

NORTH DAKOTA
DEPARTMENT OF TRANSPORTATION
REQUEST FOR PROPOSAL

STATE FEDERAL AID PROJECT NOS. NH-2-052(054)244 (PCN-24041) and NH-2-281(050)006
(PCN-24043)

32.401 Miles

MILL AND OVERLAY

US 52, JCT ND 36 (PINGREE) S TO NEAR CMC 4718 (BUCHANAN) and US 281, NEAR JCT ND 11 (ELLENDALE) N
TO JCT ND 13 (EDGELEY)

DICKEY, LAMOURE, and STUTSMAN COUNTIES

BID OPENING: The bidder's proposal will be accepted via the Bid Express on-line bidding exchange at www.bidx.com until **09:30AM Central Time on November 14, 2025.**

Prior to submitting a Proposal, the Bidder shall complete all applicable sections and properly execute the Proposal Form in accordance with the specifications.

Proposal Form of:

(Firm Name)

(Address, City, State, Zipcode)

(For official use only)

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Projects: NH-2-052(054)244 (PCN-24041) and NH-2-281(050)006 (PCN-24043)

The company, firm, corporation, or individual hereby acknowledges that it has designated a responsible person or persons as having the authority to obligate the company, firm, or individual, through electronic or paper submittal, to the terms and conditions described herein and in the contract documents. The designated responsible person submitting this proposal shall be hereafter known as the bidder. By submitting this proposal, the bidder fully accepts and agrees to all the provisions of the proposal. The bidder also certifies that the information given in this proposal is true and the certifications made in this proposal are correct.

The bidder acknowledges that they have thoroughly examined the plans, proposal form, specifications, supplemental specifications, special provisions and agrees that they constitute essential parts of this proposal.

The bidder acknowledges that all line items which contain a quantity shall have a unit price bid. Any line item which is bid lump sum shall contain a lump sum bid price.

The bidder acknowledges that they understand that the quantities of work required by the plans and specifications are approximate only and are subject to increases and decreases; the bidder understands that all quantities of work actually required must be performed and that payment therefore shall be at the prices stipulated herein; that the bidder proposes to timely furnish the specified materials in the quantities required and to furnish the machinery, equipment, labor and expertise necessary to competently complete the proposed work in the time specified.

NON-COLLUSION AND DEBARMENT CERTIFICATION

The bidder certifies that neither he/she, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with this bid.

By submitting this proposal, the bidder certifies to the best of his/her knowledge and belief that he/she and his/her principles:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal Department or agency;
- b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or perform a public (Federal, State or Local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records; making false statements; or receiving stolen property

Projects: NH-2-052(054)244 (PCN-24041) and NH-2-281(050)006 (PCN-24043)

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- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or Local) with commission of any of the offenses enumerated in paragraph b. of the certification; and
 - d. Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or Local) terminated for cause or default

Where the prospective bidder is unable to certify to any of the statements in this certification, the bidder shall submit an explanation in the blanks provided herein. The explanation will not necessarily result in denial of participation in a contract:

Explanation: _____

If the prequalified bidder's status changes, he/she shall immediately submit a new fully executed non-collusion affidavit and debarment certification with an explanation of the change to the Contract Office prior to submitting the bid.

Failure to furnish a certification or an explanation will be grounds for rejection of a bid.

BID LIMITATION (Optional)

The bidder who desires to bid on more than one project on which bids are to be opened on the same date, and who also desires to avoid receiving an award of more projects than the bidder is equipped to handle, may bid on multiple projects and limit the total amount of work awarded to the bidder on selected projects by completing the "Bid Limitation".

The Bid Limitation must be filled in on each proposal form for which the Bidder desires protection. Each such proposal must be covered by a proposal guaranty.

The bid limitation can be made by declaring the total dollar value of work OR total number of projects a bidder is willing to perform.

The Bidder desires to disqualify all of his/her bids on this bid opening that exceed a total dollar value of \$ _____

OR

that exceed a total number of _____ projects.

The Bidder hereby authorizes the Department to determine which bids shall be disqualified.

Projects: NH-2-052(054)244 (PCN-24041) and NH-2-281(050)006 (PCN-24043)

PERMISSIBLE DISCOUNT (optional)

Only when invited to do so in the Request for Proposal by Special Provision, Bidders are permitted to offer a discount on a specific project (discount project) if they are awarded the contract on one or more additional projects bid at the same bid opening time and date. The bidder must present the proposal so that it can be considered with or without the discount. The bid or discount offered on the "discount project" will not affect the determination of the low bid of any other project.

When discounts are offered, they must be presented as a reduction in the unit price for one or more items of work in the specified proposal (discount project).

Space for Offering Discounts:

Item No: _____

Description: _____

Unit: _____

Proposal Quantity: _____ Unit Price Reduction: \$ _____ Discount: \$ _____

Item No: _____

Description: _____

Unit: _____

Proposal Quantity: _____ Unit Price Reduction: \$ _____ Discount: \$ _____

Item No: _____

Description: _____

Unit: _____

Proposal Quantity: _____ Unit Price Reduction: \$ _____ Discount: \$ _____

TOTAL DISCOUNT _____

It is understood that the discount will only apply if awarded under the conditions as listed above and signed by the bidder.

Projects: NH-2-052(054)244 (PCN-24041) and NH-2-281(050)006 (PCN-24043)

PROPOSAL GUARANTY

A proposal guaranty is required. The proposal guaranty must comply with Section 102.09, "Proposal Guarantee" of the Standard Specifications.

TYPE OF PROPOSAL GUARANTY APPLIED TO THIS PROJECT (Check one):

Annual Bid Bond*

Single Project Bid Bond

Certified or Cashier's Check

*Annual Bid Bond is required when submitting proposals electronically

BID ITEMS

Projects: NH-2-052(054)244 (PCN-24041) and NH-2-281(050)006 (PCN-24043)

Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
001	103	0100	CONTRACT BOND	L SUM	1.				
002	107	0103	RAILWAY PROTECTION INSURANCE-SITE 1	EA	1.				
003	107	0104	RAILWAY PROTECTION INSURANCE-SITE 2	EA	1.				
004	216	0100	WATER	M GAL	200.				
005	302	0120	AGGREGATE BASE COURSE CL 5	TON	781.				
006	401	0050	TACK COAT	GAL	35,529.				
007	401	0070	FOG SEAL	GAL	35,529.				
008	411	0100	MILLING PAVEMENT SURFACE	TON	21,441.				
009	430	0145	RAP - SUPERPAVE FAA 45	TON	80,157.				
010	430	1000	CORED SAMPLE	EA	552.				
011	430	5818	PG 58H-34 ASPHALT CEMENT	TON	3,769.				
012	702	0100	MOBILIZATION	L SUM	1.				
013	704	0100	FLAGGING	MHR	900.				
014	704	1000	TRAFFIC CONTROL SIGNS	UNIT	2,839.				
015	704	1048	PORTABLE RUMBLE STRIPS	EA	4.				
016	704	1052	TYPE III BARRICADE	EA	2.				

BID ITEMS

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Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
017	704	1060	DELINEATOR DRUMS	EA	23.				
018	704	1067	TUBULAR MARKERS	EA	107.				
019	704	1087	SEQUENCING ARROW PANEL-TYPE C	EA	1.				
020	704	1185	PILOT CAR	HR	450.				
021	706	0550	BITUMINOUS LABORATORY	EA	2.				
022	706	0600	CONTRACTOR'S LABORATORY	EA	2.				
023	760	0025	SINUSOIDAL RUMBLE STRIP - ASPHALT SHOULDER	MILE	63.079				
024	760	0027	SINUSOIDAL RUMBLE STRIP - ASPHALT CENTERLINE	MILE	31.539				
025	762	0103	PVMT MK PAINTED-MESSAGE	SF	329.				
026	762	0432	SHORT TERM 6IN LINE-TYPE NR	LF	215,931.				
027	762	1106	PVMT MK PAINTED 6IN LINE	LF	410,995.				
028	762	1108	PVMT MK PAINTED 8IN LINE	LF	65.				
029	762	1112	PVMT MK PAINTED 12IN LINE	LF	649.				
030	762	1124	PVMT MK PAINTED 24IN LINE	LF	24.				
			TOTAL SUM BID						

Projects: NH-2-052(054)244 (PCN-24041) and NH-2-281(050)006 (PCN-24043)

Type of Work: MILL AND OVERLAY

Counties: DICKY, LAMOURE, and STUTSMAN

Length: 32.4010 Miles

TIME FOR COMPLETION:

The undersigned Bidder agrees, if awarded the contract, to prosecute the work with sufficient forces and equipment to complete the contract work within the allowable time specified as follows:

WORKING DAY CONTRACT: NA working days are provided. The Department will begin charging working days beginning NA or the date work begins on the project site, whichever is earlier.

CALENDAR DAY CONTRACT: NA calendar days are provided. The completion date will be determined by adding NA calendar days to NA or the date work begins on the project site, whichever is earlier.

COMPLETION DATE CONTRACT The project completion date is 10/17/2026. The Department provides a minimum of NA working days. The Department will begin charging working days beginning NA or the date work begins on the project site, whichever is earlier.

Projects: NH-2-052(054)244 (PCN-24041) and NH-2-281(050)006 (PCN-24043)

Type of Work: MILL AND OVERLAY

Counties: DICKY, LAMOURE, and STUTSMAN

Length: 32.4010 Miles

CONTRACT EXECUTION:

The undersigned Bidder agrees, if awarded the contract, to execute the contract form and furnish a contract bond within fifteen calendar days, as determined by NDCC Section 1-02-15, after date of notice of award, in accordance with the provisions of Sections 103.05 and 103.06 of the Standard Specifications.

AFFIDAVIT:

STATE OF _____)
) **ss.**
COUNTY OF _____)

The undersigned bidder, being duly sworn, does depose and say that they are an authorized representative of _____

CONTRACTOR NAME

of _____, a

MAILING ADDRESS

- Individual Partnership Joint Venture Corporation

and that they have read, understand, acknowledge, and accept the entire proposal form; and that all statements made by said bidder are true and correct.

_____, TITLE _____
BIDDER MUST SIGN ON THIS LINE

TYPE OR PRINT SIGNATURE ON THIS LINE Subscribed and sworn to before me this day.

COUNTY

(Seal)

STATE DATE

NOTARY PUBLIC

My commission expires _____

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

Job 24041, NH-2-052(054)244 & NH-2-281(050)006

Mill and Overlay

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Price Schedule for Miscellaneous Items dated January 3, 2025 (PS-1)

E.E.O. Affirmative Action Requirements dated March 15, 2014

Required Contract Provisions Federal Aid Construction Contracts
(Form FHWA 1273 Rev. October 23, 2023)

SP Certified Payrolls, dated 3-7-24

SP Project Payment Reporting

Labor Rates from U.S. Department of Labor dated May 30, 2025 (Mod. No. 1)

On-The-Job Training Program 2025

SSP 4 Longitudinal Joint Density

SSP 5 Limitations of Operations

SSP 8 Federal Prohibition on Certain Technological Hardware

SSP 11 Buy America

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SP Fuel Cost Adjustment Clause dated September 8, 2006

NOTICE

TO: All prospective bidders on all North Dakota Department of Transportation Highway Construction Projects.

Contractors moving construction equipment to NDDOT highway construction projects are subject to the Road Restriction Policy with the following modifications:

- A. The contractor may purchase up to 10 single trip permits for each NDDOT highway construction project at a cost ranging from \$20 to \$70 each. These permits must be purchased from the Motor Carrier Division of the Highway Patrol at the central office of the NDDOT in Bismarck, North Dakota.
- B. The \$1 per mile fee will not be charged for Gross Vehicle Weights (GVW) exceeding 105,500 pounds, 105,500 pounds, and 105,000 pounds for highways Restricted by Legal Weights, 8 Ton, and 7 Ton highways respectively.
- C. The \$5 per ton per mile fee will be charged only for loads exceeding a GVW of 130,000 pounds, 120,000 pounds, 110,000 pounds and 80,000 pounds for highways Restricted by Legal Weights, 8 Ton, 7 Ton, and 6 Ton highways respectively.
- D. The maximum weights per axle for each of the class restrictions still apply. If it is shown that more axles cannot be added, movement may be authorized; however, a \$1 per ton per mile fee will be charged for all weight in excess of the restricted axle limits.
- E. These construction equipment single trip permits apply to State and US Highways only.
- F. The District Engineers and Highway Patrol will select the route of travel.
- G. Contractors moving equipment to other than NDDOT highway construction projects are subject to all fees as shown in the Road Restriction Permit Policy.
- H. Contractors must call the Highway Patrol prior to movement of all overweight loads on all State and US Highways.

ROAD RESTRICTION PERMITS

Permits shall be issued for the movement of non-divisible vehicles and loads on state highways which exceed the weight limits during spring road restrictions. The issuance of permits may be stopped or posted weights changed at any time based on the varying conditions of the roadways. Permits can be obtained from the Highway Patrol.

RESTRICTION CLASSIFICATIONS WITH ALLOWABLE AXLE WEIGHTS AND GROSS VEHICLE WEIGHTS	PERMIT AND TON/MILE FEES
<p>Highways Restricted by Legal Weight</p> <p>Single Axle -- 20,000 lbs. Tandem Axle -- 34,000 lbs. Triple Axle -- 48,000 lbs. 4 Axles or more -- 15,000 lbs. per axle</p> <p>Gross Vehicle Weight -- 105,500 lbs.</p> <p>Note: The above weights apply to state highways restricted by legal weights, other than interstate highways, in areas where road restrictions are in force. When the gross weight of an axle grouping exceeds 48,000 pounds, the \$1 per ton per mile shall apply to all weight in excess of 15,000 pounds per axle.</p>	<p>Permit Fee: \$20-\$70 per trip</p> <p>Ton Mile Fee:</p> <p>105,501 lbs. to 130,000 lbs. GVW -- \$1 per mile</p> <p>Over 130,000 lbs. GVW -- \$1 per mile plus \$5 per ton per mile for that weight exceeding 130,000 lbs. GVW</p> <p>Exceeding axle limits -- \$1 per ton per mile</p>
<p>8-Ton:</p> <p>Single Axle -- 16,000 lbs. Tandem Axle -- 32,000 lbs. 3 Axles or more -- 14,000 lbs. per axle</p> <p>Gross Vehicle Weight -- 105,500 lbs.</p>	<p>Permit Fee: \$20-\$70 per trip</p> <p>Ton Mile Fee:</p> <p>105,501 lbs. to 120,000 lbs. GVW -- \$1 per mile</p> <p>Over 120,000 lbs. GVW -- \$1 per mile plus \$5 per ton per mile for that weight exceeding 120,000 lbs. GVW</p> <p>Exceeding restricted axle limits -- \$1 per ton per mile</p>
<p>7-Ton:</p> <p>Single Axle -- 14,000 lbs. Tandem Axle -- 28,000 lbs. 3 Axles or more -- 12,000 lbs. per axle</p> <p>Gross Vehicle Weight -- 105,500 lbs.</p>	<p>Permit Fee: \$20-\$70 per trip</p> <p>Ton Mile Fee:</p> <p>105,500 lbs. to 110,000 lbs. GVW -- \$1 per mile</p> <p>Over 110,000 lbs. GVW -- \$1 per mile plus \$5 per ton per mile for that weight exceeding 110,000 lbs. GVW</p> <p>Exceeding restricted axle limits -- \$1 per ton per mile</p>
<p>6-Ton:</p> <p>Single Axle -- 12,000 lbs. Tandem Axle -- 24,000 lbs. 3 Axles or more -- 10,000 lbs. per axle</p> <p>Gross Vehicle Weight -- 80,000 lbs.</p>	<p>Permit Fee: \$20-\$70 per trip</p> <p>Ton Mile Fee:</p> <p>\$5 per ton per mile for all weight exceeding 80,000 lbs. GVW</p> <p>Exceeding restricted axle limits -- \$1 per ton per mile</p>
<p>5-Ton:</p> <p>Single Axle -- 10,000 lbs. Tandem Axle -- 20,000 lbs. 3 Axles or more -- 10,000 lbs. per axle</p> <p>Gross Vehicle Weight -- 80,000 lbs.</p>	<p>No overweight movement allowed</p>

SINGLE UNIT FIXED LOAD VEHICLES SUCH AS TRUCK CRANES AND WORKOVER RIGS

- A. Permit Fee and Ton Mile Fee for Self-Propelled Fixed Load Vehicles .
1. Permit Fee: \$25 per trip
 2. \$1 per ton per mile for all weight in excess of restricted axle limits or in excess of legal limits on state highways in areas where road restrictions are in force. When the gross weight of an axle grouping exceeds 48,000 pounds, the \$1 per ton per mile shall apply to all weight in excess of 15,000 pounds per axle (see weight classification chart in section C.)
 3. **\$5 per ton per mile** for all movements exceeding the following gross vehicle weight limits:
 - a. 105,500 lbs. GVW on unrestricted state highways, other than interstate highways, in areas where road restrictions are in force.
 - b. 105,500 lbs. GVW on 8-ton highways.
 - c. 105,500 lbs. GVW on 7-ton highways.
 - d. 80,000 lbs. GVW on 6-ton highways.
 - e. No overweight movement allowed on 5-ton highways
- B. Permit Fees for Work-Over Rigs and Special Mobile Equipment Exceeding 650 but not 670 Pounds Per Inch Width of Tire.
1. Permit Fee:
 - a. \$50 per trip on work-over rigs up to 650 pounds per inch width.
 - b. \$75 per trip on work -over rigs that exceed 650 but not 670 pounds per inch width of tire.
 2. The work-over rig shall be stripped to the most minimum weights.
 3. A minimal number of state highway miles shall be used.
 4. District engineer approval shall be obtained prior to movement when vehicle exceeds restricted axle weights by more than 5,000 pounds.
 5. A validation number ending in TM must be obtained from the Highway Patrol prior to using a self-issue single trip movement approval form.
 6. The ton mile shall be waived .

