

STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED  
**PROJECT 000I-291**  
**INTERSTATE 29**

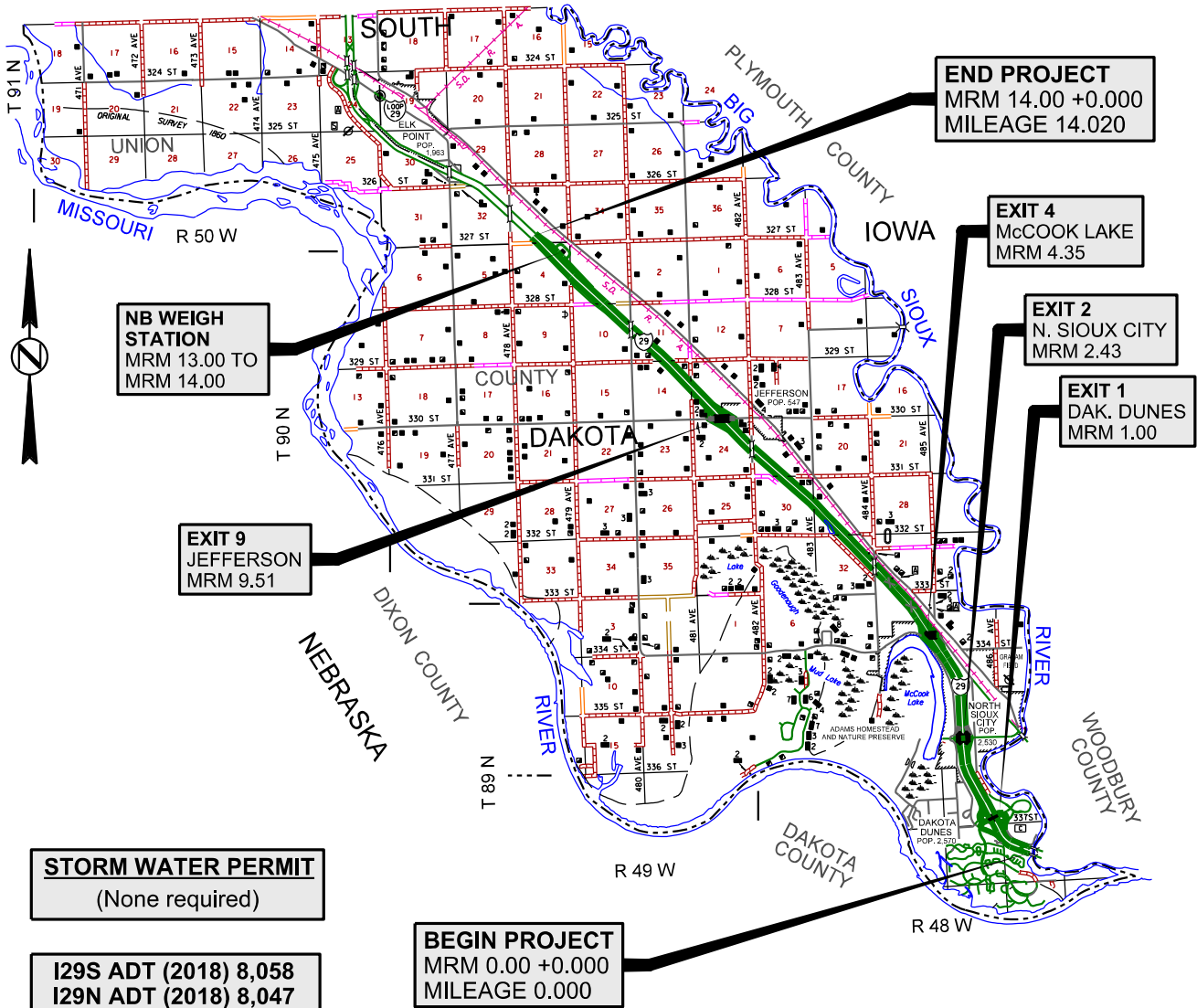
NIGHT WINTER ROAD INSPECTION AND  
SNOW & ICE CONTROL SERVICES

LENGTH: 14.020 MILES

2019-2020 - PCN I5T6

2020-2021 - PCN I5T7

2021-2022 - PCN I5T8



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**NIGHT WINTER ROAD INSPECTION AND SNOW & ICE CONTROL SERVICES  
INTERSTATE 29 FROM MRM 0 to MRM 14**

**SCOPE OF WORK**

The Contractor will provide personnel and equipment necessary to perform night winter road inspection and snow and ice control services on Interstate 29 from the Iowa State Line to just north of the Jefferson Port of Entry as awarded by this contract. Inspection and routine snow and ice control will be done between the hours of 6:00 PM and 6:00 AM, 7 days per week. Hours may vary as directed by the Highway Maintenance Supervisor.

