# COUNTY OF McHENRY MCHENRY COUNTY ADMINISTRATION BUILDING PURCHASING DEPARTMENT – ROOM 200 2200 N. SEMINARY AVENUE WOODSTOCK, IL 60098

Sealed bids will be accepted in the above office until

August 31, 2017 at 2:00 P.M. (CST)

For BID #17-47

## PROVIDE ROAD WEATHER INFORMATION SYSTEMS (RWIS) MONITORING CLOUD BASE SOFTWARE FOR THE MCHENRY COUNTY DIVISION OF TRANSPORTATION

CONTACT PERSON – DONALD A. GRAY, CPPB DIRECTOR OF PURCHASING Phone - (815) 334-4818 Fax - (815) 334-4680

MAILING ADDRESS:	DROP OFF IN PERSON:
Purchasing Department	Purchasing Department
2200 N Seminary Ave #200	667 Ware Road #200
Woodstock IL 60098	Woodstock IL 60098

#### **PRINT OR TYPE**

COMPANY	DATE
COMPAIN	DATE
CONTACT PERSON	
ADDRESS	E-MAIL ADDRESS
CITY, STATE AND ZIP	
TELEBRIONENO	FAVAIO
TELEPHONE NO	FAX NO.
FEIN, or Social Security NUMBER	_
i Eiit, oi Sociai Security Holvibert	

The attention of bidders is directed to the McHenry County Purchasing Ordinance, approved August 1, 2014, revised December 1, 2015. This Ordinance is incorporated by reference into this bid as if it were contained herein. If you have not received a copy of the above Ordinance and desire a copy, please contact the office of the Director of Purchasing.

#### SCOPE OF WORK

Provide Road Weather Information Systems (RWIS) Monitoring Cloud Base Software Contract duration for Cloud Based Services are 12-48 months and could be invoiced monthly, or annually depending on the customer/end-user. Terms of this Bid are for a Base Year starting December 1, 2017 through November 30, 2018; Year II (Optional) December 1, 2018 through November 30, 2019; Year III (Optional) December 1, 2019 through November 30, 2020; Year IV (Optional) December 1, 2020 through November 30, 2021 as outlined within this document. All requirements are as per specifications enclosed herein.

SCHEDULE OF EVENTS		
August 10, 2017	Bid Available	
August 17, 2017	Vendors Questions Submitted via fax to 815-334-4680 by 4:00 P.M.(CST)	
August 22, 2017	Vendors Questions Answered via fax and Posted on Website by 4:00 P.M.(CST)	
August 31, 2017	Bid due in Purchasing at 2:00 P.M.(CST)	

#### **PAYMENT**

Payment will be processed after receipt of delivery invoice and appropriate affidavit.

#### NON-DISCRIMINATION

Contractor shall comply with the Illinois Human Rights Act, 775 ILCS 5/1-101 et seq., as amended and any rules and regulations promulgated in accordance therewith, including, but not limited to the Equal Employment Opportunity Clause, Illinois Administrative Code, Title 44, Part 750 (Appendix A), 775 ILCS 5/1-102, which is incorporated herein by reference, and constituting of a written EEO Policy and a workforce profile that demonstrates its EEO practices. Furthermore, the Contractor shall comply the Public Works Employment Discrimination Act, 775 ILCS 10/0.01 et seq., as amended. The Contractor must have a written sexual harassment policy, which meets Illinois State Statutes, 775 ILCS, 15/3.

#### **PREVAILING WAGE**

The State of Illinois requires under Public Works Contracts that the general prevailing rate of wages in this locality be paid for each craft or type of worker hereunder. This requirement is in accordance with The Prevailing Wage Act, 820 ILCS 130/0.01 et seq., as amended. This shall include payment of the general prevailing rate for legal holiday and overtime work. It shall be mandatory upon the subcontractor under the Contractor. A copy of the prevailing wage rates is posted on the McHenry County website at www.co.mchenry.il.us under BIDS and RFP's. If wage rates change during the course of the project, the new rates will be available in the County of McHenry Purchasing Office. Contractors may access the Illinois Department of Labor website for updates at www.state.il.us/agency/idol.

It shall also be mandatory upon the Contractor to whom the Contract is awarded to insert into each subcontract and into the project Specifications for each subcontract a written stipulation to the effect that not less than the prevailing rate of wages shall be paid to all laborers, workers, and mechanics performing work under the Contract. It shall also be mandatory upon each subcontractor to cause to be inserted into each lower tiered subcontract and into the project Specifications for each lower tiered subcontract a stipulation to the effect that not less than the prevailing rate of wages shall be

paid to all laborers, workers, and mechanics performing work under the Contract. A Contractor or subcontractor who fails to comply is in violation of the Act.