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION

"HOT LINE"

As part of its continuing investigation into Highway Construction Contract Bid Rigging and abuses in the Disadvantaged Business Enterprise Program, the Inspector General for the Department of Transportation (DOT) has established a "HOT LINE" to receive information from contractors, suppliers, or anyone with knowledge of such activities.

The toll-free "HOT LINE" telephone number is 1-800-424-9071 and will be manned during normal working hours (8 a.m. to 5 p.m. EST). This operation is under the direction of DOT's Inspector General. All information will be treated confidentially and anonymity will be respected.

CALL

Inspector General's 'HOT LINE'
Toll Free 1-800-424-9071
Washington, DC Area:
202-366-1461
Fax: 202-366-7749

WRITE

Inspector General
Post Office Box 23178
Washington, DC 20026-0178

Email: hotline@oig.dot.gov

The field office address and telephone number for NORTH DAKOTA is:

CHICAGO REGIONAL OFFICE

Special Agent-in-Charge
Commercial: 312-353-0106
111 N. Canal St., Suite 677
Chicago, Illinois 60606

1/3/2025

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
PRICE SCHEDULE FOR MISCELLANEOUS ITEMS (PS-1)**

The Contractor agrees to accept the following unit prices for each listed item of work and or material when no project contract unit price exists for that item. Materials and construction methods used in performing maintenance and restoration work for 107. 08 Haul Roads shall meet the requirements of the relevant specifications.

Each price listed will be full compensation for the cost of labor, material, and equipment necessary to provide the item of work and/or material, complete in place, including (but not limited to) royalty, disposal of unsuitable material, equipment rental, sales tax, use tax, overhead, profit, and incidentals.

Each listed item is referenced to the Standard Specifications by Section number and Section name.

Spec	Code	Specification Section No.	Section Name	Item	Price
100	9950	704.04 C.5	Temporary Traffic Control	Flagging	\$60.00 per MHR
100	9951	216.04	Water	Water	\$30.00 per M Gal
100	9952	430.04 G & I.3	HMA – Bituminous Materials	Patching – Machine Placed	\$250.00 per Ton
100	9952	430.04 G & I.3	HMA – Bituminous Materials	Patching – Hand Placed	\$260.00 Per Ton
100	9954	302.04 B	Aggregate Base and Surface Course	Aggregate Base CL 13	\$40.00 per Ton ¹
100	9955	203.01 C	Rock Excavation	Rock Excavation	\$30.00 per CY
100	9956	203.01 D	Shale Excavation	Shale Excavation	\$8.50 per CY
100	9957	203.01 E	Muck Excavation	Muck Excavation	\$10.50 per CY
100	9958	203.01 G & 203.05 G.3	Excavation and Embankment	Overhaul	\$0.08 per CY-Sta
100	9960	420.04 E	Bituminous Seal Coat	Blotter Sand	\$30.00 per Ton ¹
100	9962	260.06	Silt Fence	Cleaning Silt Fence	\$5.00 per LF
100	9963	261.06	Fiber Rolls	Cleaning of Fiber Rolls	\$5.00 per LF
100	9964	260.06	Silt Fence	Removal of Silt Fence ²	\$5.00 per LF
100	9965	261.06	Fiber Rolls	Removal of Fiber Rolls ²	\$5.00 per LF

¹ Price Includes haul up to 10 miles. Payment for haul exceeding 10 miles will be according to Section 109.03 E, "Force Account." The haul distance for aggregate base will be based on the average haul. The haul distance for blotter sand will be from the point where the haul begins to the point where it enters the project.

² This is only for pre-existing items that were not installed under the Contract.

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
EEO AFFIRMATIVE ACTION REQUIREMENTS**

March 15, 2014

Bidders shall become familiar with the following requirements and be prepared to comply in good faith with all of them:

APPENDIX A

Notice or Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246).

1. The Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:
 - a. Goals for Female Participation in Each Trade – Statewide6.9%
 - b. Goals for Minority Participation in Each Trade by County:
Barnes, Cass, Dickey, Eddy, Foster, Griggs, LaMoure, Logan,
McIntosh, Ransom, Richland, Sargent, Steele, Stutsman, Traill0.7%
 - Grand Forks1.2%
 - Benson, Cavalier, Nelson, Pembina, Ramsey, Towner, Walsh2.0%
 - Burleigh, Morton0.4%
 - Adams, Billings, Bowman, Dunn, Emmons, Golden Valley, Grant,
Hettinger, Kidder, Mercer, Oliver, Sheridan, Sioux, Slope, Stark, Wells . . .1.3%
 - Bottineau, Burke, Divide, McHenry, McKenzie, McLean, Mountrail,
Pierce, Renville, Rolette, Ward, Williams4.4%

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR 60-4 shall be based on its implementation of the Equal Opportunity Clause specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3 (a),

and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order, and the regulations in 41 CFR part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall notify the Office of Federal Contract Compliance Programs, in writing, within ten working days of award of any subcontract in excess of \$10,000. The notification shall include the name, address, and telephone number of the subcontractor and their employer identification number; dollar amount of the contract, estimated starting and completion dates of the contract; the contract number; and geographical area in which the contract is to be performed.

Notification should be sent to:

U.S. Department of Labor/ESA
OFCCP
Denver District Office
1244 Speer Boulevard
Denver, Colorado 80202
Phone: 720-264-3200
Fax: 720-264-3211

4. As used in this "Notice" and in the contract for this project, the "covered area" is the State of North Dakota.

APPENDIX B

Standard Federal Equal Employment Opportunity Construction Contract Specifications
(Executive Order 11246)

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the proposal from which this contract resulted.
 - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority.
 - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - d. "Minority" includes:

- (1) Black (all persons having origins in any of the Black African racial groups, not of Hispanic origin);
 - (2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish Culture or origin, regardless of race);
 - (3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (4) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation of community identification).
2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the proposal from which this contract resulted.
 3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
 4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The Contractor is expected to make substantially uniform progress toward its goals in each craft.
 5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
 6. In order for the nonworking training hours of apprentices and trainees to be counted

in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor. (Training programs approved by the North Dakota Department of Transportation are recognized by the U.S. Department of Labor.)

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all Foremen, Superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources; provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its union have employment opportunities available, and maintain a record of the organization's responses.
 - c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union, or if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
 - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to

the sources compiled under 7b above.

- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the Company newspaper, annual report, etc., by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the Company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g. Review, at least annually, the Company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing it with the Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students, and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minorities and women, and where reasonable, provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of the Contractor's work force.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these to seek or to prepare for, through appropriate training, etc., such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring

- all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
- n. Ensure that all facilities and Company activities are non-segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction Contractors and Suppliers, including circulation of solicitations to minority and female Contractor associations and other business associations.
 - p. Conduct a review, at least annually, of all Supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligation.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a Contractor association, joint Contractor- union, Contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's, and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
 9. Goals for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minorities, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).
 10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
 11. The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
 12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termina-

tion, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
14. The Contractor shall designate a responsible official to monitor all employment-related activity to ensure that the Company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation, if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form, however, to the degree that existing records satisfy this requirement, Contractors shall not be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work

performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act ([29 CFR part 3](#))), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act ([40 U.S.C. 3141\(2\)\(B\)](#)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in [29 CFR part 1](#), a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division

under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. *Fringe benefits not expressed as an hourly rate.* Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph

2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901–3907](#).

3. Records and certified payrolls (29 CFR 5.5)

a. *Basic record requirements (1) Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) *Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) *Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(4) *Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. *Certified payroll requirements (1) Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting

agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) *Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) *Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in [29 CFR part 3](#); and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) *Use of Optional Form WH-347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature.* The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification.* The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under [18 U.S.C. 1001](#) and [31 U.S.C. 3729](#).

(7) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents.* The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access (1) Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements.* If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under [29 CFR part 6](#) any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address

of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. *Apprentices (1) Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits.* Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio.* The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates.* Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity.* The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and [29 CFR part 30](#).

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, [18 U.S.C. 1001](#).

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#); or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#).

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or

mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901](#)–3907.

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the

event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;

- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and

health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

3. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or

cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B)**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

**CONTRACT SPECIAL PROVISION
MANDATORY USE OF
AUTOMATED CERTIFIED
PAYROLL**

All contractors on NDDOT federal-aid projects, including city/county projects, must file weekly Certified Payrolls, as required under Davis-Bacon and Related Acts (DBRA). **The NDDOT requires the use of LCPtracker, a paperless online system for entering and filing these certified payrolls. Certified payrolls in paper form will no longer be accepted, and all contractors must file their payroll electronically.**

After award, the Prime Contractor (Prime) must:

1. Designate an individual as Prime Approver for the project. The Prime Approver will oversee DBRA payroll for all subcontractors of all tiers on the project. A contractor may inform the NDDOT Civil Rights Division (CRD) that the same individual will be Prime Approver on all projects. CRD will set up the Prime Approver Account for the project. Thereafter, the Prime Approver will have the responsibility to use the Account to approve all payroll on the project. Until payroll is approved by the Prime Approver, it cannot be viewed by the NDDOT and it is not deemed submitted to the NDDOT.
2. The prime contractor has the responsibility to assign subcontractors within the LCPtracker system to the project and to ensure that all subcontractors are aware of the necessity to file payrolls electronically and are set up within the system. Any subcontractor not on Approved Subcontractor List or the Qualified Contractor List must register and be placed on one of these lists before entry of the subcontractor into LCPtracker. These lists may be found at: <https://www.dot.nd.gov/construction-and-planning/construction-and-contractor-resources/contractor-information>. Only Prime Approvers or the CRD may enter subcontractors into LCPtracker.
3. The prime contractor has the responsibility to see that all required payrolls are filed by subcontractors of all tiers. If payroll is rejected or project staff otherwise requests a correction of payroll by any subcontractor on the project, the prime contractor has a responsibility to see that corrected payroll is submitted.
4. For further information on certified payroll, go to the NDDOT Labor Compliance Program (Davis-Bacon)/LCPtracker page at: <https://www.dot.nd.gov/about-nddot/civil-rights/labor-compliance-program-davis-bacon>. On this page, contractors will find a Getting Started on LCPtracker Guide and a Prime Approver Guide. Recorded trainings are also available on this page for both contractors and prime approvers. Contractors can obtain an LCPtracker user name and password by calling the NDDOT Civil Rights Division at (701) 328- 2605 or (701) 328-2576.

03/07/2024

**CONTRACT SPECIAL PROVISION
MANDATORY USE OF ONLINE
PROJECT PAYMENT REPORTING**

A. DESCRIPTION

This Special Provision (SP) replaces Section 109.04 D, "Prompt Payment"

This SP details the requirements for Contractors to document payment to all tiers of DBE subcontractors and suppliers and all non-DBE subcontractors. For the purposes of this SP, the term "payee" will be used to denote all tiers of DBE subcontractors and suppliers as well as all tiers of non-DBE subcontractors.

The Department utilizes the Certification and Compliance System (CCS) for this purpose. The direct web address to this system is <https://dotnd.diversitycompliance.com/>

B. PROMPT PAYMENT REQUIREMENTS

Within 20 calendar days of receiving payment from the Department, pay all payees their portion of the payment less applicable retainage, not to exceed 2 percent. If the Contractor does not make prompt payment, the payee may notify the Engineer.

The Contractor may withhold payment to a payee for just cause. If withholding payment from a payee, immediately provide written notification to the payee and the Engineer with the reasons for withholding the payment. If the Engineer determines the Contractor is withholding payment with just cause, interest will not accrue.

If the Engineer determines the Contractor is withholding payment without just cause, beginning on the 21st calendar day after the Contractor's receipt of payment from the Department interest will accrue for the payee at the rate provided by NDCC 13-01.1-02. Additionally, the Department may withhold all payments to the Contractor until the Contractor properly pays the payee and agrees to make all future payments to payees as required by the contract.

The Department will apply these prompt payment procedures to all payees, in accordance with 49 CFR 26.29.

C. REPORTING REQUIREMENTS

1. General.

Create a vendor account with CCS if one does not exist. Create a user for each employee who will use the system and identify the main user. The main user will receive communications from the Department.

2. Utilization Plan.

Complete a Utilization Plan (UP) and submit it for approval in CSS within 14 days of being notified the UP is available, or contract execution, whichever is later. The Department may grant an extension upon written request from the Contractor.

List all payees with the UP and at the proper tier. Ensure payees are completing their requirements and provide assistance as necessary.

The Department's Civil Rights Division will review the UP, verify the DBE participation is reported correctly, and approve the UP or return it for updates. If the UP is returned it will contain a note describing the necessary updates. Complete changes and resubmit within 7 days of receiving a returned UP.

a. Non-Account Holders.

If a payee does not already have an account within CSS when creating the UP send the information listed below to the compliance officer via CSS:

- Company name;
- Mailing address;
- Phone number;
- Contact person's name; and
- Contact person's email address.

The NDDOT will then set up a vendor account within CCS for the payee and notify the contractor when they are available to add to the UP.

b. Additional Payees.

If a payee is added after the initial UP is approved, submit a request for the payee to be added via the "Subs" tab inside CCS. Complete this process before the payee is due payment.

3. Payments.

Once the UP is approved, the UP is locked in and contractor progress payments will be reported, and the monthly auditing process begins. An audit is the term used in the system to refer to a monthly period while the project is active.

Contractors must report any payments for all payees for each audit period. A payment may be marked as final and if the payee agrees to the final payment no other reporting will be required on that payee. Payments of \$0 must be reported or the audit will be considered incomplete. Audits are available in subsequent months, meaning the January audit period will open in February. Payments not reported within 30 days will be considered past due. Audits containing past due payments must be unlocked by a system administrator.

4. Payment Discrepancies.

Payees are required to confirm payments or open a Discrepancy (dispute original submission) within 30 days of the payment being recorded. Payments not confirmed nor disputed within 30 days will be auto-confirmed by the system administrators and the ability to dispute that payment will no longer be available. Contractors are to ensure the payees on their project are timely confirming/disputing payments.

Attempts should be made to resolve Discrepancies between the two parties. CCS provides functionality for each party to comment publicly or privately (private comments are visible to system administrators only). If the parties cannot come to a resolution, the Department will make a resolution. The Department may request additional information, if applicable, before making a resolution.

5. Certification and Compliance System Assistance.

A user manual for UP's and recording project payments is available within the system. The user manual and other training is offered by navigating to it once logged in. A UP does not have to be assigned to an entity to view the guide or attend system training.

For further assistance, contact the Civil Rights Division for DBE related inquiries and the Construction Services Division for all other inquiries.

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NDDOT's *Davis-Bacon Wage and Payroll Requirements Handbook* is available at:
<https://www.dot.nd.gov/about-nddot/civil-rights/labor-compliance-program-davis-bacon>

U.S. DEPARTMENT OF LABOR

<small>STATE</small> NORTH DAKOTA	<small>COUNTY</small> STATEWIDE	ND20250006 Page 1 DATE OF DECISION 01-03-2025 Revised 05/30/2025 (Mod No. 1)
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CARPENTERS

CEMENT MASONS/FINISHERS

LINE CONSTRUCTION:

- Lineman
- Cable Splicer
- Line Equipment Operator
- Groundman

ELECTRICIANS:

- Electrician
- Cable Splicer
(Adams, Billings, Bottineau, Bowman, Burke, Divide, Dunn, Emmons, Golden Valley, Grant, Hettinger, McHenry, McKenzie, Mclean, Mercer, Mountrail, Oliver, Pierce, Renville Rolette, Sheridan, Sioux, Slope, Ward and Williams Counties)

- Electrician
- Cable Splicer
(Barnes, Benson, Cavalier, Dickey, Eddy, Foster, Grand Forks, Griggs, Kidder, La-Moure, Logan, McIntosh, Nelson, Pembina, Ramsey, Ransom, Richland, Sargent, Steele, Stutsman, Towner, Traill, Walsh, and Wells Counties)

- Electrician
- Cable Splicer
(Burleigh, Morton and Stark Counties)

- Electrician
(Cass County)

WELDERS:

Receive rate prescribed for craft performing operation to which welding is incidental

Basic Hourly Rates	Fringe Benefits Payments
	H & W/Pensions
\$35.85	\$ 7.60
35.85	7.60
53.48	8.80 + 29.5%
53.48	8.80 + 29.5%
45.41	8.80 + 29.5%
30.26	8.80 + 19.5%
53.48	8.80 + 29.5%
53.48	8.80 + 29.5%
53.48	8.80 + 29.5%
53.48	8.80 + 29.5%
53.48	8.80 + 29.5%
53.48	8.80 + 29.5%
53.48	8.80 + 29.5%
35.35	16.32

LABOR RATES

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LABORERS:

Group 1

General Construction Laborers: Sack Shaker (cement and mineral filler); pipe handler; drill runner tender; salamander heater and blower tender; light truck; pickup driver; flaggers; pilot car drivers.