The South Dakota Department of Transportation (Department) will provide sanding abrasives and/or deicing chemicals and the Contractor will supply one operator and one truck with mounted equipment consisting of a snowplow and sand spreader.

The Contractor will work under the direction of the Highway Maintenance Supervisor (Supervisor) responsible for the maintenance on the highway section awarded by contract to the Contractor. The Supervisor may use the Contractor to perform additional snow and ice control work on highway sections under the Supervisor's control and not listed on this contract provided the Contractor agrees to perform the additional work. Payment for the additional work will be at rates established by this contract.

Before beginning operations, the Contractor will provide employee equipment operation training to familiarize its employees with the equipment and its operation. Before the Contractor begins operation, the Supervisor will provide training to the Contractor's employees to ensure route familiarization.

**CONTRACT PERIOD – 3 YEARS**

The contract start date is the date the contract is awarded to the Contractor. The contract completion date is the last date the Contractor performs services for the Department.

**CONTRACT REQUIREMENTS**

The Contractor is an Independent Contractor and is responsible for withholding and paying for all applicable employee taxes and benefits. All employees of the Contractor are deemed the Contractor's employees for the purposes of the Worker's Compensation Act and not employees of the State of South Dakota.

The Contractor will maintain occurrence based commercial general liability insurance or equivalent form with a limit of not less than one million dollars (\$1,000,000) each occurrence. If such insurance contains a general aggregate limit it will apply separately to this contract or be no less than two times the occurrence limit.

The Contractor will maintain business automobile liability insurance or equivalent form with a limit of not less than one million dollars (\$1,000,000) each accident. Such insurance will include coverage for owned, hired and non-owned vehicles.

The Contractor will procure and maintain workers' compensation and employers' liability insurance as required by South Dakota law.

Prior to commencement of work under this contract, the Contractor will furnish the Department with properly executed Certificates of Insurance, which will clearly evidence all insurance required in this contract and provide that such insurance will not be canceled, except on 30 days written notice to the Department. The Contractor will furnish copies of insurance policies if requested by the Department.

The Contractor will hold harmless and indemnify the State of South Dakota, its officers, agents and employees from and against any and all action, suits, damages, liability or other proceedings which may arise as the result of performing services hereunder. This section does not require the Contractor to be responsible for or defend against claims or damages arising solely from errors or omissions of the State, its officers, agents or employees.

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**CONTRACT REQUIREMENTS (CONTINUED)**

The contract work will not be sublet, assigned or otherwise disposed of except with the written consent of the Department. In no case will it be permissible to sublet more than 50% of the work. Consent to sublet or assign a portion of the work will not be construed to relieve the Contractor of any responsibility for fulfillment of the contract.

The Contractor will provide personal supervision of the work or have a competent designee available at all times with authority to act for the Contractor.

Prior to beginning work, a conference will be arranged with the Department. In this meeting, the Contractor will outline the proposed inspection and maintenance procedure and submit a plan for performing the work.

**EQUIPMENT REQUIREMENTS**

The Contractor will be required to furnish a minimum of one specially equipped truck (tandem rear axle truck – both rear axles must be drive axles), that will have tire chains available, mounted reversible 12 foot snowplow, slide in or mounted spreader and warning lights.

If the Contractor has sufficient equipment to perform wing plowing (wing plow must be a minimum of six feet wide) and the Contractor is agreeable to wing plowing, the supervisor may direct the Contractor to perform wing plowing when the Supervisor determines that conditions warrant. In such instances, the contract unit price per hour for Plowing will be adjusted to accommodate this work.

Minimum nominal spreader capacity will be 8 cubic yards (12 tons) for a tandem rear axle truck. The spreader must be a variable speed unit capable of consistent application rates. Calibrate the spreader before beginning snow and ice control operations for the winter. Carry the spreader calibration card in the truck. The Supervisor may require additional calibrations if it appears the required application rates are not being achieved. The Supervisor will provide calibration forms to the Contractor on request.

The use of tire chains is not mandatory. Chains are not usually necessary unless the snow is frozen on the pavement. The Supervisor can order the use of chains anytime conditions indicate they are needed.