#### CERTIFIED PAYROLL REQUIREMENTS (Public Act 94-0515)

Effective August 10, 2005 contractors and subcontractors on public works projects must submit certified payroll records on a monthly basis to the public body in charge of the construction project, along with a statement affirming that such records are true and accurate, that the wages paid to each worker are not less than the required prevailing rate and that the contractor is aware that filing records he or she knows to be false is a Class B misdemeanor.

The certified payroll records must include for every worker employed on the public works project the name, address, telephone number, social security number, job classification, hourly wages paid in each pay period, number of hours worked each day, and starting and ending time of work each day. These certified payroll records are considered public records and public bodies must make these records available to the public under the Freedom of Information Act, with the exception of the employee's address, telephone number and social security number. Any contractor who fails to submit a certified payroll or knowingly files a false certified payroll is guilty of a Class B misdemeanor.

#### INCREASED PENALTIES FOR PREVAILING WAGE VIOLATIONS (Public Act 94-0488)

Effective January 1, 2006, penalties for violations of the Prevailing Wage Act will increase from 20% to 50% of the underpaid amounts for second or subsequent violations. An additional penalty of 5% of the underpayment penalty must be paid to workers for each month the wages remain unpaid (up from the current 2% penalty).

For violations that occur after January 1, 2006, the debarment period --during which contractors are ineligible for public works contracts -increases from 2 years to 4 years if two notices of violation are issued/serious violations occur within a 5-year period. In addition, a new monetary penalty of \$5,000 may be assessed against contractors who retaliate against employees who report violations or file complaints under the Prevailing Wage Act.

#### **OSHA REQUIREMENTS**

The Occupational Safety and Health Act of 1970 (OSHA) "guarantees workers the right to a safe and healthful workplace". Under Section 5(a) (1) of the OSHA Act, the employer must "furnish to each of his employees' employment and a place of employment which are free from recognized hazards that are causing or likely to cause death or serious physical harm to his employees."

There are times when the County must hire entities and individuals (contractors) to perform services. To this end, contractors hired by the County of McHenry must perform their duties in a manner that is complaint with all state and federal health and safety laws and industry guidelines. It is the responsibility of the contractor to ensure that their personnel and subcontractors comply with all state and federal health and safety laws and regulations and industry guidelines, including, but not limited to those set forth by: OSHA and related regulations, the Safety Inspection and Education Act, the Health and Safety Act, the National Institute of Occupational Safety and Health, the National Fire Protection Association, the Centers for Disease Control, American Industrial Hygiene Association, the American Council of Governmental Industrial Hygienists, the Environmental Protection Agency, and the Department of Transportation.

#### SUBSTANCE ABUSE PREVENTION ON PUBLIC WORKS PROJECTS ACT

The successful bidder must be in compliance with State of Illinois HB-1855 (Public Act095-0635), which amends the Prevailing Wage Act. Before an employer commences work on a public works project, the employer shall have in place a written program, which meets or exceeds the program requirements in this Act, to be filed with the public body engaged in the construction of the public works and made available to the general public, for the prevention of substance abuse among its employees. The testing must be performed by a laboratory that is certified for Federal Workplace

Drug Testing Programs by the Substance Abuse and Mental Health Service Administration of the U.S. Department of Health and Human Services.

#### PROCUREMENT OF GREEN PRODUCTS AND TECHNOLOGIES

As approved by the McHenry County Board in April 2008, it is in the interest of public health, safety and welfare and the conservation of energy and natural resources to use and promote environmentally responsible products. The County should strive to influence private purchases through the example of using government specifications and standards that are green or environmentally friendly when making its purchases.

Whenever available and cost-justified, the County should purchase those materials including the purchase of recycled products containing post-consumer materials rather than residual materials resulting from the processing or manufacturing from another product. To the extent practicable, all products standards shall emphasize functional or performance criteria, which do not discriminate against the use of, recycled materials.

McHenry County should cooperate to the greatest extent feasible with other governments and organizations to develop a comprehensive, consistent, and effective procurement effort intended to stimulate the market for recycled products, reusable products, products designed to be recycled, and other environmentally responsible products.

McHenry County shall continue to participate in and shall encourage other public jurisdictions to participate with the County in the purchase of products containing recycled content. Participation in such cooperative systems shall be aimed at obtaining maximum practical recycled content in County purchases, to obtain best available price for products with recycled content, to facilitate or encourage lower prices industry-wide and to encourage development of industries and markets dealing with recycled content products.

#### PROCUREMENT OF PRODUCTS THAT ARE ENERGY STAR QUALIFIED

McHenry County shall select, where life cycle and cost-effective, ENERGY STAR and other energy efficient products, when acquiring energy-using products. This information will be required by the bidder in their bid submittal.