Group 2

Semi Skilled Laborer: bulk cement handler; conduit layer, telephone or electrical, form setter (pavement); gas electric or pneumatic tool operator; chipping hammer; grinders and paving breakers (tamper-dirt); concrete vibrator operator; chain saw operator; Concrete saw operator, concrete curing man (not water); bituminous worker (shoveler, dumper, raker and floated); kettleman (bituminous or lead); concrete bucket signalman; power buggy operator; brick and mason tender; multi-plate pipelayer; culvert pipe layers; carpenters tenders.

Group 3

Caisson Worker: Bottom Man (Sanitary sewer, storm sewer, water and gas liners); Concrete Mixer Operator (one bag capacity); Mortar Mixer.

Group 4

Drill Runner (includes Wagon Chum or Air Track); Pipe Layers (sanitary sewer, storm sewer, water, and gas lines); Powderman; gunite and sandblast; Nozzleman; Rein forcing Steel Sellers/Tiers; Concrete Finisher Tender.

POWER EQUIPMENT OPERATORS:

Group 1

All Cranes 60 tons and over; Cranes doing piling, sheeting, dragline/clam work; Derrick (Guy and Stiff); Gentry Crane Operator; Helicopter Operator; Mole Operator or Tunnel Mucking Machine; Power Shovel; 3-1/2 CY and over; Traveling Tower Crane.

Group 2

All Cranes 59 tons and under; Backhoe Operator 3 CY. and over; Creter Crane; Dredge Operator 12" and over; Equipment Dispatcher; Equipment Foreman; Finish Dozer; Finish Motor Grader; Front End Loader Operator 8 CY. and over; Master Mechanic (when supervising 5 or more Mechanics); Mon-O-Rail Hoist Operator; Power Shovel up to and including 3 CY; Tugboat.

Basic Hourly Rates	Fringe Benefits Payments
	H & W/Pensions
\$27.65	\$ 3.15
27.90	3.15
28.05	3.15
28.80	3.15
35.05	21.90
33.65	21.90

LABOR RATES

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POWER EQUIP. OPERATORS: (CONT.)

Group 3

Asphalt Paving Machine Operator; Asphalt Plant Operator; Automated Grade Trimmer; Backhoe Operator, 1 CY. up to and including 2-1/2 CY.; Boom Truck Hydraulic 8 tons and over; Cableway Operator; Concrete Batch Plant Operator (electronic or manual); Concrete Mixer Paving Machine Operator; Concrete Paver Bridge Decks; Concrete Pump; Concrete Spreader Operator and Belt Placer; Crushing Plant Operator; Dozer Operator; Dredge Operator or Engineer 11" and under; Drill Rigs, Heavy Duty Rotary or Churn or Cable Drill; Front End Loader Operator, 3-1/2 CY up to and including 7-1/2 CY; Gravel Washing and Screening Plant Operator; Lazer-Screed Operator; Locomotive, all types; Mechanic or Welder(Heavy Duty); Motor Grader Operator; Pavement Breaker (Non-Hydro Hammer Type, Pipeline Wrapping, Cleaning and Bending Machine Operator); Power Actuated Auger and Horizontal Boring Machine Operator 6" and over; Refrigeration Plant Engineer; Rota Milling Machine (SurfacePlaner) 43" and over; Scraper Operator; Slip Form Concrete Paving Operator; Tandem Pushed Quad 9 or similar; Tractor with Boom Attachment; Trenching Machine Operator 100 H.P. and over.

Group 4

Articulated/Off Road Hauler; Asphalt Dump Person(Controls the spread of asphalt); Asphalt Paving Screed Operator; Backhoe, up to and including 1/2 CY; Boring Machine Locator; Console Board Operator; Curb Machine Operator; Distributor Operator (Bituminous); Forklift Operator; Front End Loader, 1-1/2 CY up to and including 3 CY; Fuel/ Lube Truck Operator; Grade Person(Responsible for establishing and determining grade through instrumentation); Gravel Screening Plant Operator (not Crushing or Washing); Greaser; Hydro Vac and Hydro Excavator self propelled; Longitudinal Float and Spray Operator; Micro Surfacer Machine; Motor Grader Operator (Haul Roads); Paving Breaker HydroHammer Type; Pugmill Operator; Push Tractor; Roller, Steel and Rubber on Hot Mix Asphalt Paving; Rotomilling Machine (Surface Planer), up to and including 42"; Rumble Strip Machine; Sand and Chip Spreader; Self-Propelled Sheepsfoot Packer with or without Blade Attachment; Self Propelled Traveling Soil Stabilizer; Sheepsfoot Packer with Dozer Attachment 100 H.P. and over; Shouldering Machine; Slip Form, Curb and Gutter Operator; Slurry Seal Machine; Tamping Machine Operator; Tie Tamper and Ballast Machine; Trenching Machine Operator, 46 H.P. up to and including 99 H.P.; Truck Mechanic; Tub Grinder; Well Points.

Group 5

Boom Truck, A-Frame or Hydraulic 2 tons up to and including 7 tons; Broom Self-Propelled; Concrete Saw (power operated); Cure Bridge Operator; Front End Loader Operator, less than 1-1/2 CY; Mobile Cement Mixer-Non-Truck; Power Actuated Auger and Horizontal Boring Machine Operator up to and including 5"; Roller (on other than hot mix asphalt

Basic Hourly Rates	Fringe Benefits Payments
	H & W/Pensions
\$33.40	\$21.90
33.25	21.90

LABOR RATES

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POWER EQUIP. OPERATORS: (CONT.)

Group 5 (CONT.)

paving); Oilers; Vibrating Packer Operator (Pad Type) (Self Propelled); Water Spraying Equipment-Self Propelled; Skidsteer Operator with attachments.

Group 6

Assistant/Apprentice Operator; Brakeman or Switchman; Dredge or Tugboat Deckhand; Drill Truck Gravel/Testing Operator; Form Trench Digger (Power); Gunite Operator Gunall; Paint Machine Striping Operator; Pickup Sweeper, 1 CY and over Hopper Capacity; Scissor Jack {Self -Propelled) Platform Lift; Straw Mulcher, Blower and straw press; Stump Chipper Operator; Tillage Equipment Operator; Tractor Pulling Compaction or Aerating Equipment and no till drills; Trenching Machine Operator up to and including 45 H.P.

TRUCK DRIVERS:

Single-Axle Truck

Tandem- and Tri-Axle Truck

Tandem- and Tri-Axle Semi, Lowboy

Off Road Heavy Duty End Dumps 20 Yards and Under

Euclid, Over 20 Yards

Basic Hourly Rates	Fringe Benefits Payments
	H & W/Pensions
\$32.40	\$21.90
31.60	21.90
32.88	17.99
33.00	17.99
33.31	17.99
33.31	17.99
34.83	17.99

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses [29 CFR, 5.5 (a) (1) (iii)].

LABOR RATES

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01-03-2025

Revised 05/30/2025 (Mod No. 1)

HIGHWAY CONSTRUCTION PROJECTS

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022: Executive Order 14026 generally applies to the contract. The contractor must pay all covered workers at least \$17.75 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing the contract in 2025.

If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022: Executive Order 13658 generally applies to the contract. The contractor must pay all covered workers at least \$13.30 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2025.

The applicable Executive Order minimum rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION (NDDOT)

ON-THE-JOB TRAINING SPECIAL PROVISION

The bidder's signature on the proposal sheet indicates the bidder agrees to take part in the On-the-Job Training (OJT) Program and to follow the OJT Program Manual and Special Provision. Contractors that fail to do so will be subject to suspension of progress payments or sanctions up to and including revocation of bidding privileges.

OJT is training conducted in a highway construction work environment designed to enable minority, female, and economically disadvantaged individuals to learn a bona fide skill and qualify for a specific occupation through demonstration and practice.

After a training program and trainee candidate have been approved, the contractor begins training its regular employee according to the approved program. The goal of this training is to retain the trainee as a permanent employee within the ND Highway Construction industry. OJT involves individuals at the entry level. Training is designed to help participants reach their fullest potential and become self-sufficient in the job.

I. POLICY STATEMENT

The purpose of the OJT Program is to provide training in the highway construction industry for minority, female, and economically disadvantaged individuals, from this time known as the targeted group. Pursuant to 23 Code of Federal Regulations Part 230, Subpart A, Appendix B - Training Special Provisions, this program provides for on-the-job training aimed at developing journey-level workers in skilled trades.

The Contractor shall take all necessary and reasonable steps to ensure that minorities and women have the opportunity to compete for and participate as trainees or apprentices and to develop as journey-level workers employed in the skilled trades.

Contractors should select a training program(s) based on their company's employment/staffing needs as stated in the OJT Program Manual.

II. INTRODUCTION/PROGRAM BACKGROUND

The OJT Program was originally prepared through the cooperative efforts of the Associated General Contractors of North Dakota (AGC); the Federal Highway Administration (FHWA); the North Dakota Department of Transportation (Department); and, other program stakeholders.

Successful operation of the OJT Program requires contractors to follow uniform and basic training procedures, keep records of trainee progress, and report each trainee's completion or termination.

III. ASSIGNED OJT POSITIONS

A. Trainee positions are assigned based only on federal highway dollars awarded to contractors from April to March. Trainee assignments are not project specific; that means the contractor may train program participants on any project where training opportunities exist within the state of North Dakota.

The number of trainee positions assigned will be determined by formula based on calculations involving particular project specification numbers on applicable projects. Once the formula calculations are determined the OJT Program Administrator completes a further analysis based on number of trainees per contractor, contractor work type,

location, past assignments, etc.

The types of projects NOT applicable in the calculation to assign trainee positions are:

- County-only or state-only funded projects
- Emergency relief, concrete pavement repair (CPR), electrical, rest area, signing, striping projects
- Projects subject to Tribal Employment Rights Ordinances (TERO)
- Projects not let as part of NDDOT bid openings

B. Contractors will receive the number of positions assigned and links to resources necessary for completion of program requirements via email.

C. The number of trainee positions assigned to each contractor will increase proportionately, as shown below, for any applicable federally funded projects awarded to them.

For all federal highway dollars awarded from April to March the following year:

8,000,000 to 16,000,000	1	trainee
16,000,001 to 24,000,000	2	trainees
24,000,001 and above	3	trainees

A maximum of three (3) trainee positions in a federal fiscal year will be assigned to any prime contractor regardless of dollar amount. Carryover positions from a prior construction season are not included in the three trainee maximum, e.g., a contractor with one carryover and three assigned positions may have a total four trainees.

Contractors assigned OJT positions are required to attend one-on-one meetings with the OJT Program Administrator and the OJT Supportive Services Consultant in early spring. The meeting is conducted virtually via Microsoft TEAMS. At this meeting any changes to the program and other important information will be shared and the contractor will have an opportunity to ask any questions they may have.

Failure to follow the OJT Special Provision and OJT Program Manual may result in suspension of progress payments or sanctions up to and including revocation of bidding privileges.

IV. FUNDING

The Department will establish an OJT fund annually from which contractors may bill the Department directly for eligible trainee hours. The funds for payment of trainee hours on federal-aid projects will be made available based on 23 USC 504(e) to a maximum of \$100,000. The funds for payment of trainee hours on state-aid only projects will be allocated to a maximum of \$10,000.

V. ONLINE RESOURCES

SFN 60226 Request for On-the-Job Training Program and Trainee Approval:
<http://www.dot.nd.gov/forms/sfn60226.pdf>

SFN 51023 Voucher for On-the-Job Training Program Hourly Reimbursement:
<http://www.dot.nd.gov/forms/sfn51023.pdf>

SFN 62136 On-The-Job Training (OJT) Program Dependent Child Care Reimbursement:
<https://www.dot.nd.gov/forms/sfn62136.pdf>

VI. APPROVALS REQUIRED

- A. Requests for Approval of Training Programs and Trainee Candidates must be submitted to Civil Rights Division (CRD). Contractors must request and receive program and trainee candidate approval in order to pay trainees less than the established Davis-Bacon wage for the job classification concerned. **No training program hours will count toward the fulfillment of an assigned trainee position or be eligible for reimbursement without prior approval.** No retroactive approval will be granted.
1. Submit SFN 60226 *Request for On-the-Job Training Program and Trainee Approval* with each trainee's employment application. <http://www.dot.nd.gov/forms/sfn60226.pdf> and the pre-approved training curriculum for each trainee position assigned by April 1 or within fifteen (15) calendar days of notification.
 2. Submit *SFN 7857 Application for Eligibility* directly to Job Service North Dakota (JSND) for approval of an economically disadvantaged individual for participation in the OJT Program.
- B. Pre-approved curriculum: NDDOT's OJT Program Manual contains pre-approved training curriculum for a number of skilled trade positions. Contractors should select a training program(s) based on their company's employment/staffing needs.
- C. Customized curriculum: To request a training curriculum not included in the pre-approved curriculum, submit a written request for approval by NDDOT Civil Rights Division.

The request must include:

- A training curriculum, including the classification requested, minimum number of hours required, and type of training the individual will receive to achieve journey-level worker status.
- A minimum wage scale.

If approved, each new classification must comply with the provisions specified in the OJT Program Manual. No hours worked prior to approval will be credited toward completion of the customized training program. Training programs for classifications not covered by the Davis-Bacon and Related Acts (DBRA) will be considered on a limited basis.

The contractor may commence its "customized" training as of the date of the written approval.

- D. Union apprenticeship and on-the-job training programs registered with the Bureau of Apprenticeship and Training (BAT), U.S. Department of Labor, may be used for trainee positions assigned under the OJT Program, provided the trainees or apprentices are minority, female, or economically disadvantaged. Nonminority males not certified as economically disadvantaged may only be used when the contractor has requested and received approval, from the Department, for additional trainee positions. The apprenticeship indenture agreements serve as the trainee's job application and must be provided prior to any hours being credited toward OJT Program completion.
- E. Power Equipment Operators:

The contractor may train an individual on a combination of equipment if each piece of equipment falls within the same groups of power equipment operators identified in the training curricula (groups 1-3 and groups 4-6). These power equipment operator groups are referenced to the federal DBRA wage rates contained in the contract proposal. As an example, a "utility operator" may receive training on a broom, a front-end loader less than 1½ cubic yards, or other piece of equipment that is used around a paver if each piece falls within either groups 1-3 or groups 4-6. When multiple wage rates apply, the trainee's wage will be based on the equipment being operated at the time or on the highest of the applicable wage rates.

Use of the classification "pickup machine operator (asphalt dump-person)" as a group 4 power equipment operator is considered standard industry practice. The classification is defined as: "Operates the controls on the pickup machine that runs in front of the paver, trips the levers on the dump trucks, and balances the loads for the paver. The pickup machine operates on similar principles as a shouldering machine."

- F. Contractors not qualifying for the OJT Program, or contractors desiring to train more than the allotted number of trainees, may apply to the Department for additional trainee positions. Approval of additional positions will be at the sole discretion of the Department. The Department will take into consideration whether there is enough work for the trainee to successfully complete the curriculum and whether the contractor will be exceeding the allowable ratio of trainees to journey-workers (generally considered to be one trainee or apprentice to every three to five journey-workers).

The additional positions may be filled by individuals outside of the targeted groups. The contractor may pay the reduced training rates to additional trainees outside of the targeted groups but will not receive hourly reimbursement for any individuals not directly assigned by NDDOT.