The snowplow's moldboard will be, at minimum, a 12 foot unit equipped with standard or carbide insert cutting edges. The Contractor will furnish cutting edges for snowplows. Serrated cutting edges or cutting edges with teeth are not allowed. Mark each moldboard end with an orange flag that is at least 18 inches square.

Equip each truck with warning lights consisting of a three light or four light strobe system. The three light strobe system is generally considered adequate but the Contractor may use a more powerful four light strobe system if desired. In order to maintain lighting uniformity between trucks, it is recommended that no additional warning lights be put on a truck equipped with the three or four light strobe system.

The three light strobe system consists of a 360 Degree Strobe mounted centered above the cab guard and one Rear Directional Strobe mounted on each rear corner of the dump body or spreader. Mount all the strobes so that the distance to the bottom of a strobe is at least 11 feet above ground level and at least 1 foot above the top of the spreader or dump body, whichever is highest.

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**EQUIPMENT REQUIREMENTS (CONTINUED)**

The minimum specifications for the three light strobe systems are listed below:

<b>TYPE OF STROBE</b>	<b>NUMBER</b>	<b>HIGH-LOW</b>	<b>JOULES</b>	<b>TYPE OF FLASH</b>	<b>FLASHES PER MINUTE</b>
360 Degree Strobe	1	Yes	20	Double	80
Rear Directional Strobe	2	Yes	13	Double	70

The four light strobe system consists of one Twin 180 Degree Strobe mounted on each of the cab's rear view mirrors and one Rear Directional Strobe mounted on each rear corner of the dump body or spreader. Mount the Rear Directional Strobes so that the distance to the bottom of a strobe is at least 11 feet above ground level and at least 1 foot above the top of the spreader or dump body, whichever is highest.

The minimum specifications for the four light strobe system are listed below:

<b>TYPE OF STROBE</b>	<b>NUMBER</b>	<b>HIGH-LOW</b>	<b>JOULES</b>	<b>TYPE OF FLASH</b>	<b>FLASHES PER MINUTE</b>
Twin 180° Strobe Module	2	Yes	60	Double	140
Rear Directional Strobe	2	Yes	60	Double	70

Equip each truck with a cellular phone for communication.

The Supervisor may extend the contract start date by up to forty-five (45) days in the event the Contractor is unable to obtain the required equipment by the contract start date. To get the contract start date extended, the Contractor will provide to the Supervisor verifiable evidence no less than twenty (20) days before the contract start date that the required equipment is forthcoming. The Supervisor will make arrangements with the Contractor to accomplish the work until the equipment arrives.

The Contractor's trucks will meet all applicable laws regarding licenses, insurance, weight limits, etc.

Prior to beginning work, the Contractor's trucks, plows and spreaders will be inspected and approved by the Department.

Bidders are required to complete the enclosed Equipment Data Sheet specifying the equipment that will be used on the projects and return the completed form with the bid.

**WORK REQUIREMENTS**

The Contractor WILL BE MOBILIZED AND READY TO RESPOND IMMEDIATELY to all sanding or plowing needs determined during inspections and to all emergency or maintenance calls received during the specified contract hours. The Contractor will provide the name and telephone number of the responsible individual(s) whom the State is to contact to implement operations. This individual(s) will be required to carry a cellular phone. The individual(s) must be available at any and all times for inspection and maintenance activities.

The Supervisor must be able to immediately contact the Contractor's contact individual by telephone or cellular telephone 24 hours a day 7 days a week during periods requiring snow and ice control work. Once contacted, this individual will have ½ hour to initiate the Contractor's snow and ice control operations. Upon initiation, the individual will call the Supervisor and advise when each truck left the Contractor's yard, the operator's name and cellular telephone number. Names and phone numbers must be submitted with the bid on the Equipment Data Sheet provided.

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**WORK REQUIREMENTS (CONTINUED)**

The Contractor will inspect the Interstate route when weather forecasts indicate and/or existing conditions are such that sanding or plowing may be necessary. In addition, the Contractor will be available to make special inspections, sanding or plowing when scheduled by the Department.

In addition to Department call requests, the Contractor will respond to emergency or maintenance calls from State Radio or the South Dakota Highway Patrol.

The Contractor will notify the Department when weather conditions develop that will require immediate winter maintenance by the State crews. The Contractor will notify the following State designates in order until one contact is made.