#### **SECURITY**

The contractor represents and warrants to the County of McHenry that neither it nor any of its principals, shareholders, members, partners or affiliates, as applicable, is a person or entity named as a Specially Designated National and Blocked Person (as defined in Presidential Executive Order 13224) and that it is not acting, directly or indirectly, for or on behalf of a Specially Designated National and Blocked Person. The Contractor further represents and warrants to the County of McHenry that the Contractor and its principals, shareholders, members, partners, or affiliates, as applicable, are not directly or indirectly, engaged in, and are not facilitating, the transactions contemplated by this Agreement on behalf of any person or entity named as Specially Designated National and Blocked Person. The Contractor hereby agrees to defend, indemnify and hold harmless the County of McHenry, the Corporate Authorities, and all County of McHenry elected or appointed officials, officers, employees, agents, representatives, engineers and attorneys, from and against any and all claims, damages, losses, risks, liabilities, and expenses (including reasonable attorneys' fees and costs) arising from or related to any breach of the foregoing representation and warranties.

#### **PURCHASE EXTENSION**

This contract shall be offered for purchases to be made by other counties and governmental units within the State of Illinois as authorized by the Government Joint Purchasing Act. All purchases and payments made under this authority shall be made directly by the governmental unit to the Vendor. The County of McHenry shall not be responsible in any way for such purchase orders or payments. All terms and conditions of this contract shall apply to all orders placed by another governmental unit.

#### **ADDENDUM**

Should the Vendor require any additional information about this Bid, please fax to Purchasing (815-334-4680) any questions by the deadline as outlined in the schedule of events. ANY AND ALL changes to these specifications are valid only if they are included by Written Addendum to All Bidders. NO interpretation of the meaning of the plans, specifications, or other contract documents will be made orally. If required, all addenda will be faxed to bidder if a Notice of Intent to Bid has been completed and faxed to the Purchasing Office. In addition, all addenda are posted on the County of McHenry's website. Failure of the bidder to receive any such addendum or interpretation shall not relieve the bidder from obligation under this Bid as submitted. All addenda so issued shall become part of the bid documents. Failure to request an interpretation constitutes a waiver to later claim that ambiguities or misunderstandings caused by a bidder to improperly submit a bid.

Response to these questions will be made by means of an addendum. Only the Director of Purchasing has the authority to issue an addendum.

Addenda are written instruments issued by the County prior to the date for receipt of proposals, which modify or interpret the Bid by addition, deletions, clarifications or corrections.

Prior to the receipt of bids, addenda will be faxed or delivered to all who are known to have received a Notice to Bid. Each vendor shall ascertain prior to submitting a bid that all addenda issued have been received and, by submission of a bid, such act shall be taken to mean that such vendor has received all addenda and that the vendor is familiar with the terms thereof and understands fully the contents of the addenda.

#### **TAXES**

The County of McHenry is exempt from paying Illinois Use Tax, Illinois Retailers Occupation Tax, and Federal Excise Tax. The bidder's attention is directed to the McHenry County Purchasing Ordinance {S3-10, (9), (10), and (11)}.

#### <u>INSURANCE</u>

#### (1) GENERAL

The successful bidder shall maintain for the duration of the contract and any extensions thereof, at bidder's expense, insurance that includes "Occurrence" basis wording and is issued by a company or companies qualified to do business in the State of Illinois that are acceptable to the County, which generally requires that the company(ies) be assigned a Best's Rating of A or higher with a Best's financial size category of Class XIV or higher, in the following types and amounts:

(a) Commercial General Liability in a broad form, to include, but not limited to, coverage for the following where exposure exists: Bodily Injury and Property Damage, Premises/Operations, Independent contractors, Products/Completed Operations, Personal Injury and Contractual Liability; limits of liability not less than:

\$500,000 per occurrence and \$1,000,000 in the aggregate;

- (b) Business Auto Liability to include, but not be limited to, coverage for the following where exposure exists: Owned Vehicles, Hired and Non-Owned Vehicles and Employee Non-Ownership; limits of liability not less than:
  - \$300,000 per occurrence, combined single limit for: Bodily Injury Liability and Property Damage Liability;
- (c) Workers' Compensation Insurance to cover all employees and meet statutory limits in compliance with applicable state and federal laws. The coverage must

also include Employer's Liability with minimum limits of \$100,000 for each incident.

#### (2) EVIDENCE OF INSURANCE

The successful bidder agrees that with respect to the above required insurance that:

- (a) The County of McHenry shall be provided with Certificates of Insurance evidencing the above required insurance, prior to commencement of the contract and thereafter with certificates evidencing renewals or replacements of said policies of insurance at least fifteen (15) days prior to the expiration or cancellation of any such policies;
- (b) The contractual liability arising out of the contract shall be acknowledged on the Certificate of Insurance by the insurance company;
- (c) The County of McHenry shall be provided with thirty (30) days prior notice, in writing, of Notice of Cancellation or material change and said notification requirement shall be stated on the Certificate of Insurance;
- (d) Subcontractors, if any, comply with the same insurance requirements. In addition to being named as an additional insured on the Certificate of Insurance, each liability policy shall contain an endorsement naming the County of McHenry as an additional insured. A copy of the endorsement shall be provided to McHenry County along with the Certificate of Insurance; and,
- (e) have McHenry County named as an additional insured and the address for certificate holder must read exactly as:

