectSuperior staff to access it anytime. This platform also provides real-time updates to procedures, ensuring everyone is working with the latest information.

Process Automation Documentation: We document all automation processes, including workflows for ticket creation, network scanning, diagnostics, and remediation. This helps in maintaining transparency and understanding of how automation is implemented within the NOC, allowing for smoother operations and quick adjustments as necessary.

Continuous Improvement and Feedback: We encourage feedback from ConnectSuperior staff to continuously improve training content and documentation. Regular review sessions are conducted to update materials based on practical insights gained from ongoing operations, ensuring our documentation and training remain relevant and effective.

We will develop comprehensive run books, which will serve as step-by-step guides for recurring issues, ensuring that our NOC team can operate independently and efficiently. Training sessions for ConnectSuperior staff will also be conducted to align on procedures and ensure knowledge transfer.

9. Onboarding Plan

To facilitate the onboarding process during the network deployment phase, we propose a collaborative approach involving:

- **System Setup:** Configuration of monitoring tools, training for the ConnectSuperior team, and integration with Nokia Altiplano.
- **API Integration:** Our systems are capable of linking to ConnectSuperior's source-of-truth, COS Systems for managing data related to service providers, customer premise equipment, and third-party vendors.

10. Subconsultants

We do not propose using any subconsultants for parts of the project.

Any future subconsultants will be authorized by the City of Superior and carefully selected based on their proven experience in similar projects and will have the capabilities needed to fulfill their roles effectively.

11. Additional Commitments

We are committed to continuously improving service quality, with regular process reviews and quarterly meetings to discuss strategic improvements, performance metrics, and upcoming

milestones. We will also maintain an escalation matrix to manage our performance and provide strategic recommendations.

12. Addenda Acknowledgement

We have not received any addenda.

We further certify that we have carefully examined the project, requirements, and specifications and agree to all terms and conditions.

13. Conclusion

northlandia networks is dedicated to providing top-quality Network Operations Center services to support the City of Superior in its goals of operational excellence and community service. With our extensive experience, specialized skills, and commitment to quality, we are well-positioned to meet the demands of this project. As well-known and respected members of the technology community in the Twin Ports, we're eager to have additional conversations on what a partnership could do for the City of Superior, its residents and more importantly for our community at large.

We look forward to the opportunity to discuss our proposal in further detail. Please feel free to reach out to us to schedule an interview or request additional information.

14. References

References are available upon request.

6. SubConsultants Listing (Must be submitted with Qualifications.)

Network Operations Center (NOC)

The undersigned agrees to employ the following listed **subConsultants** for the following enumerated classes of work and not to alter or add to such list without the written consent of the City of Superior, WI. Use separate sheet as necessary.

	<u>SUBCONSULTANT</u>	<u>CLASS OF WORK</u>
1)	_____	_____
2)	_____	_____
3)	_____	_____
4)	_____	_____
5)	_____	_____

Submitted by: COMPANY northlandia networks
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COMPANY REPRESENTATIVE Abhi Devireddy

7. Addenda Acknowledgement (Must be submitted with Qualifications)

Network Operations Center (NOC)

I/we hereby acknowledge receipt of the following addenda(s):

Addendum No. _____ Dated
Addendum No. _____ Dated
Addendum No. _____ Dated
Addendum No. _____ Dated

I/we further certify that no agreement has been entered into to prevent competition for said work and that I/we carefully examined the site where the work is to take place, and the plans, specifications, form of contract and all other contract documents.

I/we further agree to enter into the contract, as provided in the contract documents, under all the terms, conditions and requirements of those documents.

* If no addenda were issued, the consultant/firm shall so indicate and sign this document.

northlandia networks
Company

Abhi devinreddy. 10/29/2024
Representative Signature