VII. NDDOT'S RESPONSIBILITIES

- A. The NDDOT OJT supportive services (OJTSS) consultant will monitor excerpts from the weekly certified payrolls or LCP Tracker for NDDOT projects submitted with the monthly vouchers for reimbursement. On contracts where certified payrolls are not required and not available for supporting documentation, contractors may enter trainee wages, hours in training, and the project control number(s) (PCN) in a spreadsheet to support their reimbursement vouchers. In this case, contractors should work with OJTSS to assure that all information required for payment is provided.
- B. The OJTSS will review Daycare Reimbursement Forms and make recommendations to CRD on approvals. CRD approves any reimbursements and the OJTSS will process any payments. OJTSS tracks funds available/expended in order to stay within the limit of available funds that season/year. OJTSS Daycare reimbursements are made using OJTSS funding, which may be limited or unavailable year to year.
- C. The OJTSS consultant will assess when the trainees have completed the specified number of hours and their wages are increased accordingly. The OJTSS consultant will also assure that applicable fringe benefits are paid either directly to the trainees or for the trainee into approved plans, funds, or programs.
- D. The OJTSS consultant is charged with visiting trainees and monitoring their progress under the OJT Program. To facilitate the on-site visits, the OJTSS consultant will contact contractors for the location of the trainees weekly.

VIII. CONTRACTOR'S RESPONSIBILITIES

- A. Consistently demonstrate efforts to recruit, hire, and train candidates for the OJT Program.
- B. Assign each trainee to a particular person—either a supervisor or an employee proficient in the skills to be trained—who shall see that the trainee is given timely, instructional experience. This person must be familiar with the OJT Program, keep proper records, and ensure completion of the required training hours in accordance with the training curriculum.
- C. Appoint a company employee who will be available and responsive to weekly contacts by the OJTSS consultant. OJTSS monitors the status of assigned trainee positions (e.g., program and trainee approvals, trainees' progress, etc.). The OJTSS consultant will contact the individual listed on the company's approved SFN 60226 Request for OJT Trainee Approval. This person must reply to communications from the Department and the OJTSS consultant in a timely manner.
- D. Must have trainees available to the OJTSS consultant for at least two on-site visits during the construction season. The OJTSS consultant will be provided a private location to meet with the trainee and the trainee will be allowed as much time away from the project as necessary to complete the on-site visit.
- E. Make the trainer and project superintendent available to the OJTSS consultant for at least two on-site visits each construction season.
- F. Make trainees aware they are formally enrolled in the OJT program.
- G. Inform trainees on availability of Daycare Reimbursement Program while in an approved training curriculum and assist them with completing the required paperwork, if applicable.
- H. Identify trainees on the payroll excerpts, for example: "grp. 4 roller operator trainee." This includes trainees in job classifications not covered by DBRA. Handwritten notes are appropriate for identification.
- I. Notify the Department when a trainee completes the number of hours required to graduate from the OJT Program. The Department will issue the trainee a confirmation letter as proof of the graduate's successful training program completion.
- J. Notify the Department to "propose graduation" or discontinue the training period of a trainee who has completed 90% or more of their hours and thereafter advance the trainee to journey-worker status.
- K. Elect to upgrade proficient trainees from one power equipment operator group or truck driver group to another, with the approval of CRD. Fewer hours are required to complete the upgraded position.

Minimum number of hours required:

Power Equipment Operator Groups 4-6 to Groups 1-3 = 400 hrs.
 Class C Truck Driver to Class B = 200 hrs.
 Class B Truck Driver to Class A = 200 hrs.

Depending on the variety of experience the trainee has gained under the previous curriculum, the difference in the hours may be deducted from the actual operation of the piece of equipment or truck. The contractor will need to review the trainee's past performance to make this determination.

- K. May hire commercial driver's license (CDL) holders as truck driver trainees. Those having over-the-road driving experience, with little or no highway construction experience, may be considered to have completed the Class C truck driver training

curriculum and, therefore, are eligible to be upgraded to a Class B truck driver trainee, with the approval of CRD.

- L. May transfer trainees from one project to another to complete the OJT Program. If transfers are made, CRD must be notified and provided with the name of the trainer.
- M. May train trainees on municipal, private, or other non-highway work. These training hours must be paid at the OJT minimum wage scale to count toward their OJT Program completion; however, no program reimbursement will be made for those hours. Payrolls of employees trained on non-NDDOT projects must be provided to prove appropriate wages are paid.
- N. Must train trainees on projects within North Dakota. Cannot train trainees on projects located outside of the state lines. The OJTSS consultant must be able to visit the trainee twice during their program. It is unreasonable for the OJTSS consultant to make these visits outside of the state.
- O. May delegate or reassign trainee positions to subcontractors, with the acceptance of the subcontractors and the approval of CRD. The prime contractor must verify that the trainee will be able to accumulate enough hours to complete his or her training program. If approved, the subcontractor must obtain training program and trainee approval from CRD before the trainee begins work under the OJT program. Program reimbursement will be made directly to the prime contractor. The trainee position will remain the responsibility of the prime contractor.
- P. May use trainees on projects subject to TERO requirements as part of the core crew. The training hours will count toward overall OJT Program completion; however, no program reimbursement will be made for those hours unless it is a NDDOT let project.
- Q. Must not use one trainee to simultaneously fill multiple trainee positions
- R. May use a trainee on a piece of equipment in groups 1-3 or groups 4-6 for one assigned trainee position, then once that trainee has completed the program, the trainee may be trained on a different piece of equipment in groups 1-3 or groups 4-6 to fulfill a second assigned trainee position. When a trainee is used for a second time within a group, the contractor must pay that trainee at the higher wage rate as described in paragraph B under Wage Rates (page 8).

IX. CLASSROOM TRAINING

- A. Classroom training may be used to train employees. Each classroom training curriculum must be approved by CRD if the contractor wishes to count the classroom hours as training hours and be reimbursed.

Submit a proposed classroom training curriculum to CRD for approval. Define the type of training the individual will receive, classroom training curriculum, and the minimum number of hours required. The Department will determine the number of hours of credit each trainee will receive toward their training. No retroactive approval will be granted.

Contractors will be reimbursed for classroom training hours after the trainee has completed 40 hours of work on highway construction projects.

Reimbursement for classroom training will be limited to 40 hours per trainee per construction season.

- B. The minimum wage scale to be used for classroom training will be that of the first federal-aid highway construction project on which the trainee will be employed. If the trainee is already employed on a federal-aid highway construction project, the trainee will be paid in accordance with the minimum wage scale applicable to that project. However, if the first project on which the trainee will be employed is a state funded only contract, the minimum wage scale to be used for the classroom training will be that of the appropriate DBRA wage in effect at the time of award of the state funded contract.

X. WAGE RATES

- A. When the contractor is submitting the trainee's hours toward training program, wages paid shall in no case be less than that of those stated in the approved curriculum. A trainee working on a non-federal aid project, must be paid the DBRA wage rate in effect at the time of award for the type of work the trainee is performing as a trainee. Current and prior labor rates can be found on the NDDOT website at: <https://www.dot.nd.gov/divisions/civilrights/laborcompliance.htm>
- B. The minimum wage rates shall not be less than 80% of the journey-worker rate for the first two quarters of training, 85% of the journey-worker rate for the third quarter, and 90% of the journey-worker rate for the fourth quarter.
- Under the power equipment operator training curricula only, once a trainee has completed a training curriculum in either groups 1-3 or groups 4-6, the contractor may enroll the trainee in another training curriculum on a different piece of equipment in either groups 1-3 or groups 4-6.
 - The minimum wage rate under the trainee's second program shall not be less than 85% of the journey-worker rate for the first two quarters of training, 90% of the journey-worker rate for the third quarter, and 95% of the journey-worker rate for the fourth quarter.
 - For the purpose of the OJT Program, a quarter is 25% of the hours the trainee works toward completion of their approved program. The first two quarters of a 550-hour training curriculum would end after 275 hours, the third quarter after 138 hours, and the fourth after 137 hours.
- C. At any time hours are being attributed toward the completion of the approved training program, trainees shall be paid full fringe benefit amounts, where applicable, in accordance to DBRA requirements. DBRA requirements can be found on the NDDOT website at <https://www.dot.nd.gov/divisions/civilrights/laborcompliance.htm>
- D. At the completion of the OJT Program, the trainee shall receive the wages of a skilled journey-worker.

XI. RECRUITMENT AND SELECTION

- A. Prerequisites:
Trainees must possess basic physical fitness for the work to be performed, dependability, willingness to learn, ability to follow instructions, and an aptitude to maintain a safe work environment. Trainees must be a North Dakota resident during their training program.
- B. Licenses:
Truck driver trainees must possess appropriate driver permits or licenses for the

operation of Class A, B, and C trucks. When an instructional permit is used in lieu of a license, the trainee must be accompanied by an operator who:

1. Holds a license corresponding to the vehicle being operated;
2. Has had at least one year of driving experience; and
3. Is occupying the seat next to the driver.

C. Recruitment:

1. Place notices and posters setting forth the contractor's Equal Employment Opportunity (EEO) Policy and the availability of the OJT Program in areas readily accessible to employees, applicants for employment, and potential employees.
2. Employ members of the targeted group (minority, female, or economically disadvantaged individuals) for all trainee positions assigned in accordance with the OJT Program. Additional positions requested by the contractor may be filled by individuals outside of the targeted groups.
3. Conduct systematic and direct recruitment through public and private employee referral sources.
4. Screen present employees for upgrading to higher skilled crafts. A present employee may qualify as a trainee; however, no work hours will be reimbursed or counted toward program completion prior to training program and trainee approval by CRD.

D. Selection:

1. Hire and enroll OJT trainee candidates who qualify as an individual in the targeted group.
2. Select a training program(s) based on their company's employment/staffing needs.
3. Individuals in the targeted group having experience in the selected curriculum may be eligible to participate in the OJT Program providing they:
 - are not or have not been journey-workers in the selected curriculum, and/or
 - have not been previously trained in the selected curriculum.

E. Daycare Reimbursement Program:

Approved trainees may apply for the OJT Daycare Reimbursement Program and be eligible for up to \$3,500 in reimbursement of daycare costs. The trainee must be the legal primary custodial guardian of the dependent(s) they are requesting reimbursement for. Dependent(s) must reside at the same address as the trainee for more than 50% of the calendar year. Proof of cost and other documentation will be required to be submitted with the OJT Dependent Child Care Reimbursement Form.

- Availability of program and eligible funds dependent on FHWA funding annually
- Once funding for the program has been expended for the year no further reimbursements are available
- W-9 will be required prior to any reimbursement
- Only daycare services provided during the dates/times the trainee is being trained in their approved OJT program will be reimbursed.

F. Completion Bonus Program:

Trainees that successfully complete their approved program may be eligible for a \$500 completion bonus. These funds are provided directly from NDDOT to the trainee once

completion is determined.

- Availability of program and eligible funds dependent on FHWA funding annually
- Once funding for the program has been expended for the year no further funds are available
- W-9 will be required prior to any payment
- Any voluntary positions and/or carryover positions are not eligible

G. Commercial Drivers License (CDL) Program Reimbursement:

Individuals that qualify may request reimbursement for tuition costs in an approved CDL Program upon completion up to \$6,000.

- Availability of program and eligible funds dependent on FHWA funding annually
- Once funding for the program has been expended for the year no further funds are available
- Pre-approval form and completion form required
- Periodic check-ins with instructors conducted to ensure compliance
- W-9 will be required prior to any reimbursement
- Only CDL Programs within ND on NDDOTs approved program list are available for reimbursement

XII. BASIS OF PAYMENT

- A. Contractors will be paid \$4.00 for each hour of training in accordance with the OJT Program Manual.
- B. Reimbursement will be made directly to the contractor. Complete SFN 51023 Voucher for On-the-Job Training Program Hourly Reimbursement for each trainee. LCPtracker must be utilized on NDDOT projects for reporting certified payrolls. The OJTSS consultant will be verifying hours submitted on NDDOT projects through this online reporting system. For non-NDDOT projects the firm must attach excerpts from the weekly certified payrolls showing the trainee's hours, rate of pay, and how applicable fringe benefits were paid. Vouchers without excerpts from payrolls will not be paid until the excerpts are provided. If the excerpts from the payrolls are not provided within one week, the voucher will not be paid, and the trainee's hours will not be credited toward completion.
- C. On contracts where certified payrolls are not required and not available for supporting documentation, contractors may enter trainee wages, hours in training, and the project control number(s) (PCN) in a spreadsheet to support their reimbursement vouchers. In this case, contractors should work with OJTSS to assure that all information required for payment is provided.
- D. Submit completed vouchers to CRD for approval and processing by the fifteenth (15th) calendar day of every following month the trainee is employed under the OJT Program. Regardless, all vouchers for trainee hours worked on state funded only projects from July 1 to June 30 must be received by CRD no later than July 15 in order to be

reimbursed. All vouchers for trainee hours worked on federally funded projects from October 1 to September 30 must be received by CRD no later than October 15 in order to be reimbursed. This is due to state and federal end-of-the-year budget fiduciary requirements.

XIII. FAILURE TO PROVIDE THE TRAINING OR HIRE THE TRAINEE AS A JOURNEY-WORKER

- A. The contractor is required to consistently demonstrate efforts to recruit, hire, and train candidates for the OJT Program.
- B. If the contractor does not show in a timely manner good faith efforts to recruit, hire, and train candidates in the targeted group, the Department may withhold progress payments
- C. If payments have been made, the Department will deduct the amount paid from the contractor's progress payment.
- D. No payment shall be made to a contractor for failure to provide the required training or failure to hire the trainee as a journey-worker when such failure is caused by the contractor and evidences a lack of good faith on the part of the contractor in meeting the requirements of this OJT Program Special Provision.
- E. Hiring a trainee to begin training as soon as feasible after start of work is evidence of a contractor's good faith efforts to comply with the OJT Program requirements. Additional evidence supporting a contractor's good faith efforts would be to keep the trainee employed as long as training opportunities exist in the approved work classification or until the trainee has completed his or her training program.
- F. It is not required that all trainees be employed for the entire length of the construction season. A contractor will have fulfilled its responsibilities under this OJT Special Provision if it has provided acceptable training to the number of trainees assigned.

XIV. UNFILLED OR INCOMPLETE TRAINEE POSITIONS

- A. By October 1, provide written explanation of the firm's good faith efforts for unfilled or incomplete trainee assignments to CRD. CRD will decide, on a case-by-case basis, whether to carry the assigned positions over to the next construction season.
- B. Positions carried over from the previous construction season must be among the first positions filled at season startup. To notify CRD of the trainee's rehiring, submit *SFN 60226 Request for On-the-Job Trainee Approval*, marking 'Check if Carryover Trainee' in the Approved Training Program section of the form. There is no need for the training position or a returning trainee to be re-approved.
- C. Sanctions, up to and including revocation of bidding privileges, may be imposed on the contractor for failure to provide sufficient explanation and documentation for reasons assigned trainee positions when unfilled or incomplete.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

LONGITUDINAL JOINT DENSITY FOR HOT MIX ASPHALT PAVEMENTS

DESCRIPTION

This provision describes the procedure for determining core locations, coring frequency and acceptance criteria for longitudinal joint construction. This Special Provision is in addition to the requirements of Section 430, "Hot Mix Asphalt (HMA)".

ATTACHMENTS

Appendix A – Notched Wedge

CONSTRUCTION REQUIREMENTS

A. General

Applicable longitudinal joints are defined as those between any two paved areas that require calculated density; excluding joints for mats constructed on aggregate base, reclaimed material, or cold in place recycled material.

Hot seams or seams created via echelon paving are not considered applicable joints.

B. Longitudinal Joint Placement.

When placing the top lift of pavement, locate longitudinal joints at lane lines or the proposed edge of pavement.

When placing asphalt pavement over existing concrete pavement, place longitudinal joints at the same location as the existing concrete pavement longitudinal joints.

C. Notched Wedge Construction Option.

If a notched wedge joint is used, construct the notched wedge according to Appendix A.

D. Coring.

Obtain joint cores at locations determined by the Engineer. The locations for joint cores will be independent of mat density cores.

Obtain density cores for butt joints centered over the longitudinal joint.

If a notched wedge style joint is constructed, center the core over the tapered portion of the joint.

E. Longitudinal Joint Field Density.

A lot for joint density is defined as the length of the joint completed in one day. Sublots are 1,000 feet in length, contained within the lot. If a day contains less than 3 sublots, that day will not be considered a lot and the sublots will be included in the next complete lot.

Sublots less than 500 feet in length will not be counted separately. Sublots 500 feet or greater in length will be considered separate sublots.

The Engineer will determine the density of each longitudinal joint core. The Engineer will then divide the joint core density by the daily Maximum Theoretical Density (MTD) calculated from the day the lot is completed.

The subplot percent MTD will then be averaged to obtain a lot percent MTD for the joint. The Engineer will use the lot percent MTD and Table 1 to determine a contract price adjustment. The Contract Price Adjustment per Linear Foot will be applied to the entire length of the lot.

F. Low Density Requirements.

If the percentage of compaction of a subplot is below 87.0%, a corrective action must be performed for that subplot. Collaborate with the Engineer on what corrective action to take.

If the percent compaction of a subplot is less than 90.0% and the joint is in a location where rumble strips will not be installed, seal the joint represented by that subplot with an undiluted emulsion that meets the requirements of Section 401.03 C, "Fog Coat" at no additional cost to the Department. Seal butt joints at a width of 8 inches centered on the joint and seal notched wedges at a width of 16 inches centered on the middle of the notched wedge. Use an application rate ranging from 0.10 to 0.15 Gal/SY.