County of McHenry, a body politic 2200 N. Seminary Avenue Woodstock, IL 60098

(f) Insurance Notices and Certificates of Insurance shall be provided to:

McHenry County, Purchasing Department 2200 N. Seminary Avenue, Room 200 Woodstock, Illinois 60098

#### **HOLD HARMLESS CLAUSE**

The successful bidder will agree to indemnify, save harmless and defend the County of McHenry, its agents, servants, and employees, and each of them against and hold it and them harmless from any and all lawsuits, claims, demands, liabilities, losses and expenses, including court costs and attorney's fees, for or on account of any injury to any person, or any death at any time resulting from such injury, or any damage to property, which may arise or which may be alleged to have arisen out of or in connection with the work covered by this contract upon award. The foregoing indemnity shall apply except if such injury, death or damage is caused directly by the willful and wanton conduct of the County of McHenry, its agents, servants, or employees or any other person indemnified hereunder.

#### **BID RESPONSE**

It is highly recommended that the vendor completely read the bid prior to filling out to become acquainted with terms and conditions of the bid document and merchandise requirements. No relief will be allowed from the bid conditions unless you take written exception to that condition on your bid.

BIDS MUST BE SUBMITTED IN DUPLICATE FORM, (One Original, and One Copy). BIDS ARE DUE BACK BY 2:00 P.M. (CST) ON August 31, 2017.

SEALED BID ENVELOPES ARE TO BE CLEARLY MARKED WITH THE BID/RFP TITLE, TIME & DATE OF OPENING.

Bidders are urged to respond to this bid request in every case to insure being maintained on current bid lists. Explanations of the reasons for not bidding will assist in maintaining the bidder on the correct bid list(s).

#### **SUBMITTAL**

Submit one (1) bid, multiple bids will not be accepted.

#### **GENERAL CONDITIONS**

This bid shall be firm for at least 120 days after the latest time specified for submission for bids and thereafter until written notice is received from the bidder.

#### AWARD OF ORDER

The County will award a purchase order to the lowest responsive, responsible bidder meeting the County's requirements as listed in this document. The County will be the sole judge of acceptability of any products offered.

#### WORKMANSHIP

Items shall be manufactured according to the highest traditions of the industry and shall meet all commercial standards of quality. The County shall be the sole judge of acceptable products. Unacceptable products will be rejected and suitable price adjustments made.

#### **MISCELLANEOUS**

It is the bidder's task to be familiar with the referenced items and to offer only products of equal or greater quality. Any questions on specifications should be directed to the Purchasing Department.

#### **EXCEPTIONS**

The bid speaks for itself. Bidders taking exception to any terms, conditions or specifications of this bid must clearly state in writing such exception(s) either on or with their bid. The County will be the sole judge of the acceptability of any exception noted, and is not bound to consider any bid submitted with exceptions.

#### **ALTERNATES**

Trade names are used solely for the purpose of setting minimum standards of quality and performance and are <u>not</u> to be construed as exclusionary. Bidders are encouraged to contact the Purchasing Department prior to the bid opening for the purpose of clarifying specifications.

#### **FULL PRICING AND CONTINGENCIES**

The County shall hold the successful bidder to bid pricing. Additional charges for contingencies discovered by the vendor at any time after the date of opening of this bid will not be considered for payment by the County.

#### RECOURSE FOR UNSATISFACTORY MATERIALS

Payment shall be contingent upon the County's inspection of and satisfaction with completed work. Any defective work or materials, non-conformance to bid specifications, damaged materials, or unsatisfactory installation shall be corrected to the County's satisfaction by the successful bidder at no additional charge.

#### **TERMINATION**

Failure to comply with the terms and conditions as herein stated shall be cause for cancellation of the contract. The County will give written notice of unsatisfactory performance and the contractor will be allowed thirty (30) days to take corrective action and accomplish satisfactory control. If at the end of the thirty days, the County deems the contractor's performance still unsatisfactory, the contract shall be cancelled. The exercise of its right of cancellations shall not limit the County's right to seek any other remedies allowed by law.

The successful bidder will agree that the resulting contract is made subject to available budgetary appropriations and shall not create any obligation on behalf of the County in excess of such appropriations. In the event that no funds or insufficient funds are appropriated and budgeted, this Contract shall terminate without penalty or expense to the County thirty (30) days after written notification of termination from the County.

The successful bidder will agree that pursuant to requirements imposed under Illinois law, the County shall have 120 days after each election of county board members to terminate this Agreement, without cause and without penalty.

#### CHOICE OF LAW AND VENUE

The bidder agrees that this bid has been executed and delivered in Illinois and that their relationship and any and all disputes, controversies or claims arising under this bid or any resulting contract shall be governed by the laws of the State of Illinois, without regard to conflicts of laws principles. The bidder further agrees that the exclusive venue for all such disputes shall be the Circuit Court of the 22<sup>nd</sup> Judicial Circuit of McHenry County, Illinois, and the bidder hereby consent to the personal jurisdiction thereof.