		<b>CELL</b>	<b>HOME</b>
1. Brad Steeneck	Telephone Number	605-202-1593 or 605-659-6396	
2. Jerry Hansen	Telephone Number	605-677-8187 or 605-202-0356	
3. Richard Jahn	Telephone Number	605-677-8695 or 605-624-8868	
4. Rod Gall	Telephone Number	605-661-8621 or 605-665-3490	
5. Yankton SDDOT Office	Telephone Number		605-668-2929

The Contractor will work under the direction of the Supervisor. At the time of initial contact, the Supervisor and the Contractor will work together to establish mutually agreeable route starting points and work sequence. A route starting point may be a shop site, highway/MRM location, stockpile site, etc., and may vary based on type of operation. For example, a route starting point for sanding operations may be a stockpile site. On initial contact, the Contractor will also provide the Supervisor with the name, address, and telephone number of the Contractor's contact individual the Supervisor calls to implement operations.

The Supervisor, at the time of the Contractor's initial contact, will provide the Contractor with a Snow and Ice Control Notebook for each truck the Contractor proposes to use. Information entered into this notebook will become the original source documentation information used for contract payment. Each truck will carry a notebook and the truck operator will enter the required information into the notebook for each day snow and ice control operations are accomplished. At minimum, the notebook will contain the following information:

1. Date and time the truck reached the route starting point,
2. Total time of inspecting operations,
3. Total time of plowing operations,
4. Total time of sanding operations,
5. Total time of plowing and sanding operations,
6. Total time of standby time (list reasons: loading sand, mounting chains, pulled in by Supervisor, etc.),
7. Total tons of sanding abrasive/chemical used,
8. Total quantity and type of extra deicing chemical added while loading spreader,
9. Date and time inspection and snow & ice control operations are complete and the truck starts its return to the Contractor's yard, and
10. Contractor's Signature.

On Monday of each week, the Contractor will provide to the Supervisor a copy of all daily records entered into the notebook for the previous week.

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**WORK REQUIREMENTS (CONTINUED)**

The Contractor will conduct snow and ice control operations as follows and/or as instructed by the Supervisor:

- The Contractor will consider and take precautions to ensure the safety of the traveling public first and foremost at all times. When driving conditions warrant, snowplow trucks will pull over as necessary to allow traffic to pass.
- All operations must proceed in the direction of traffic. Avoid backing movements unless absolutely necessary.
- During the period between 6:00 PM and 6:00 AM, if conditions warrant, continue snow and ice control operations unless otherwise directed by the Supervisor.
- The interchange ramps and crossroads between the ramp terminals at Exits 1, 2, 4, 9 and the NB On and Off ramps at the Weigh Station are part of this contract.
- The Supervisor can suspend snow and ice control operations at any time it is felt that continued operation is ineffective or unsafe.
- Advise the Supervisor immediately anytime snow and ice control operations are discontinued for any reason, i.e., operations done, conditions too bad, equipment breakdown, etc.
- Begin snowplowing operations before driving conditions become difficult.
- This contract consists of Interstate Routes. In the event that the Contractor is called to perform additional work, the priorities for snow plowing will be as follows:
  1. Plow each mile of Interstate Routes once every two hours.
  2. Plow each mile of Priority One Routes once every two hours.
  3. Plow each mile of Non-Priority One Routes once every four hours.
  4. Plow driving lanes of service roads, local intersections, and other areas as time permits.
  5. Widen and plow shoulders beginning with Priority One Routes. Next widen shoulders on Non-Priority One routes and finish with other Department routes.
- The Contractor will not create hazards or traffic blocks by leaving banks of snow on driving lanes or through intersections.
- Adjust snowplow shoes to allow the cutting edge to be in contact with the surface on asphalt and concrete surfaces.
- Generally plow snow at speeds between 15 and 30 MPH.
- When plowing snow off of grade separation bridges, reduce speed to prevent throwing snow over bridge rail. Clear snow from grade separation bridges by pushing snow off the end of the bridge and then off the road into the right-of-way.
- Call State Radio at approximately 5:00 AM each morning including weekends and holidays to provide road condition report if requested by the Supervisor.