METHOD OF MEASUREMENT

The Engineer will measure each lot in linear feet along the longitudinal joint.

BASIS OF PAYMENT

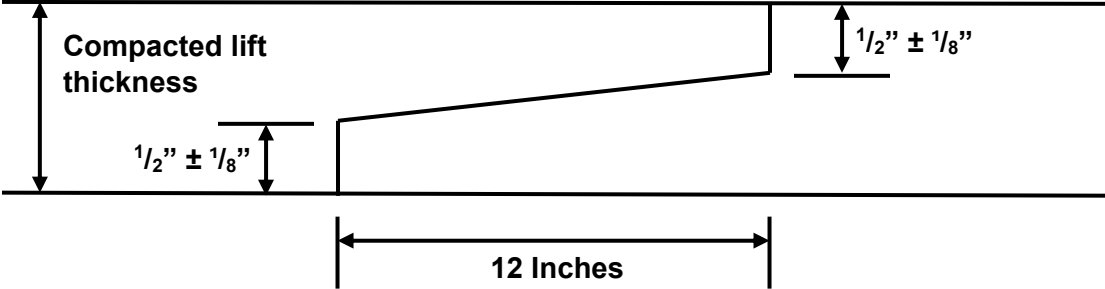
The pay adjustment for longitudinal joint density will not be used for areas constructed according to Section 430.04 I.3, "Ordinary Compaction".

The Engineer will apply the appropriate pay adjustment specified in Table 1 for each lot.

Table 1

Contract Price Adjustment Per Linear Foot	Joint Lot % MTD
\$0.40	≥ 91.1%
\$0.20	90.6% – 91.0%
\$0.00	90.0% - 90.5%
\$(0.20)	89.0% - 89.9%
\$(0.60)	88.5% - 88.9%
\$(1.10)	88.0% - 88.4%
\$(1.80)	87.5% - 87.9%
\$(3.60)	87.0% - 87.4%

Appendix A
Notched Wedge



NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

LIMITATIONS OF OPERATIONS

DESCRIPTION

Section 108.05, "Limitations of Operations" is no longer valid. Use this Special Provision in its place.

108.05 LIMITATION OF OPERATIONS

A. General.

Perform the work in a manner and sequence that minimizes interference to traffic, and with due regard to the location of detours and provisions for handling traffic. Do not begin work to the prejudice or detriment of work already started; the contract may require a section of roadway to be finished before starting additional sections if the opening of the section is essential to public convenience.

If the prosecution of the work is discontinued, provide the Engineer at least 24-hours notice before resuming operations.

B. Holidays.

Unless the contract allows work on holidays, perform work on holidays only with the Engineer's prior written approval. Submit a written request to the Engineer by noon 2 business days before the requested holiday.

C. Nighttime Operations and Extended Hours.

1. General.

When performing work in low light conditions, implement proper safety precautions and provide adequate lighting for the performance and inspection of the work.

The following operations are exempt from the definitions of extended hours and nighttime operations:

- Pavement coring;
- Concrete joint cutting; and
- Temporary traffic control.

Work conducted less than 1 hour after sunset and less than 1 hour before sunrise is considered extended hours. All other operations conducted under darkness fall under nighttime operations.

2. Nighttime Operations.

Unless the contract allows for nighttime operations, perform work at night only with the Engineer's prior written approval.

Submit a written request to the Engineer before anticipated nighttime operations. Allow up to 7 calendar days for the Engineer to review the request. The Engineer may deny the request or delay approval if it would require additional staffing considerations. If nighttime

operations require the Engineer to hire additional forces, nighttime operations may not be allowed for up to 30 days from the receipt of the request.

When requesting to perform nighttime operations, include a plan to ensure the safety of all individuals on the project site, including the Contractor's and subcontractor's workers, Department representatives, and the traveling public.

The Department bears no liability for costs or delays resulting from the Engineer's approval, rejection, or delay for staffing purposes of a request to perform nighttime operations.

3. Extended Hours.

Extended hours are allowed before sunrise with verbal notice given to the Engineer the previous day. Extended hours are allowed after sunset with verbal notice given to the Engineer that same day.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

STANDARD SPECIAL PROVISION

FEDERAL PROHIBITION ON CERTAIN TECHNOLOGICAL HARDWARE

DESCRIPTION

This Special Provision details technological items that are prohibited from use on Department contracts. The contents of this SP take precedent over requirements regarding affected equipment in all other contract documents.

CONTRACT REQUIREMENTS

Equipment, services, and systems using telecommunications equipment or services are prohibited from containing equipment produced by:

- Huawei Technologies Company;
- ZTE Corporation; and
- Any subsidiary or affiliate of the named entities.

Video surveillance and telecommunications equipment are prohibited from containing equipment produced by:

- Hytera Communications Corporation;
- Hangzhou Hikvision Digital Technology Company;
- Dahua Technology Company; and
- Any subsidiary or affiliate of the named entities.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

STANDARD SPECIAL PROVISION

BUY AMERICA/BUILD AMERICA BUY AMERICA

DESCRIPTION

Replace Section 106.08, "Buy America", with the following:

BUY AMERICA FOR INFRASTRUCTURE PROJECTS

A. General.

Provide materials from domestic sources when products are permanently incorporated into the work.

The requirements of this SP are not applicable to equipment, tools, and temporary items.

This definitions and requirements in this SP have been assembled based on the following Federal requirements:

- Iron and steel requirements are based on 23 CFR part 635, "Buy America"; and
- Construction materials and manufactured products are based on 2 CFR part 184, "Buy America Preferences for Infrastructure Projects" (BABA).

B. Certifications.

All certifications are submitted by the prime Contractor. When submitting certifications for materials that are subject to the requirements of this provision, the prime Contractor shall include a signed letter stating that the submitted documentation is the documentation that was received by the prime Contractor for material incorporated into the work. The prime Contractor's signature on the Department's Certificate of Compliance form meets this requirement.

C. Determination of Material Category.

1. General.

Only single category of requirements will apply to an item.

Some contract items are composed of multiple components that may fall into different categories. Individual components will be categorized based on their nature when they arrive at the work site. In cases where the classification of an item is in question or dispute, the Engineer's determination of the classification will be binding.

EXCEPTION:

Iron and steel components included in items classified as manufactured products must meet the requirements of Section D, "Steel and Iron Certification" of this SP.

2. Iron and Steel.

All iron and steel permanently incorporated into the work must meet the requirements of Section D, "Steel and Iron Certification" of this Special Provision. Buy America requirements do not apply to iron and steel items used by the Contractor to facilitate

construction that are left in place upon completion of the work and are not required to be permanently installed as part of the contract requirements.

3. Manufactured Products.

An FHWA general applicability waiver exists for Manufactured Products and this category is therefore currently not subject to BABA requirements; however, they are included in this Special Provision to maintain the category definition and consistency with Federal language.

Manufactured product is defined as articles, materials, or supplies that have been:

- Processed into specific form or shape; or
- Combined with other articles, materials, or supplies to create a product with different properties than the individual articles, materials, or supplies.

4. Construction Materials.

The category of construction materials excludes cement and cementitious materials, aggregates such as stone, sand, or gravel, or aggregate binding agents or additives.

Construction materials are materials that consist primarily of:

- Non-ferrous metals;
- Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- Glass (including optic glass);
- Fiber optic cables (including drop cable);
- Optical fiber;
- Lumber;
- Engineered wood; or
- Drywall.

Minor additions of articles, materials, supplies, or binding agents to a construction material do not change the categorization.

5. Exempt Materials [Section 70917(c) Materials].

The following materials are exempt from the requirements of this provision per Section 70917(c) of the Build America, Buy America Act:

- Cement and cementitious materials;
- Aggregates such as stone, sand, or gravel; or
- Aggregate binding agents or additives.

D. Steel and Iron Certification.

1. General.

Ensure all manufacturing processes, including applications of coatings, occur in the United States. A coating includes all processes required to apply the coating to a product to protect or enhance the value of the product.

2. Bulk Manufactured Steel and Iron Materials.

In addition to the requirements of Section 106.01 C, "Certificate of Compliance", submit a contractor's Certificate of Compliance stating that the iron and steel products listed in Table 1 are of domestic origin.

Table 1

Mailbox supports	Cable Fence Materials
Chain Link Fence Materials	Barbed Wire Fence Materials
Guardrail Components	Woven Wire Fence Materials
Culvert Markers	Delineators
Perforated Tube Sign Supports and Related Materials	

3. Other Steel and Iron Products.

For steel and iron products that are not listed in Table 1, submit a manufacturer's Certificate of Compliance as specified in Section 106.01 C, "Certificate of Compliance" and the following information:

- a. A signed mill test report.
- b. A signed certification from each fabricator and manufacturer that has handled the steel and iron products affirming that all processes performed on the steel and iron products were conducted in the United States.
- c. Material descriptions, quantities, and a means of material identification (lot number, bin number, heat number, or factory identification) for each process performed on the steel and iron products.

Each certification shall contain the material identification from all previous fabricators and manufacturers in the process.

4. Foreign or Uncertified Products.

These requirements allow the use of steel and iron products produced and manufactured outside the United States, or products that cannot be certified as originating in the United States, of a total value less than 0.1 percent of the original contract amount, or \$2,500, whichever is greater.

The total value is that shown to be the cost of the steel and iron products as delivered to the project site.

Document the cost of:

- Foreign steel and iron products, plus
- Steel and iron products which cannot be certified as originating in the United States.

Submit the documentation of foreign and uncertified products with the required certifications.

E. Manufactured Products

An FHWA general applicability waiver exists for Manufactured Products and this category is therefore currently not subject to BABA requirements; however, they are included in this Special Provision to maintain the category definition and consistency with Federal language.

A manufactured product is acceptable under this provision if:

- The product was manufactured in the United States; and
- The cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product.

Compute the cost of components of manufactured products as follows:

- For components purchased by the manufacturer, the acquisition cost, including transportation costs to the place of incorporation into the manufactured product and any applicable duty; or
- For components manufactured by the manufacturer, all costs associated with the manufacture of the component, including transportation costs described in the prior bullet, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the manufactured product.

F. Construction Materials.

1. General.

Each material classified as a construction material has a specific standard for the material to be considered in compliance with this provision.

Except as specifically provided, only a single standard under this section should be applied to a single construction material.

2. Non-Ferrous Metals.

For non-ferrous metals, all manufacturing processes from initial smelting or melting through final shaping, coating, and assembly, occurred in the United States.

3. Plastic and Polymer-Based Products.

For plastic and polymer-based products; including polyvinylchloride, composite building materials, and polymers used in fiber optic cables; all manufacturing processes, from initial combination of constituent plastic or polymer-based inputs, or, where applicable, constituent composite materials, until the item is in its final form, occurred in the United States.

4. Glass.

For glass; including optic glass; all manufacturing processes, from initial batching and melting of raw materials through annealing, cooling, and cutting, occurred in the United States.

5. Fiber Optic Cable.

For fiber optic cable; including drop cable; all manufacturing processes, from the initial ribboning if applicable, through buffering, fiber stranding and jacketing, occurred in the United States.

All manufacturing processes also include the standards for glass and optical fiber, but not for non-ferrous metals, plastic and polymer-based products, or any others.

6. Optical Fiber.

For optical fiber, all manufacturing processes, from the initial preform fabrication stage through the completion of the draw, occurred in the United States.

7. Lumber.

For lumber, all manufacturing processes, from initial debarking through treatment and planing, occurred in the United States.

8. Drywall.

For drywall, all manufacturing processes, from initial blending of mined or synthetic gypsum plaster and additives through cutting and drying of sandwiched panels, occurred in the United States.

9. Engineered Wood.

For engineered wood, all manufacturing processes from the initial combination of constituent materials until the wood product is in its final form, occurred in the United States.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION
PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE

DESCRIPTION

This SP replaces Section 107.14 Public Liability and Property Damage Insurance.

107.14 Public Liability and Property Damage Insurance.

A. General Requirements.

Submit to the Department the certificates of insurance effecting the requirements in this section for the Commercial General Liability and Commercial Automobile Liability Insurances with the contract and the contract bond in accordance with Section 103.06, "Execution and Approval of Contract."

Provide insurance policies executed by a corporation qualified and authorized to write the policies in the State of North Dakota. The State reserves the right to obtain complete, certified copies of all required insurance documents, policies, or endorsements at any time.

Secure and maintain insurance in full force and effect before starting the work and until completion of all work required and accepted by the Department or owner. The policies shall provide 30 calendar days notice to the Department or the owner of any intent to cancel or materially alter such insurance.

Failure to maintain the insurance as required constitutes a material breach of contract. The Department or the owner may, after giving 5 business days notice to the Contractor to correct the breach, immediately terminate the Contractor in accordance with Section 108.08, "Termination of the Contract for Default," and procure or renew such insurance and pay all premiums. The Department or the owner may demand repayment of premium costs by the Contractor, or may offset the premium costs against funds due the Contractor from the Department or the owner.

B. Insurance Requirements.

Secure and maintain in full force and effect during the term of the contract the following insurance coverages:

1. Commercial General Liability for limits not less than \$2,000,000 combined single limit per occurrence and aggregate for bodily injury, property damage, personal injury and completed operations/product liability. Provide products and completed operations coverage for a period of one year following final acceptance of the work. Provide coverage with the aggregate limit applied separately to occurrences at the location or project described in this contract. Provide a policy including a "stop-gap" Employers Liability endorsement to cover the employer's liability for injury to employees falling outside the State Worker's Compensation Law.
2. Commercial Automobile Liability for limits not less than \$2,000,000 combined single limit per accident for bodily injury and property damage.

3. Workers Compensation coverage as required by the State of North Dakota.

The General Liability and Automobile policies shall provide an additional insured endorsement in favor of the State of North Dakota and the Owner and shall contain a "Waiver of Subrogation" to waive any right of recovery that the Insurance company may have against the State and the Owner. The coverage required under this agreement shall be primary for the State and the Owner, and shall not be affected by any other insurance or coverage obtained by the State or the Owner on their own behalf.

Any right of the State to receive indemnification and insurance shall not give rise to a duty on the part of the State to exercise its rights or status for the benefit of the owner, or any other person or entity.

C. Subcontractor.

If subletting a portion of the contract, the Contractor shall obtain insurance protection in accordance with Section 107.14.B, "Insurance Requirements," to provide liability coverage to protect the Contractor, State, and owner for work undertaken by the subcontractor. Ensure public liability and property damage insurance coverage in accordance with Section 107.14.B, "Insurance Requirements," for all parties performing work under the contract.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

FLEXIBLE PAVEMENT SURFACE TOLERANCE

PROJECT 2-052(054)244 – PCN 24041 2-281(050)006 – PCN 24043

DESCRIPTION

This provision details the surface tolerance requirements, corrective actions, performance incentives, and contract price adjustments for flexible pavement.

ATTACHMENTS

Appendix A – Existing IRI Data

CONSTRUCTION REQUIREMENTS

A. General.

Any lot with any amount of grinding done before the Engineer collects the initial profile is ineligible for incentive.

The Engineer will use the straight edge method described in Section 430.04 K, "Tolerances" with the Rolling Straightedge Module of Proval to determine the surface tolerance, including leave outs.

The Engineer will profile the finished surface to determine the pavement ride quality. All finished bituminous surfaces will be profiled with the following exceptions:

- 1) Bridge decks and/or approach slabs and 150 feet on either side;
- 2) Side roads and approaches;
- 3) Shoulders, ramps, and gore areas;
- 4) At grade railroad crossings and 150 feet on either side;
- 5) The beginning and end of the project and 50 feet on either side of these boundaries;
- 6) 50 feet from areas not receiving surfacing;
- 7) Areas with speed limit under 50 MPH;
- 8) Where safety and the roadway geometrics do not allow the proper operating speed for the profiler to collect data. The Engineer will determine the location of these areas. These locations may include, but are not limited to the following:
 - Signal controlled intersections;
 - Stop controlled intersections;
 - T intersections; and
 - Other situations that would be detrimental to safety of the traveling public or the profiler.

On surfaces exempt from the profile testing, the Engineer will determine the pavement smoothness according to section 430.04 K "Tolerances".

B. Profiler Limitations.

The Engineer will not test the roadway in the following conditions:

- Between November 30 to May 15;
- When the air or surface temperature is below 35 °F; or
- When the roadways surface is wet or under inclement weather conditions.