#### **COMPLIANCE WITH LAWS**

The bidder hereto covenants and agrees to comply with all applicable federal, state, and local laws, codes, ordinances, rules and regulations. Failure to comply with the terms of this provision shall constitute a breach of contract and permit the County to terminate this (Request for Sealed Proposal/Bid) in accordance with the termination provisions stated herein.

#### REJECTION OF BIDS, WAIVER OF IRREGULARITIES

McHenry County reserves the right to reject any or all bids, to waive irregularities, and to accept that bid which is considered to be in the best interest of the County. Any such decision shall be considered final.

#### PROTEST PROCEDURES

Any Bidder who believes contractual terms or specifications are unnecessarily restrictive or limit competition may submit a protest, in writing, to the Director of Purchasing. To be considered, the protest must be received by McHenry County five (5) days prior to the stated bid opening. Any adversely affected or aggrieved Bidder shall have ten (10) days from the date of the bid opening to file a written protest regarding the intent to award the bid. Protests submitted after that date will not be accepted. Protests must specify the grounds upon which the protest is based (refer to appropriate statute, rule, code, or ordinance which defines the protest process).

#### BIDDER'S ATTACHMENT TO THE BID

Any attachment to this bid, as required by the bid conditions, or made at the bidder's option, must reference on their face the bid title, opening date, and time.

#### **DELIVERY**

Delivery will be considered in making the award and the bidders shall state, in the spaces provided, expected delivery after receipt of Purchase Order. Failure to meet said delivery promises without prior consent of the Director of Purchasing will be considered a breach of faith.

#### **FREIGHT**

Freight is all inclusive unless otherwise stated.

#### **FUEL SURCHARGE**

The County of McHenry does NOT accept any fuel surcharges.

#### **SPECIFICATIONS**

Road Weather Information Systems (RWIS) Monitoring Cloud Base Software

Contract duration for Cloud Based Services are 12-48 months and could be invoiced monthly, or annually depending on the customer/end-user. Terms of this Bid are for a Base Year starting December 1, 2017 through November 30, 2018; Year II (Optional) December 1, 2018 through November 30, 2019; Year III (Optional) December 1, 2019 through November 30, 2020; Year IV (Optional) December 1, 2020 through November 30, 2021 as outlined within this document. All requirements are as per specifications enclosed herein.

#### **Online User Interface**

The software should be capable of unlimited users and logins access

A web-based user interface will be provided with the capability to view all available forecast and observation data. It should not be necessary to download any client software prior to operation. Latest data will always be displayed immediately at log-in, in a clear and concise manner, available in tabular, graphical, map or text format as appropriate.

Data will be accessed from an easy to use menu toolbar, clearly displaying the features available within each tab.

Evidence should be provided of a development process being followed that has and will systematically include customer feedback.

The user interface should include an online help facility in addition to the supplier providing comprehensive user training.

#### **Login Page**

The website must have an individual username and password for access.

The login page must contain contact details for technical support.

The login page should contain a message board for planned maintenance and other operational items

The login details should be personal and linked to the user so that all settings and views created by that user remain in place for subsequent access.

Main page

Key road weather network data should be available on one single configurable page.

It should be possible to configure the weather stations into arbitrary groups so that the data on screen can be filtered using those groups.

The user should be able to define the time of data shown, past, present and any future forecast up to 24hr either side of current time. This should be easy to achieve through a simple time control onscreen feature.

Whatever time is chosen to view, the rest of the application should be set to that time throughout all features to ensure consistency.

The application should only show quality controlled data – any erroneous data should be removed from the application to avoid confusion.

The application should only show data from stations that are correctly reporting. Data that is old / out of date should not be shown.

The data should automatically refresh to always show the latest data as and when it becomes available.

Where a weather station has more than one sensor of the same type installed, the user should be able to configure which sensor provides the value displayed, i.e. values from the primary sensor or the worst-case value from any sensor.

The software should not time-out the user.

#### Map

Map view should always return to last used zoom on initial log in

Map area should be defined so as to include neighboring areas if required

User should be able to zoom and pan

Map scale should always be present on screen

The weather stations shown on the map should be filtered using the user selected filtering group.

Station plots should be color coded to provide an at a glance overview of conditions across the network

A clearly defined legend should indicate the threshold values for each colored-coded station plot Color-coding should be available for, but not limited to,

- road surface temperature
- road surface state
- wind speed
- grip
- visibility

The legend pane should be able to be minimized to allow the map area to take precedent over the user interface

The user should be able to select the parameter to drive the color-coded station plot

The user should be able to select any parameter reported from the station to display

The application should only show parameters that are actually available from the station network – i.e. no choices that do not actually exist on the station network

The user should be given the facility to choose what they show on the map in terms of information layers

Map layers available should be;

- Station data showing user configured parameters that allows all parameters reported from the station sensors to be chosen including Grip
- Thermal Mapping data including individual salting routes
- Radar imagery 1
- Weather Satellite
- Terrain

 To supplement road weather station data, there should be an option to display METAR (Meteorological Aerodrome Report) data on the map.