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**WORK REQUIREMENTS (CONTINUED)**

- Perform sanding operations in the following sequence and repeat applications as instructed by the Supervisor or as needed to meet existing conditions and provide traction:
  1. Apply a continuous coverage of sanding abrasives and/or deicing chemicals to Interstate Routes.
  2. Apply a continuous coverage of sanding abrasives and/or deicing chemicals to Priority One Routes.
  3. Apply sanding abrasives and/or deicing chemicals to hills, curves, highway intersections and dangerous locations on all Non-Priority One Routes.
  4. Apply a continuous coverage of sanding abrasives and/or deicing chemicals to Non-Priority One Routes.
  5. Apply sanding abrasives and/or deicing chemicals to service roads, local intersections and other areas.
- Sanding abrasive and deicing chemicals are available at the Jefferson Port of Entry (MRM 13-14) stockpile site. Mixtures of sanding abrasive and deicing salt are generally available at all sites. Under certain road and weather conditions and/or as instructed by the Supervisor, the Contractor's employee may have to add deicing chemicals to the mixture during the spreader loading operation.
- The Contractor's truck operator will fill their spreader using the Department's loader provided at each site. The Contractor will be responsible for any damages or injuries caused by their employee's operation of the Department's loader.
- Any remaining material left in the spreader after completing snow and ice control work will be handled by the Contractor as instructed by the Supervisor.
- Unless advised otherwise by the Supervisor, use the following material mixture rates for sanding operations:

<b>Temperature</b>	<b>Material Used</b>
32°F and Above	Use premixed stockpile material (Approximately 17% Salt, 83% Sand)
Below 32°F	Add additional salt/deicing chemical to the load (if necessary) at a rate approved by the Supervisor

- Apply premixed stockpiled deicing material at a rate of ½ to 1 CY (¾ to 1½ ton) per two-lane mile. Apply deicing material with added chemicals at an application rate that will result in a salt application rate of 250 to 500 pounds of salt per two-lane mile. The Supervisor may approve or request different application rates.
- Apply the sanding abrasives and/or deicing chemicals to the center 6 to 10 feet of a two-lane roadway.

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**BASIS OF PAYMENT**

Payment for Mobilization 1, 2 or 3 will be made at the contract unit price per each and is payment for the work necessary to establish, modify and/or organize the facilities, equipment, and personnel to provide inspecting and snow & ice control services as per this contract. Payment for Mobilization 1 will take place once, after contract award, and payment for Mobilization 2 or 3 will take place once, in each of the successive 2 years of the contract, provided that the contract is renewed and, provided that the Contractor demonstrates to the Department that the aforementioned mobilization work is accomplished. The contract unit price for Mobilization 1, 2 or 3 will not exceed \$4,000 (\$12,000 total).

Winter Road Inspection will be paid at the contract unit price per hour measured to the nearest ¼ hour for the actual hours of inspection. The truck plow/sander unit will be used for the inspections in case sanding or plowing is required during inspection. When sanding or plowing is required, no time will be allowed for inspection.

Sanding Road will be paid at the contract unit price per hour measured to the nearest ¼ hour of actual hours of sanding.

Snow Plowing will be paid at the contract unit price per hour measured to the nearest ¼ hour of actual hours of plowing. The contract unit price per hour for Snow Plowing (when plowing & wing plowing) will be increased by 25%. The contract unit price per hour for Snow Plowing (when wing plowing only) will be decreased by 15%.

Snow Plowing and Sanding Road will be paid at the contract unit price per hour measured to the nearest ¼ hour of actual hours of plowing and sanding.

Payment is considered full compensation for the operation of the truck to perform plowing and sanding operations and includes cost for operator, fuel, and all other maintenance costs necessary for operating the truck and mounted equipment. Time will start when the truck leaves the route starting point and time will end when the work operations are complete and the truck starts its return to the Contractor's yard.

Payment for authorized standby time will be made at the contract unit price per hour for Standby Time measured to the nearest ¼ hour. Authorized standby time includes the Contractor's employee time used to load and unload abrasives and/or deicing chemicals, and the time used to install and remove tire chains. Authorized standby time also includes the time each Contractor's employee spends on ordered standby time. Ordered standby time starts when Supervisor orders the Contractor to suspend operations and standby. Ordered standby time also starts when the Supervisor decides to delay the start of actual operations after the Contractor's contact individual is notified to commence work and the Contractor's personnel and equipment are at their route start point. Ordered standby time stops when the Supervisor orders the Contractor's personnel and equipment to either resume operations or to stop operations and return to the Contractor's yard.

Progress payments will be made monthly when authorized hours are documented in the notebook and verified by the Department representative. Payments of less than \$500.00 will be held until a \$500.00 minimum is accrued.

To protect against extreme changes in the cost of fuel, the State of South Dakota Department of Transportation Specifications Section 9.12 Fuel Cost Adjustment applies to all inspecting, plowing and sanding work provided under this contract.