C. Profiler Inputs.

1. General.

The Engineer will:

- Measure the smoothness of the roadway using the International Roughness Index (IRI) to the nearest 0.1 inch;
- Use ProVal, <http://www.roadprofile.com>, to calculate the IRI for the Pavement Profile (PPF);
- Apply a 250 mm filter to generate the IRI in ProVal;
- Average the IRI of the two wheel paths to calculate the Mean Ride Index (MRI); and
- Use the MRI option in ProVal for evaluation

2. Fixed Interval (Lot Smoothness) Ride Quality Module.

The Engineer will identify lot smoothness using the following inputs:

- Set the Ride Quality Index to “MRI”
- Segment Length – 528 feet
- Threshold – 75.0 in/mile

3. Rolling Straightedge Module.

Identify areas of surface deviation using the Rolling Straightedge Module within the current version of ProVal. Use the following settings in the Rolling Straightedge Module:

- Straightedge Length – 16 feet
- Deviation Threshold – 3/16 inch

D. Lot Definition.

A lot is defined as a 528 foot road segment, one lane wide. The Engineer will include a partial lot less than or equal to 370.0 feet in the previous lot. The Engineer will treat a lot greater than 370.0 feet as an independent lot.

E. Profiling.

1. General.

a. Naming Convention and Collection Points.

Discuss with the Engineer the naming convention of the lanes before profiling as well as the beginning and end points for areas of collection.

b. Timing

Notify the Engineer that the road is ready for profiling. The Engineer will coordinate a time within 5 working days of receiving that notification.

c. Physical Surface Conditions.

Remove all debris that will inhibit collection of the road profile before the profiler arrives on site for collection. Keep the lanes clear of construction activity during the time of profiling.

The Engineer will collect the profile when the pavement is dry and at a time agreed upon between the Engineer and the Contractor.

d. Profiler Data Collection.

The Engineer will use an inertial profiler to collect the profile in each wheel path of each lane.

The Engineer will trace the profile at approximately 31 and 97 inches, measured from the left edge of the lane, as determined by the direction of traffic.

Provide traffic control for 500 feet beyond the ends of the collection area to facilitate the collection of profile data and for run in and run out.

2. Initial Profile.

The Engineer will complete an initial profile to determine the MRI.

The Engineer will collect a complete initial profile after the mainline paving is complete.

3. Additional Profiles.

The Engineer will collect any additional profiles after corrective action has taken place.

The Engineer will apply a liquidated damage of \$1,500 per trip for each profile collected after the second profile.

4. Final Acceptance Profile.

The Engineer will collect the final acceptance profile after the necessary corrective actions on the roadway are completed.

5. Reports.

The Engineer will provide the following information to the Contractor within 5 days of completing the profile:

- PPF files;
- The Viewer;
- The Ride Quality Report; and
- The Rolling Straightedge Report.

F. Lots With MRI Less Than 75.1

For lots with an MRI less than 75.1, the Engineer will process performance incentives and contract price adjustments for each lot as specified in Section B "Ride Quality- Lot Smoothness" of the Basis of Payment Section.

G. Lots with MRI Greater or Equal to 75.1

Lots with an MRI greater than or equal to 75.1 will require corrective action, as specified in Section H, "Corrective Action" of the Construction Requirements.

Areas that would result in a contract price adjustment may be ground to a lower MRI. If grinding occurs and results in an MRI of 48.0 or less, the Engineer will not apply a performance incentive to that lot. Only lots with an initial MRI of 48.0 or less will receive a performance incentive based on the initial readings, before grinding.

H. Corrective Action.

1. General.

Any grinding performed is considered corrective action.

Complete corrective action within 21 calendar days of final profile data collection.

2. Corrective Action Plan.

Confirm date and time, locations, equipment, and timeframes with Engineer.

Contractor may develop a detailed corrective action plan using the ProVal data. Generate grinding simulations in ProVal with multiple grinding depths, varying equipment, and multiple pass patterns. Include the grinding simulations with the corrective action plan.

Submit the plan three working days in advance of grinding.

The Engineer will review the corrective action plan.

3. Corrective Grinding.

a. General.

Grind lots to a maximum MRI of 75.0 in/mile.

Grind high shoulders to provide drainage and safety.

Grind the full width of the lane and a feather pass onto the shoulder to daylight the grinding.

Grind a minimum length of 30 feet. Join grind sections if the distance between grind sections is less than 60 feet.

b. Grinding Equipment.

Use diamond grinding head for lot corrective action that does not cause strain or damage to the underlying surface of the pavement. Do not cause excessive ravels, aggregate fractures, or spalling.

c. Grinding.

Perform grinding in the longitudinal direction so grinding begins and ends at lines normal to the pavement centerline. Do not overlap more than 2 inches between passes and ensure the depth variance between adjacent passes is less than 1/8 inch. Feather the grinding at the beginning and end of each pass.

Ensure the surface of the ground pavement has a texture consisting of grooves between 0.090 and 0.130 inches wide. Keep the peaks of the ridges approximately 1/32 inch higher than the bottom of the grooves.

d. Slurry Removal.

When grinding in areas with curb and gutter, and areas adjacent to waterways continuously collect all slurry or residue resulting from the grinding operation. Dispose of the slurry or residue as specified in Section 107.17, "Removed Material".

4. Profiling.

The Engineer will perform additional profiling according to Section E.3 "Additional Profiles" of the Construction Requirements. The Engineer will determine if additional Corrective Action is required based on the new profile. If additional Corrective Action is required, the Engineer will provide additional profile PPF and a new Corrective Action plan is required.

BASIS OF PAYMENT

A. Liquidated Damages

If the project would be considered substantially complete, as specified in Section 108.07 B, "Failure to Complete within the Contract Time" and corrective action is required, the Engineer may suspend time charges and the assessment of liquidated damages for up to 21 calendar days after the contract time has expired. If the corrective action is not complete within 21 calendar days after the contract time has expired, the Engineer will restart time charges and will assess liquidated damages.

B. Ride Quality.

The Engineer will pay a performance incentive for ride quality based on Table 1.

**Table 1
Ride Quality Performance
Incentives**

MRI Range	Performance Incentive per Lot
≤ 34.0	\$300
34.1 to 39.0	\$225
39.1 to 44.0	\$150
44.1 to 48.0	\$75
48.1 to 56.0	\$0

The Engineer will process contract price adjustments for ride quality based on Table 2.

Table 2
Ride Quality Contract Price
Adjustments

MRI Range	Contract Price Adjustment per Lot
48.1 to 56.0	\$0
56.1 to 62.0	(\$100)
62.1 to 69.0	(\$200)
69.1 to 75.0	(\$400)
75.1 ≥	Corrective Action

C. MISCELLANEOUS

Include costs necessary to prepare the roadway for testing in the contract unit price for asphalt pavement items.

Traffic control items, including flagging and pilot cars will be paid for according to Section 109.03, "Compensation for Contract Revisions".

Appendix A Existing IRI Data

IRI DATA FOR PCN 24041 PROJECT NO. NH-2-052(054)244							
HWY 52, Eastbound Survey Data Collection Date = 9/10/2024							
HWY	Start-Mi	End-Mi	IRI_Left Wheel Path	Standard Deviation	IRI_Right Wheel Path	Standard Deviation	IRI_AVERAGE
52	244.8	244.9	78.4	60.1	108.2	88.8	93.3
52	244.9	245	59.3	70.9	88.8	111.3	74.1
52	245	245.1	56.1	65	59.9	63.8	58
52	245.1	245.2	76.6	92.8	110.5	137.4	93.6
52	245.2	245.3	66.4	71.4	92	82.4	79.2
52	245.3	245.4	60.5	67.1	89	77.7	74.7
52	245.4	245.5	56.1	48.7	57.3	35.5	56.7
52	245.5	245.6	61.6	52	66.6	56.1	64.1
52	245.6	245.7	69.9	87.4	116.7	129.9	93.3
52	245.7	245.8	64.5	74.6	85	82.7	74.7
52	245.8	245.9	62.8	56.6	81.6	85.8	72.2
52	245.9	246	54.8	52.1	56.2	46.4	55.5
52	246	246.1	60.4	61.8	92.7	111.6	76.6
52	246.1	246.2	56.1	82.2	68.7	90.7	62.4
52	246.2	246.3	70.1	78.5	85.8	89.2	78
52	246.3	246.4	65.1	106.2	82.9	95.3	74
52	246.4	246.5	73.4	94.3	95.8	101.3	84.6
52	246.5	246.6	74.7	111	76.3	96.3	75.5
52	246.6	246.7	66.3	88.9	77.8	95.5	72.1
52	246.7	246.8	76.2	104.6	96.4	119.1	86.3
52	246.8	246.9	64.7	94.4	72.2	105.4	68.5
52	246.9	247	58.6	78.4	62	85.2	60.3
52	247	247.1	100.5	113.4	100.7	104.3	100.6
52	247.1	247.2	68.2	73.9	101	107	84.6
52	247.2	247.3	57.7	60	75.1	79.7	66.4
52	247.3	247.4	53.7	44.8	55.6	49.8	54.6
52	247.4	247.5	58.5	71.3	67.4	84.8	62.9
52	247.5	247.6	52.9	55.7	64.1	61.5	58.5
52	247.6	247.7	55.9	55.5	71.1	69.2	63.5
52	247.7	247.8	78.3	102.6	89.5	122.7	83.9
52	247.8	247.9	78.6	113	93	116.2	85.8
52	247.9	248	64.4	80.3	70.6	91.8	67.5
52	248	248.1	67.8	83.6	91.5	109	79.6

IRI DATA FOR PCN 24041 PROJECT NO. NH-2-052(054)244							
HWY 52, Eastbound Survey Data Collection Date = 9/10/2024							
HWY	Start-Mi	End-Mi	IRI_Left Wheel Path	Standard Deviation	IRI_Right Wheel Path	Standard Deviation	IRI_AVERAGE
52	248.1	248.2	71.1	90.7	92.7	117.7	81.9
52	248.2	248.3	72.3	68.1	104.2	97.5	88.2
52	248.3	248.4	64.3	65.3	64.1	64.1	64.2
52	248.4	248.5	59.1	65.3	95.4	77.6	77.2
52	248.5	248.6	56.9	56.5	75.7	80.3	66.3
52	248.6	248.7	72.2	84.8	84	102.1	78.1
52	248.7	248.8	64.9	81.8	70.5	92.7	67.7
52	248.8	248.9	75.7	100.2	89.6	128.6	82.7
52	248.9	249	78.1	91.4	99.7	163.6	88.9
52	249	249.1	57.1	43.2	61.7	66.9	59.4
52	249.1	249.2	81.3	64.7	69.4	68.3	75.4
52	249.2	249.3	58.6	45.7	82.7	85.7	70.7
52	249.3	249.4	59.5	59.2	77.2	92.9	68.3
52	249.4	249.5	63.9	52.5	66.4	78.7	65.1
52	249.5	249.6	71.2	64.6	86.3	98.2	78.7
52	249.6	249.7	91.7	78.5	111.3	64.6	101.5
52	249.7	249.8	68.3	32.5	97	53	82.7
52	249.8	249.9	73.4	36.6	104	62.8	88.7
52	249.9	250	83.5	77.5	87.9	114.7	85.7
52	250	250.1	66.3	76.6	58.3	50	62.3
52	250.1	250.2	52	64.6	53.5	68.6	52.7
52	250.2	250.3	60.7	76.5	81.9	99.8	71.3
52	250.3	250.4	59.9	73.2	72.4	90.4	66.2
52	250.4	250.5	46	58.1	54.4	66.4	50.2
52	250.5	250.6	53.4	75.2	72.3	90.9	62.8
52	250.6	250.7	50	60.5	58.6	70.1	54.3
52	250.7	250.8	49.6	48.7	55.2	54	52.4
52	250.8	250.9	36.8	41.5	48.6	55.2	42.7
52	250.9	251	41.7	43.4	52.5	60.9	47.1
52	251	251.1	52.9	80.1	87.2	171.8	70
52	251.1	251.2	49.7	63.9	65.5	83.1	57.6
52	251.2	251.3	50.4	66.4	59.6	79.1	55
52	251.3	251.4	41.7	56	54.1	69.3	47.9
52	251.4	251.5	56.8	54.2	70	67	63.4
52	251.5	251.6	49	59.8	62.7	80	55.8
52	251.6	251.7	54	60.2	67.5	83.2	60.7

IRI DATA FOR PCN 24041 PROJECT NO. NH-2-052(054)244							
HWY 52, Eastbound Survey Data Collection Date = 9/10/2024							
HWY	Start-Mi	End-Mi	IRI_Left Wheel Path	Standard Deviation	IRI_Right Wheel Path	Standard Deviation	IRI_AVERAGE
52	251.7	251.8	51.6	61.3	63.6	70	57.6
52	251.8	251.9	52.1	68.8	67.8	87	60
52	251.9	252	53.7	59.5	61.9	54.3	57.8
52	252	252.1	65.1	89.2	77.9	75.7	71.5
52	252.1	252.2	52.4	63.6	56.6	73	54.5
52	252.2	252.3	57	79.7	67.9	81.8	62.5
52	252.3	252.4	48.3	60.9	58.2	65.3	53.3
52	252.4	252.5	71.5	66.4	83.5	84.5	77.5
52	252.5	252.6	198.5	196.5	125.5	163.3	162

IRI DATA FOR PCN 24043 PROJECT NO. NH-2-281(050)006							
HWY 281, Northbound Survey Data Collection Date = 8/28/2024							
HWY	Start-Mi	End-Mi	IRI_Left Wheel Path	Standard Deviation	IRI_Right Wheel Path	Standard Deviation	IRI_AVERAGE
281	6.1	6.2	62.7	49.6	75.2	58.1	69
281	6.2	6.3	56.3	52.7	63.1	65	59.7
281	6.3	6.4	47.5	50.3	46.6	48.2	47.1
281	6.4	6.5	48.1	51.3	49.6	56.2	48.8
281	6.5	6.6	61.2	62.5	60.6	56.8	60.9
281	6.6	6.7	56.9	47.2	63.2	54.9	60
281	6.7	6.8	56.6	61.5	47.9	51.5	52.3
281	6.8	6.9	65.7	78.3	55.7	70.5	60.7
281	6.9	7	50.6	58.9	43.4	51.3	47
281	7	7.1	60.7	64.5	57.9	60.5	59.3
281	7.1	7.2	57.5	56.7	50.3	52.8	53.9
281	7.2	7.3	66.2	67.8	57.7	58.2	61.9
281	7.3	7.4	56.4	47.4	56.2	49.8	56.3
281	7.4	7.5	47.7	50.2	43.7	41.6	45.7
281	7.5	7.6	64.8	75.2	63.9	77.1	64.4
281	7.6	7.7	69.5	79.6	61.4	81.2	65.5
281	7.7	7.8	76.4	77.5	75.5	78.5	76
281	7.8	7.9	65.4	70.5	62.9	71.1	64.1
281	7.9	8	73.6	83.2	68.6	75.8	71.1
281	8	8.1	85.2	102.5	75	94.4	80.1
281	8.1	8.2	87.5	104.5	82.2	105.4	84.8
281	8.2	8.3	87.3	110.2	84.6	110.5	86
281	8.3	8.4	79.4	88.6	83	93.8	81.2
281	8.4	8.5	87.6	85.8	68.1	70.5	77.8
281	8.5	8.6	77.2	86.6	63	74.5	70.1
281	8.6	8.7	67.6	73.9	52.9	55	60.2
281	8.7	8.8	62.7	60.5	67.7	60.9	65.2
281	8.8	8.9	49.8	65.1	50.8	62.5	50.3
281	8.9	9	69.7	87.4	71	95.8	70.4
281	9	9.1	59	76.6	65.6	84.6	62.3
281	9.1	9.2	72.5	89.9	67	85.4	69.7
281	9.2	9.3	71.7	96.3	78	103.3	74.8
281	9.3	9.4	79.8	112	73.7	102.7	76.7
281	9.4	9.5	63.9	88.7	59.2	94.9	61.6
281	9.5	9.6	74.3	92.1	69.3	83.3	71.8
281	9.6	9.7	60.7	82.3	58	72.6	59.4