Where METAR data is selected for display it should be available to view on the Station Summary table as well.

<sup>&</sup>lt;sup>1</sup> Software should have the capability to support radar if it is available

Separate Map with Lightning data; the software has the ability of displaying data from the National Lightning Detection Network (NLDN); addition of this data enhances evaluation of the potential impact of storms passing through.

#### **Station Summary**

Data from the weather stations should be available in a simple table.

Observations of key data parameters should be highlighted with appropriate color coding to draw attention to particular conditions.

The weather stations shown on the station summary should have the functionality to be filtered using the user selected filtering group.

The user should be able to choose which parameters appear in the table and have a choice of all possible sensor data if it exists on the network

The user should be able to re-order the data in the table to match their own requirements

The user should be able to choose which stations they display in the table

There should be a facility to order the data by parameter if desired by ascending or descending order.

If a sensor is not installed anywhere on the network it should not appear as an option

It should be possible to select to display past observation data or forecast data (when available) by up to 24hrs either side of current time.

#### **Station Wall**

The application should allow the user to view key data from each weather station in an easy-to-view one page, "wall" format.

On one wall, it should be possible to display camera images, and wind rose for each weather station (where available), together with a graph showing road surface temperature and dew point temperature.

- Data can be viewed in graphical and tabular formats. Graphs should be configurable and allow users to plot as many of few parameters on same graph.
- Tables are also configurable and are utilized for display of weather information from sites in a
  tabular form. Will have the ability to sort by value (low to high) or condition (best to worst),
  and can be added or deleted as required. In addition, the application allows conditional
  highlighting of data with colours based on changing conditions

The application should allow the user to select to view all of the elements simultaneously or make individual selection of each element.

It should be possible to select for display the elements from a sub-group of weather stations, by using the user selected group filter.

The user should have the option to select different sizes of the elements, from within the page, to view greater detail.

The camera images, site specific graph and wind rose should automatically update whenever latest data is available.

The timeline control should enable easy access to past observation data or forecast data (when available), 24hrs either side of now.

#### **Wind Rose Wall**

The application should allow the user to view all available wind roses in one wind rose wall.

It should be possible to select a sub-group of wind roses to be visible on screen, by using the user selected filtering group.

The user should be able to change the display size of the wind rose. Archive Facility

All RWIS data will be retained online for the duration of the contract. All data is also backed up offline as part of the Disaster Recovery process.

Camera images are currently stored online for a period of 90 days. Offline archiving of individual camera image jpg files is also available. All camera image files and folders can be supplied on a suitable external hard drive, if required.

The application should allow the user to view archive information from any time where station and forecast data has been available.

The user should be able to select the date and time for the archive to view.

When viewing data the archive time should replace the current time and the user should then see archive data in exactly the same way as they would have at the time. They should also be able to view forecasts as they were presented at that time.

The application should change some form of appearance to ensure that the user is aware that they are viewing archive data.

It should be possible to produce a report in xlsx format presenting the data available at the selected time in the past. A pdf format is available as a region report.

Weather Forecast Information

The application should include space for forecast information such as 24hr and 2-5 day texts.

It should be possible to display the forecasts exactly as the forecast provider determines.

Where appropriate single site forecast parameters should appear alongside observation data in the graphical functions and on the main map page.

The user should be able to view any valid forecast texts from the main page as well as seeing any forecast parameters on the map and station summary page when looking into the future.

IceBreak Forecast features Heat Balance Model which accurately forecasts surface temperatures for RWIS stations with appropriate pavement and atmospheric sensors.

- Standard forecast length is 72 hours
- High frequency forecast updates hourly and 3-hourly options available
- Optional graphical atmospheric forecast outlook products 24-
- hour forecast and 5-day outlook are available

#### **Automated Vehicle Location**

The application should be capable of displaying summary data from any automated vehicle location (AVL) software installed within the authority's winter fleet.

AVL data would be shown to end-users in e.g. graphs along with weather observations, so that winter maintenance decision-makers could review the performance of the applied treatments. Reports

The user should be able to create a report from current conditions and from archive conditions at the touch of a button.

The report should mimic the view created by the user in terms of stations and parameters chosen, map view zoom etc.

The report should show each aspect of the main view including any forecast texts valid for that time.

The report should be visible on screen and be available to print.

The report is available in xlsx format with the region report in pdf Single Site Page

The user should be able to view data from a single site by a simple link from the main page.

Information from the site should be displayed in an easy to assimilate way.

The page should not be overloaded with information and should focus only on the key data.

The page should clearly show the data time of any information shown.

The page should be configured such that only expected parameters will be displayed. If a site is not equipped with a specific sensor, the page should not have provision to display it.

The user should be able to view the data on the single site page on the map with a simple link from the single site page to the map.

Camera Image

The single site page should include a latest image from the station where it is enabled with a camera.

If the camera has more than one view the user should be able to select which view they have as the main image.

The images should update automatically as they become available.

Where the camera has a fixed IP address there should be a simple link available on page to that cameras address and manufacturers software.

It must be possible to display camera images for the previous 24hrs, with the most recent images shown first.

Camera images should display a timestamp.

It should be possible to select individual camera images to display in a larger size.

Road Surface State Image

The key data from the station should be seen on screen in a simple and uncluttered way.

The road surface state should be shown in diagrammatical format so as to ensure that camera images when available are not misinterpreted

Wind Rose

Where wind data is available the single site page should show clearly the latest wind speed and direction on a wind rose.

Where available the road orientation at the site should also be shown.

**Graphical Interface** 

The single site page should have a graphical representation of the data that shows recent history data (24hours) and any forecast parameter data available.

The graph should automatically configure to the length of forecast available at the time of viewing

Where forecast data has been issued the graph should show observed data for that parameter on the same axis to allow a compare and contrast from the user.

The user should be able to choose which parameter they graph and the scales should alter accordingly

The user should be able to look at several parameters of their choice simultaneously on the graph

The Graph should have a pictorial reference for surface state and wind speeds and direction as observed or forecast at that site.

The user should be able to use a simple tool to expand a particular time on the graph to allow closer inspection of the data.

To ensure that the user does not suffer from data overload the surface state and wind icons should remain at an easy to read frequency along the bottom of the graph – the data displayed should be the worst case for that time period.

All observed data from the site for the previous 24 hrs should be available through a simple Excel spread sheet report.

All forecast parameters available should also be available on the Excel report History Table

For each road weather station a table should be displayed showing the last 24 hours of history data for available observation and (where available) forecast parameters.

Forecast Text

Where forecast text associated with a specific weather station is fed into the system it should be visible on the single site page of the application.

#### **Traffic Counting**

Where traffic counting sensors are installed, traffic data should be presented with a date and timestamp in an easy to read tabular format, alongside station data.

Displayed traffic data should be averaged over a 5 minute period and should include;

- Average vehicle speed
- Average occupancy
- Volume

#### **Alert Management**

The application should allow the user to set some simple alarms, for example to alert when certain weather conditions have exceeded a predefined limit. The approach to configuring and managing alerts should be simple to use and intuitive.

The process for setting alarms should support both status (e.g. road surface state) and numerical (e.g. surface temperature) data.

In particular, the Alert Management software should allow the user to set warnings for different types of precipitation.

It should be possible to create both shared and personal alerts.

- Shared alerts, including notifications and alert details will be displayed to all users within an organisation.
- The software should enable restricted access to configuration and management of shared alerts.
- All users should be able to create, edit and delete personal alerts.
- Visibility of personal alerts should be restricted to the user who created them.

The configuration tool should determine if an alert requires acknowledgement by a user. Where acknowledgement is required, both the alert and acknowledgement should be logged by the system.

An alert should have the capability to be reset based either on the passage of time or in accordance with the data meeting a specified threshold.

Audible and visual prompts should be utilized to attract the user to an active alert.

Notification of alerts to users working remotely (with no access to the software) must be available, utilizing a definable contact list via email and text message.

The Alert logic process should run at least every minute to ensure alarms are raised on the latest known data.

Active alerts should be clearly indicated. The indicator should be clearly visible from any page within the software application.

#### Reporting

The reporting function should be designed to minimize the effort of collating actionable information.

All reports should be viewable on screen.

All reports should be easily exportable on one click.

Regional Report

The user should be able to create a report from current conditions and from archive conditions at the touch of a button for a region or sub-group of that region.

The report should mimic the view created by the user in terms of stations and parameters chosen, map view zoom etc.

The report should show each aspect of the main view including any forecast texts valid for that time. Station Data Report

For a user selected time range it should be possible to generate a tabular report for all available observation data of an identified weather station.

Where forecast data is available, the report should also contain all available forecast parameters for the station.

It should be possible to preview the report on screen before exporting to Excel.

Meteorological Monthly Report

For individual parameters at the weather station it should be possible to report the minimum, maximum and average values for a period of one month.

The parameter and month should easily be selectable by the user.

Winter Performance Index Report

It should be possible to measure and report the effectiveness of road treatment and timing of the application.

The software should be capable of automatically generating the Index on a weekly basis and emailing it to configured users.

After a winter event, such as a snow storm or frost/ice impact, the user is able to select an RWIS site location and a time period from the archive, and then run the report.