IRI DATA FOR PCN 24043 PROJECT NO. NH-2-281(050)006							
HWY 281, Northbound Survey Data Collection Date = 8/28/2024							
HWY	Start-Mi	End-Mi	IRI_Left Wheel Path	Standard Deviation	IRI_Right Wheel Path	Standard Deviation	IRI_AVERAGE
281	9.7	9.8	59.7	72.9	59	78.9	59.4
281	9.8	9.9	64.9	98.2	59.9	84.8	62.4
281	9.9	10	62.6	90.3	54	77.7	58.3
281	10	10.1	75.9	88.1	80.3	88.6	78.1
281	10.1	10.2	72.1	83.2	57.6	61.3	64.8
281	10.2	10.3	75.9	109.9	59.1	77.4	67.5
281	10.3	10.4	87.7	104.8	67.5	73.7	77.6
281	10.4	10.5	82.7	115.4	65.2	72.2	73.9
281	10.5	10.6	74.1	86.6	62	64.7	68
281	10.6	10.7	69.1	77.3	53.2	60	61.1
281	10.7	10.8	67.6	91.2	60	74.9	63.8
281	10.8	10.9	77.4	83.1	68.6	75.4	73
281	10.9	11	75.4	85.9	70.9	80.6	73.1
281	11	11.1	76.7	93.2	70.4	81.3	73.6
281	11.1	11.2	89.3	111.3	79.8	106.1	84.5
281	11.2	11.3	63.2	73.4	63.5	75.7	63.3
281	11.3	11.4	64.9	66	76.2	84.6	70.5
281	11.4	11.5	71.5	76	78.8	88.7	75.1
281	11.5	11.6	79	98.3	85.7	107.7	82.4
281	11.6	11.7	72.1	84.1	80.7	103.1	76.4
281	11.7	11.8	75.3	95	88.2	110.4	81.8
281	11.8	11.9	71.7	97	71.5	91.3	71.6
281	11.9	12	69.7	85.4	62.4	70.5	66.1
281	12	12.1	60.8	89.5	81.1	102.4	71
281	12.1	12.2	69.8	88.6	78.8	93.3	74.3
281	12.2	12.3	90.4	121.8	83.3	105.2	86.9
281	12.3	12.4	64.5	92.4	61.4	84.6	62.9
281	12.4	12.5	69.9	90.9	72.6	90.2	71.2
281	12.5	12.6	82.8	103.4	69.1	78.4	75.9
281	12.6	12.7	74.6	104.6	60.5	75.3	67.5
281	12.7	12.8	68	97.9	55.9	68.5	62
281	12.8	12.9	77.6	104	78.6	97.6	78.1
281	12.9	13	68.6	95.3	57.6	72	63.1
281	13	13.1	103.7	128.9	69	76.5	86.3
281	13.1	13.2	79	100.5	66.7	74.6	72.9
281	13.2	13.3	110	118	82.3	85.5	96.2

IRI DATA FOR PCN 24043 PROJECT NO. NH-2-281(050)006							
HWY 281, Northbound Survey Data Collection Date = 8/28/2024							
HWY	Start-Mi	End-Mi	IRI_Left Wheel Path	Standard Deviation	IRI_Right Wheel Path	Standard Deviation	IRI_AVERAGE
281	13.3	13.4	85.3	105.2	83	96.8	84.1
281	13.4	13.5	84.4	98.8	82.9	91.4	83.6
281	13.5	13.6	111.9	130	120.6	149.9	116.2
281	13.6	13.7	98.4	112	98.2	100.4	98.3
281	13.7	13.8	91.8	115.1	93.6	112.1	92.7
281	13.8	13.9	86.9	104	87	104.1	86.9
281	13.9	14	94.8	127.8	94.5	131.2	94.7
281	14	14.1	96.5	134	105.5	140	101
281	14.1	14.2	94	141.3	91.1	136.5	92.5
281	14.2	14.3	108.7	146.8	120.5	159.8	114.6
281	14.3	14.4	106.9	131	107.9	130.7	107.4
281	14.4	14.5	75.8	102.2	88.9	124.4	82.4
281	14.5	14.6	87.3	111.2	88.2	112.4	87.7
281	14.6	14.7	68.5	88.8	84.5	107.6	76.5
281	14.7	14.8	96.4	120.4	92.7	109.6	94.6
281	14.8	14.9	91.7	145.1	83.8	114.3	87.8
281	14.9	15	102.1	111.9	89.4	106.7	95.7
281	15	15.1	100.6	122.4	93.5	107.4	97
281	15.1	15.2	111.9	124.6	96.9	97.9	104.4
281	15.2	15.3	100	132.7	71.8	96.2	85.9
281	15.3	15.4	120.9	151.6	100.4	120	110.6
281	15.4	15.5	99.5	138.3	74	95.6	86.8
281	15.5	15.6	112.7	144.3	102	120.5	107.3
281	15.6	15.7	101.8	104.3	82.8	77.6	92.3
281	15.7	15.8	116	141.4	105.7	138.5	110.8
281	15.8	15.9	150.9	175.1	142.9	178.1	146.9
281	15.9	16	174.2	219	112.1	121.5	143.1
281	16	16.1	99.9	134.7	83	106.7	91.4
281	16.1	16.2	119.7	142.1	102.1	125.1	110.9
281	16.2	16.3	81.9	99.9	71.7	89.6	76.8
281	16.3	16.4	69.9	73.4	66	73.4	68
281	16.4	16.5	76.8	83.5	75.1	81.1	75.9
281	16.5	16.6	93.5	101.5	81.8	91.2	87.7
281	16.6	16.7	91.5	120.6	75.1	88.3	83.3
281	16.7	16.8	112.2	138.5	88.8	87.2	100.5
281	16.8	16.9	89.6	92.8	91	83.1	90.3

IRI DATA FOR PCN 24043 PROJECT NO. NH-2-281(050)006							
HWY 281, Northbound Survey Data Collection Date = 8/28/2024							
HWY	Start-Mi	End-Mi	IRI_Left Wheel Path	Standard Deviation	IRI_Right Wheel Path	Standard Deviation	IRI_AVERAGE
281	16.9	17	82.3	99.8	83.7	112.3	83
281	17	17.1	72.8	77.6	71.2	64.9	72
281	17.1	17.2	97.2	112.5	98.1	102.3	97.6
281	17.2	17.3	79.7	115.1	68.9	88.6	74.3
281	17.3	17.4	72	105	71.4	91.4	71.7
281	17.4	17.5	74.8	85.1	62.8	66.9	68.8
281	17.5	17.6	80.5	94.7	78.1	107.5	79.3
281	17.6	17.7	60.7	78.4	50.1	64.2	55.4
281	17.7	17.8	76.3	89.5	67.1	80.4	71.7
281	17.8	17.9	71.1	98.9	67.8	83	69.4
281	17.9	18	78.9	93.8	83	81.4	81
281	18	18.1	77.5	77.2	69.5	61.8	73.5
281	18.1	18.2	73.3	78.5	77.6	69.9	75.5
281	18.2	18.3	72.3	79.7	72.2	71.6	72.3
281	18.3	18.4	88.2	109.8	83.6	76	85.9
281	18.4	18.5	98.8	109.9	94.8	93.6	96.8
281	18.5	18.6	89.9	112.2	84.7	76.5	87.3
281	18.6	18.7	76.7	88.4	64.1	51.9	70.4
281	18.7	18.8	93.5	115	76.5	75.2	85
281	18.8	18.9	64.2	86.4	56.9	56.8	60.6
281	18.9	19	85.6	104.7	82.4	78.7	84
281	19	19.1	80.4	97.9	70.8	67.9	75.6
281	19.1	19.2	83.9	108.7	81.7	86.7	82.8
281	19.2	19.3	83	94.4	71.9	82.2	77.4
281	19.3	19.4	79.3	92.2	63.9	62.2	71.6
281	19.4	19.5	77.8	77.3	66.5	59.6	72.2
281	19.5	19.6	71.9	79.5	63.6	63.7	67.8
281	19.6	19.7	82.2	90	69.1	77.1	75.7
281	19.7	19.8	75.8	66.7	67.5	64.8	71.7
281	19.8	19.9	80.5	85.5	73.4	63.6	77
281	19.9	20	96	102.9	79.2	67.9	87.6
281	20	20.1	82.9	103.3	95.8	84	89.3
281	20.1	20.2	86.5	92.3	82	74.7	84.3
281	20.2	20.3	77.5	79.9	67.5	63.7	72.5
281	20.3	20.4	75.6	79.4	74.7	80.4	75.1
281	20.4	20.5	80.1	88.5	81.7	79.3	80.9

IRI DATA FOR PCN 24043 PROJECT NO. NH-2-281(050)006							
HWY 281, Northbound Survey Data Collection Date = 8/28/2024							
HWY	Start-Mi	End-Mi	IRI_Left Wheel Path	Standard Deviation	IRI_Right Wheel Path	Standard Deviation	IRI_AVERAGE
281	20.5	20.6	70.9	79.8	66.2	76.2	68.5
281	20.6	20.7	65.6	72.5	72.1	83.6	68.9
281	20.7	20.8	73.4	69.1	73.4	72.1	73.4
281	20.8	20.9	83.6	89.2	88.8	103.8	86.2
281	20.9	21	62.7	58.6	64.4	68.5	63.5
281	21	21.1	62.7	57.3	67.7	66.6	65.2
281	21.1	21.2	70.4	67.7	67.9	81.2	69.1
281	21.2	21.3	94.8	83.8	94.8	94.3	94.8
281	21.3	21.4	76	72.6	65.1	65.3	70.6
281	21.4	21.5	67.3	79.5	60.3	70.8	63.8
281	21.5	21.6	68.1	74.9	75.3	81.3	71.7
281	21.6	21.7	64.8	77	70.3	72.1	67.6
281	21.7	21.8	73.5	63.2	68	53.1	70.8
281	21.8	21.9	80.3	80.5	60.6	52.1	70.5
281	21.9	22	81.4	77.2	77.3	73	79.3
281	22	22.1	80.8	73.7	71.2	68.2	76
281	22.1	22.2	88.9	86.1	72.4	75.5	80.6
281	22.2	22.3	74.2	67	74.4	69.5	74.3
281	22.3	22.4	76.8	69.2	59.9	60.9	68.3
281	22.4	22.5	65.9	57.9	54	47.2	59.9
281	22.5	22.6	56.4	51.9	55.8	54.4	56.1
281	22.6	22.7	55.7	65.3	52.6	56.5	54.1
281	22.7	22.8	57.3	66.5	59.1	75.1	58.2
281	22.8	22.9	63.1	63.5	64.8	61.3	63.9
281	22.9	23	71.2	62.6	65.6	59.1	68.4
281	23	23.1	66.1	62	65.3	69.7	65.7
281	23.1	23.2	54	47.4	69	65.3	61.5
281	23.2	23.3	55	50.8	62.2	62.8	58.6
281	23.3	23.4	58.4	46.6	57.9	51.5	58.2
281	23.4	23.5	73.2	66.5	75.9	73.8	74.5
281	23.5	23.6	64.3	56	65.6	62.3	65
281	23.6	23.7	61.9	63.4	64.9	63.3	63.4
281	23.7	23.8	53.3	50.3	51	53.6	52.2
281	23.8	23.9	54	56	57.3	57.3	55.6
281	23.9	24	70.8	78.6	64.8	76	67.8
281	24	24.1	61.6	69.5	60.5	64.2	61

IRI DATA FOR PCN 24043 PROJECT NO. NH-2-281(050)006							
HWY 281, Northbound Survey Data Collection Date = 8/28/2024							
HWY	Start-Mi	End-Mi	IRI_Left Wheel Path	Standard Deviation	IRI_Right Wheel Path	Standard Deviation	IRI_AVERAGE
281	24.1	24.2	65.4	66.7	70.8	76.9	68.1
281	24.2	24.3	68.9	84.8	71.5	92.7	70.2
281	24.3	24.4	74.2	76.5	69.8	73.5	72
281	24.4	24.5	71.7	76.4	84.9	94.8	78.3
281	24.5	24.6	75.6	91.8	71.3	74.8	73.4
281	24.6	24.7	62.7	66	72.4	84.7	67.5
281	24.7	24.8	56.3	57.8	64.7	75.2	60.5
281	24.8	24.9	73	79.2	69	86.4	71
281	24.9	25	62.5	69.2	61.6	71.7	62
281	25	25.1	61.1	68.3	59.5	56.5	60.3
281	25.1	25.2	61.5	53	62.4	61.9	61.9
281	25.2	25.3	62.4	64.4	61.5	69.5	62
281	25.3	25.4	73.7	85.2	90.6	98.5	82.2
281	25.4	25.5	79.4	92.3	82	81.5	80.7
281	25.5	25.6	66.6	78.5	76.3	74.8	71.4
281	25.6	25.7	63.8	61.3	72.3	77.1	68
281	25.7	25.8	65	70	68.4	77.7	66.7
281	25.8	25.9	53.1	56.7	62.7	73.5	57.9
281	25.9	26	68.2	70.6	63.6	55.8	65.9
281	26	26.1	50.1	39.3	66.2	56.5	58.1
281	26.1	26.2	57	45.8	65.6	54	61.3
281	26.2	26.3	56.1	57.6	60.9	58.9	58.5
281	26.3	26.4	70.3	55.3	78	70.8	74.1
281	26.4	26.5	65.6	55.4	69.6	66.2	67.6
281	26.5	26.6	66	54.1	69.9	62.2	67.9
281	26.6	26.7	54.4	49.2	50.8	43.6	52.6
281	26.7	26.8	60.5	45.7	56.9	57.3	58.7
281	26.8	26.9	61	56.2	54.8	47.6	57.9
281	26.9	27	62.9	51.4	58.8	52	60.8
281	27	27.1	58.8	51.3	52.7	50.8	55.7
281	27.1	27.2	62.1	67.6	66	67.3	64
281	27.2	27.3	68.7	68.4	78.4	87.4	73.6
281	27.3	27.4	51.2	53.3	54.6	46.9	52.9
281	27.4	27.5	52.4	44	66.1	57.1	59.2
281	27.5	27.6	62.3	55.4	74	66.7	68.2
281	27.6	27.7	43.3	34.6	48.4	38.7	45.9

IRI DATA FOR PCN 24043 PROJECT NO. NH-2-281(050)006							
HWY 281, Northbound Survey Data Collection Date = 8/28/2024							
HWY	Start-Mi	End-Mi	IRI_Left Wheel Path	Standard Deviation	IRI_Right Wheel Path	Standard Deviation	IRI_AVERAGE
281	27.7	27.8	60.9	53.7	51.7	48.2	56.3
281	27.8	27.9	68.8	63	57.2	52.9	63
281	27.9	28	59.7	65.9	79.2	82.4	69.5
281	28	28.1	73.9	70.6	71.2	77.6	72.5
281	28.1	28.2	60.8	74.9	56.9	70.8	58.8
281	28.2	28.3	63.5	72.2	66.3	82.9	64.9
281	28.3	28.4	65.5	79.2	67.2	82.6	66.3
281	28.4	28.5	58.2	72	56.9	58.1	57.6
281	28.5	28.6	64.5	72.4	65.2	59.8	64.8
281	28.6	28.7	66.6	69.4	67.7	62.6	67.1
281	28.7	28.8	83.4	86.2	87.3	90.1	85.3
281	28.8	28.9	72.2	77.8	60.5	59.5	66.4
281	28.9	29	64.2	60.6	65.7	65.8	64.9
281	29	29.1	66.5	61.1	61.3	54.8	63.9
281	29.1	29.2	60.9	61.1	61.9	63.5	61.4
281	29.2	29.3	59.5	58.8	61.2	54.8	60.3
281	29.3	29.4	61.8	59.1	59.7	52.8	60.7
281	29.4	29.5	49.5	36.8	53.2	49.4	51.4
281	29.5	29.6	48.3	38	44.9	32.4	46.6
281	29.6	29.7	60.7	60	61.8	55.7	61.2
281	29.7	29.8	59.7	58.5	63.2	64.7	61.5
281	29.8	29.9	60.7	59.8	60.6	65.6	60.7
281	29.9	30	54.7	51.3	59.7	58.3	57.2
281	30	30.1	57.1	57.4	65.6	77.9	61.3
281	30.1	30.2	63.5	79.3	63	88.5	63.2
281	30.2	30.3	89.3	108.5	85.5	108.1	87.4
281	30.3	30.4	97.1	102.2	76.4	80.9	86.8
281	30.4	30.5	104.4	103.5	82.1	87.3	93.2
281	30.5	30.6	68.9	111.7	56.6	81.9	62.7
281	30.6	30.7	108.1	109	120.3	111.7	114.2

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION
INTELLIGENT COMPACTION FOR HOT MIX ASPHALT (HMA)
PROJECT 2-052(054)244 – PCN 24041 &
2-0281(050)006 – PCN 24043

DESCRIPTION

This work consists of compacting asphalt using Intelligent Compaction (IC) rollers Hot Mix Asphalt (HMA) permanently incorporated into the project. This Special Provision is in addition to the requirements of Section 430, "Hot Mix Asphalt (HMA)".

EQUIPMENT

A. Rollers.

1. General.

Provide breakdown, intermediate, and finish rollers that meet the requirements of Section 151, "Rollers" equipped with following:

- Noncontact temperature sensor mounted to measure pavement surface in the direction of travel;
- Global Navigation Satellite System (GNSS) with the ability to connect to RTK-GPS using either:
 - Local network;
 - Ground-based stations; or
 - VRS network (only if VRS network is available throughout the project limits);
 - Connect to a RTK-GPS.
- Provide GNSS equipment with the following components:
 - Receiver;
 - Antenna; and
 - Telemetry equipment;
- Modem or Wi-Fi;
- A color monitor that is capable of the following:
 - Displaying real time color coded map with the number of passes;
 - Roller speed;
 - Surface temperature;
 - Vibration frequency;
 - Vibration amplitude;
 - Data that is transferable by USB and cellular connection; and
 - Is easily visible to the operator without obstructing normal operations.