- Winter Performance Measure
  - Used to identify how successful the treatment and timing were of the field maintenance personnel
- Winter Mobility Index
  - Used to identify the percentage of time the road conditions did not significantly impede mobility during a storm event

- Storm Severity Index
  - Used to quantify the severity of a winter event, so that it can be taken in to account when assessing treatment outcomes

#### Uptime

Company should have several data centers globally, with two located on different electrical grids in the United States, ensuring highest resilience and outmost security during emergency conditions. These centers work together, and have achieved 99.9% uptime for over a decade, and for all systems currently hosted by vendor at these facilities. Vendor data centers provide highest levels of redundancy, and the primary data center is manned 24/7/365

When information is being received from the RWIS Station and Sensors we offer 96-98% up time performance of Cloud based software for viewing the data Software Training

Training on the use of the online software application must be provided to ensure the user can fully operate all of its features and appreciate the benefits and value the system will bring.

The training should enable the trainees to receive hands-on experience, practicing the use of the software application through demonstration.

An appropriate training outline should be specified including a detailed lesson plan and the length of time required to complete the session. As a minimum, but not restricted to, the training course should equip trainees with;

- An introduction to road surface meteorology, allowing better understanding and interpretation of the meteorological information seen in their day to day jobs.
- An understanding of how the weather affects the actual and forecasted road surface temperatures and road conditions at the weather stations.
- The capability to view live and archived data from the weather stations in different formats, such as tables, graphs, maps and images.
- The knowledge to interpret live and archived forecast information in the application.
- Clarity and understanding of how Thermal Mapping works and its application to daily decision-making (where relevant)
- The confidence to use the application to support decision-making
- The ability to record operational activity
- The capability of producing reports.

Full handouts shall be provided to the trainees including material to support the training session. On completion of the training course, trainees will receive a certificate.

The supplying organization must demonstrate at least 3 years proven track record of delivering training in the application of winter service and provide evidence to support their competence. Proof of the trainers' capability and competence to deliver such a training course must be demonstrated.

#### **BID ON**

Total Cost Year I (12/1/2017 – 11/30/2018):

Total Cost Year II (12/1/2018 – 11/30/2019):

Total Cost Year III (12/1/2019 – 11/30/2020):

Total Cost Year IV (12/1/2020 – 11/30/2021):

Addition fees:

EXCEPTIONS TO THE BID:		
List any exceptions to the BID Specifications:		

List three (3) references that you have done similar work, service or supplied similar products to

#### **REFERENCES**

Telephone Number:

Contact Person & Email Address:

within the last twelve (12) months (Only correct contact names and phone numbers will be acceptable). Entity: Address: City, State, Zip Code: Telephone Number: Contact Person & Email Address: Entity: Address: City, State, Zip Code: Telephone Number: Contact Person & Email Address: Entity: Address: City, State, Zip Code:

### RUBBER STAMPED, FAXED, COPIED, OR TYPED SIGNATURE WILL DISQUALIFY YOUR BID MUST BE AN ORIGINAL SIGNATURE

#### **CERTIFICATIONS**

	a violation of Section 33E-3 or 33E-4 of the	cting with a unit of State or local government Criminal Code of 1961, as amended. _ Yes No
	fies that it is aware that all contracts for the revailing Wage Act (820 ILCS 130/1-12)	e Construction of Public Works are subject to Yes No
•	ties of perjury, I certify that entification Number. I am doing business as a	is my correct Federa a (please check one):
*Partners **Corpor Not-for-F Medical a	orietorship ship	Real Estate AgentGovernment EntityTax Exempt Organization
Name: Address:	Title:	

If needed please submit any additional sheets.

### PROPOSER'S CERTIFICATION SIGNATURE PAGE

# RUBBER STAMPED, FAXED, COPIED, OR TYPED SIGNATURE WILL DISQUALIFY YOUR BID MUST BE AN ORIGINAL SIGNATURE

I have carefully examined the Bid, Scope of Work, Specifications, and any other documents accompanying or made a part of this Bid.

I hereby propose to furnish the goods or services specified in the Bid. I agree that my proposal will remain firm for a period of up to 120 days in order to allow the County adequate time to evaluate the qualifications submitted.

I verify that all information contained in this proposal is truthful to the best of my knowledge and belief. I further certify that I am duly authorized to submit this Bid on behalf of the firm as its act and deed, and that the firm is ready, willing, and able to perform if awarded the contract.

I further certify, under oath, that this proposal is made without prior understanding, agreement, connection, discussion, or collusion with any other person, firm or corporation submitting a proposal for the same product or service. No officer, employee or agent of the County of McHenry or any other proposer is interested in said proposal and that the undersigned executed this Proposer's Certification with full knowledge and understanding of the matters therein contained and was duly authorized to do so.

**State of Incorporation		
(Individual - Partnership - Company - Corpora	ation)	
(Business Address)		
(City, State and Zip Code)		
(By Printed Name and Signature)		(Title)
(Witness Signature)		(Title)
(Telephone No)		(Fax No.)
(Date)	(Email)	

**End of Document**