Provide instrumented roller accuracy shown in Table 1.

Table 1	
Operating Parameter	Accuracy
Speed	± 0.5 mph
Frequency	± 2 Hz
Amplitude	± 0.008 in
Temperature	± 2.7 °F

2. Vibratory Rollers.

Equip vibratory rollers with accelerometers mounted according to the manufacturer's recommendations.

B. Global Positioning System (GPS).

1. General.

Provide a Global Navigation Satellite System (GNSS) that has a minimum of 90% coverage for the project site.

2. Roller GPS.

Provide GPS on the roller with an accuracy of ±0.2 ft in the X and Y direction.

3. Rover GPS.

Provide a rover with Real Time Kinematic (RTK) GPS with accuracy of ±0.1ft.

CONSTRUCTION REQUIREMENTS

A. General.

The Department does not guarantee the accuracy and compatibility of electronic or supplemental data provided by the Department. The Plan documents, originally provided with the Contract, remain the basis of the Contract. The Contractor is responsible for any necessary conversions of the provided electronic data.

If supplemental data is not provided by the Department, create the design files that are needed.

B. IC Work Plan:

In addition to the HMA quality control plan, submit an IC Work Plan at least 2 weeks before the preconstruction conference.

Include the following information in the IC Work Plan:

- Roller Type and make;
- Roller dimensions and weight;
- IC system type including:
 - Vendor;
 - Model Number; and
 - Data output;
- Data collection method including:
 - Sampling rates;
 - Intervals; and
 - Data file types
- Temperature measurement system manufacturer;

- Number of IC rollers; and
- List of personnel trained to work on IC system including the data analysis.

C. Training.

Provide an IC system's representative for approximately 4 to 8 hours of on-site training at a location that is suitable for the needs of the training.

Include the Contractor's and the Engineer's personnel in the training. During the training cover the following:

- Background information for the IC system;
- Setup and checks for the following:
 - IC system;
 - GPS receiver;
 - Base-station; and
 - Rovers;
- Operation of the IC system on the roller
- Transferring raw IC data;
- Operation of the Vendor's software to open and view raw IC data files and exporting all data files in Veta-compatible format;
- Operation of Veta software including:
 - Importation of files;
 - Creation of maps ; and
 - Interpretation of data.

D. GPS Calibration.

The Engineer will supply 2 control points at each end of the project on opposites sides of the roadway and 1 per mile for the project corridor. Provide notice to the Engineer a minimum of two weeks before the start of construction. The control points are under the North Dakota State Plane coordinates for the appropriate region with the horizontal datum based on NAD83(2011) and vertical datum based on NAVD 88 using GEOID 12A.

Complete site calibration and site setup of the IC according to the manufacturer's instruction before beginning paving operations.

Perform one IC GPS calibration check on the IC rollers and the rover daily at the beginning of each workday.

E. Roller Operations.

Provide an IC manufacturer's representative or a Contractor's representative who has experience on 5 projects performing IC for the first 2 days of paving.

Operate the IC roller according to the IC manufacturer's recommendations.

F. Equipment Malfunction.

Immediately contact the Engineer when a malfunction of any IC roller or a breakdown of an IC equipped roller occurs. Provide written documentation of the failure including the following:

- Date and time;
- Location;

- Brief description of failure;
- IC or roller equipment that failed;
- Method of repair; and
- Date and time the equipment was brought back into service.

A conventional roller may replace an IC roller, but IC mapping data will continue. A minimum of 80% of the plan quantity of HMA will be mapped using IC.

G. Data Submittal.

Upload all measurement data to the cloud storage at 15 minute intervals or once per day when no cellular coverage is available.

Transfer all IC data to the Engineer at the end of each working week. The Engineer may request data any time during compaction operations.

H. Data Format.

Distinctly identify the data lots for measurements passes using the format in Table 2 and 3. Ensure that the data lot designations are digitally stored with the associated measurement pass data.

Table 2 Standardized Naming Convention for Measurement Passes Data Lots	
Standardized Format*	Definition
IC-ROUTE-MATL-L#-XXX-XXX	Undivided Highways (e.g., IC-TH83-HMA-L1-12L-CL)
IC-ROUTE-MATL-L#-XXX-XXX-DT	Divided Highways (e.g., IC-TH83-HMA-L1-12L-CL-NB)
* Add an additional designation behind the ROUTE for instances where more than one site calibration is needed within the project limits (e.g., a site calibration was completed for the northern and southern limits of the project – a “N” and “S” would be added immediately behind the ROUTE [TH83N-HMA-L1-12L-CL, TH83S-HMA-L1-12L-CL]).	

Table 3 Standardized Abbreviations for Measurement Passes Data Lots									
Abbreviation	Definition								
ROUTE	ROUTE DESIGNATION. Replace “ROUTE” with the route system, as designated by the following acronyms or short form, immediately followed by the route number (e.g., TH12).								
	<table border="1"> <thead> <tr> <th>Acronym or Short Form</th> <th>Full Name or Meaning</th> </tr> </thead> <tbody> <tr> <td>TH</td> <td>Trunk Highway (US or State Highway)</td> </tr> <tr> <td>CR</td> <td>County Road</td> </tr> <tr> <td>MS</td> <td>Municipal Street</td> </tr> </tbody> </table>	Acronym or Short Form	Full Name or Meaning	TH	Trunk Highway (US or State Highway)	CR	County Road	MS	Municipal Street
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	TH	Trunk Highway (US or State Highway)							
CR	County Road								
MS	Municipal Street								

Table 3 Standardized Abbreviations for Measurement Passes Data Lots													
Abbreviation	Definition												
MATL	<p>MATERIAL/ SURFACE TYPE. The material/surface type is designated by the following acronyms or short form:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Acronym or Short Form</th> <th style="text-align: center;">Full Name or Meaning</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">FDR</td> <td>Full Depth Reclamation</td> </tr> <tr> <td style="text-align: center;">HMA</td> <td>Hot Mix Asphalt</td> </tr> <tr> <td style="text-align: center;">SMA</td> <td>Stone Matrix Asphalt</td> </tr> </tbody> </table>	Acronym or Short Form	Full Name or Meaning	FDR	Full Depth Reclamation	HMA	Hot Mix Asphalt	SMA	Stone Matrix Asphalt				
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FDR	Full Depth Reclamation												
HMA	Hot Mix Asphalt												
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Acronym or Short Form	Full Name or Meaning												
L1	Lift 1												
L2	Lift 2												
L3	Lift 3												
...	...												
Ln	Lift n												
XXX-XXX	<p>CENTERLINE OFFSET. The location of the left and right edge of the production/compaction area with respect to the centerline, facing in the direction of increasing stationing. Stationing typically increases from West to East and South to North. Each character of the abbreviation is defined as the following:</p> <div style="text-align: center;"> <p style="text-align: center;"> $\underbrace{XX}_{(a)} \underbrace{X}_{(b)} - \underbrace{XX}_{(c)} \underbrace{X}_{(d)}$ </p> </div> <p>(a) The offset distance (in feet rounded to the whole number) from the centerline to the left edge of the production area (e.g., CL, 12, 24). CL reflects the Center Line.</p> <p>(b) R or L, to reflect Right (R) or Left (L) of Centerline, in the direction of increasing station numbering.</p> <p>(c) The offset distance (in feet rounded to the whole number) from the centerline to the right edge of the production area (e.g., CL, 12, 24). CL reflects the Center Line.</p> <p>(d) R or L, to reflect Right (R) or Left (L) of Centerline, in the direction of increasing station numbering.</p>												
DT	<p>DIRECTION OF TRAVEL. The direction that traffic moves during non-construction conditions. The direction of travel is designated by the following acronyms or short form:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Acronym or Short Form</th> <th style="text-align: center;">Full Name or Meaning</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">NB</td> <td>North Bound</td> </tr> <tr> <td style="text-align: center;">SB</td> <td>South Bound</td> </tr> <tr> <td style="text-align: center;">EB</td> <td>East Bound</td> </tr> <tr> <td style="text-align: center;">WB</td> <td>West Bound</td> </tr> </tbody> </table>	Acronym or Short Form	Full Name or Meaning	NB	North Bound	SB	South Bound	EB	East Bound	WB	West Bound		
Acronym or Short Form	Full Name or Meaning												
NB	North Bound												
SB	South Bound												
EB	East Bound												
WB	West Bound												

I. Data Analysis Software.

Export all measurements into Veta which is available from the website: <http://www.intelligentconstruction.com>.

Provide the Engineer with user identification to access both the cloud storage, cloud computing, and the software being used.

Use Veta to create project files with the temperature, roller coverage, and reports of the HMA.

Use the Veta software to plot measurement pass data and to determine roller coverage. Produce *.VETAPROJ filenames in the **X-XXX(XXX)XXX ROUTE IC** standardized format shown in Table 4.

Table 4 Standardized Naming Convention for *.VETAPROJ Files * 									
Abbreviation	Definition								
X-XXX(XXX)XXX	STATE PROJECT NUMBER. Replace the “X’s” with the state project numbers. Do not use any of the Letters on the project number.								
ROUTE	<p>ROUTE NUMBER. Replace “ROUTE” with the route system, as designated by the following acronyms or short form, immediately followed by the route number(s) mapped in the given Veta project. (e.g., TH94, TH94-34, TH94-34-56)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Acronym or Short Form</th> <th style="text-align: center;">Full Name or Meaning</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">TH</td> <td>Trunk Highway (US or State Highway)</td> </tr> <tr> <td style="text-align: center;">CR</td> <td>County Road</td> </tr> <tr> <td style="text-align: center;">MS</td> <td>Municipal Street</td> </tr> </tbody> </table>	Acronym or Short Form	Full Name or Meaning	TH	Trunk Highway (US or State Highway)	CR	County Road	MS	Municipal Street
Acronym or Short Form	Full Name or Meaning								
TH	Trunk Highway (US or State Highway)								
CR	County Road								
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IC	IC reflects the intelligent compaction method, the data set contained within the Veta project file.								
<p>* Example *.VETAPROJ filename: 1-234(567)890 TH94 IC</p> <p> Add the county name at the end of the Veta project file name for instances where design and alignment files were created for multiple counties. This requires creation of a Veta project per county (e.g., 1-234(567)890 TH94 IC Barnes; 1-234(567)890 TH94 IC Cass).</p>									

Provide Veta files that include the following:

1. Alignment (*.LandXML file[s]) and Design (*.kmz file[s])
2. Raw or Gridded All Passes Data (imported data)
3. Filter Groups (for all machines) per:
 - a. Data lot (e.g., 1-234(456)789 TH94-HMA-L1-12L-CL),
 - b. Lane and per lift (e.g., TH94-HMA-L1-12L-CL) and
 - c. Lift (e.g., TH94-HMA-L1)
4. Operation Filters (for all machines) per data lot (e.g., 1-234(456)789 TH94-HMA-L1-12L-CL)
5. Override Filters per Machine ID per:
 - a. Lift (e.g., TH94-HMA-L1 Machine ID) and

b. Lane and per lift (e.g., TH94-HMA-L1-12L-CL Machine ID)

Submit final Veta files to the Engineer 1 week after the paving is complete.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Pay Item	Pay Unit
Intelligent Compaction	Lump Sum

Payment for IC will be based on the percentage of the plan quantity HMA placed on each progressive estimate.

Delays due to GPS satellite reception issues or IC roller breakdowns will not be considered justification for contract modifications or contract extensions.

Such payment is full compensation for furnishing all equipment, labor, and incidentals to complete the work as specified.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

PAVER MOUNTED THERMAL PROFILER

PROJECT 2-052(054)244 – PCN 24041 & 2-281(050)006 – PCN 24043

DESCRIPTION

This work consists of using the Paver Mounted Thermal Profile (PMTP) Method to continually monitor the surface temperature of the Hot Mix Asphalt (HMA) mat immediately behind the trailing edge of the paver screed during placement operations on mainline paving.

DEFINITION

AUXILIARY LANE. This provision is required only on continuous left turn lanes and passing lanes (excluding turn lanes and tapers).

DRIVING LANE. See **traffic lane**.

PAVER MOUNTED THERMAL PROFILE (PMTP) METHOD. This method uses a system that continually monitors the surface temperature readings of the mat immediately behind the paver screed during placement operations.

STANDARD DEVIATION (StDev). The sample standard deviation of the surface temperature readings. This value reflects the overall spatial variability of surface temperature measurements within the data subplot.

SURFACE TEMPERATURE READINGS. The temperatures of the mat immediately behind the trailing edge of the screed plate during placement operations.

THERMAL COVERAGE (TC). The percent of the total paving area, for the given lift and material type, where surface temperature readings are collected and stored.

THERMAL PROFILES. The surface temperature readings and associated Global Navigation Satellite System (GNSS) coordinates and time stamps.

THERMAL SEGREGATION INDEX. A composite index equally reflecting the overall variability of surface temperature measurements (StDev) and the transverse variability of surface temperature measurements (presence of longitudinal thermal streaking [TSVI]) within the data subplot.

TRAFFIC LANE. This provision is required on all traffic lanes with the exception of traffic lane tapers and roundabouts (including the traffic lane between the roundabout and mainline transition prior to and after the radius point of the roundabout).

TRANSVERSE SEMIVARIOGRAM (TSV) INDEX. This value reflects the transverse variability in surface temperature measurements (presence of longitudinal thermal streaking).

VETA. A standardized intelligent construction data management (ICDM) software that stores, maps and analyzes geospatial data resulting from intelligent compaction, thermal profiling and spot test data (e.g., density, moisture). This software can perform standardized data processing, analysis and reporting to provide Project summary results quickly in the field from various intelligent compaction and thermal profiling manufacturers. In particular, the software can provide statistics, histograms, correlations for these measurements, document coverage area and evaluate the uniformity of compaction and surface temperature measurements as part of the Project quality control operations.

EQUIPMENT

A. General.

Provide a PMTP System supplier that will provide a representative for onsite technical assistance for the following:

- Initial setup;
- Preconstruction verification; and
- Data management and processing as needed.

Provide a technical support contract for the PMTP system for the duration of the project.

B. PMTP System.

Provide the Engineer with access to the PMTP system, including the cloud storage and cloud computing, 7 days before the start of paving that requires the PMTP method until 1 year after final acceptance according to Section 105.15, "Acceptance".

Use PMTP, capable of collecting, mapping, retaining and analyzing the mat temperature readings during placement and exporting thermal profile data meeting the requirements of this provision and supporting the following features:

- (1) Filtering by surface temperature reading location (items 8 through N of Table 3).
- (2) Display through a map/graph:
 - (2.1) Surface temperature readings across the required width and with respect to a user defined data subplot length,
 - (2.2) Paver speed and
 - (2.3) Paver stops (location and duration).
- (3) Provide the paving length and duration.

C. PMTP System.

1. System Requirements.

Use a PMTP system that only requires an operator to initiate the start of continuous data collection. After initializing the equipment, no operator attendance is required for continuous data collection

Calibrate and install the PMTP System according to the Manufacturers recommendations.

Provide a PMTP System that meets the requirements of Table 1 and is equipped with the following:

- Wireless method for transferring data to cloud storage.
- Onboard Documentation System with the following capabilities:
 - Displays (in real-time) a map of the surface temperature readings.
 - Displays the total distance, paver speed and location.
 - Reports the surface temperature readings and GNSS status.
 - Provides real-time statistical summaries of the surface temperature readings.
 - Has the ability to manually export data using a removable media device.
 - Allows the operator to define the data lot currently being placed.

Table 1 PMTP System Requirements	
Parameter	Requirement
Longitudinal and Lateral Surface Temperature Readings	≤ 1-ft intervals at all paving speeds Tolerance: ± 1 in
Surface Temperature Readings Total Measurement Width	Traffic / Required Auxiliary lane(s) paved in 1 pass
Surface Temperature Readings	Range: 32°F to 480°F Accuracy: ± 3.6°F or 2.0% of the sensor reading, whichever is greater
GNSS	Accuracy better than ± 2 Inch in the X and Y direction

2. Thermal Profiling Data.

Encrypt and export the thermal profiling data into one of the following formats:

- As dbase ASCII or Text Format;
- Directly into Veta, if a file format compatible with Veta is available; or
- Through a direct transfer of data from cloud storage to Veta.

Verify the PMTP date and time stamp is correct for the local time zone for the mapped and exported data.

Include the information in Table 2 in the header of each data file or section. Include the fields in Table 3 with each data point.

Table 2 Required Information in Data Header		
Item No.	Description	Example Data included in Header
1	State Project Number using only the numerical values	Highway 77
2	Machine Trade Name	ABC Company
3	Machine ID	1234AC78
4	Lateral Spacing between surface temperature measurements (inch)	12
5	Longitudinal Spacing between surface temperature measurements (inch)	12

Table 2 Required Information in Data Header		
Item No.	Description	Example Data included in Header
6	Vertical Distance between the temperature sensor(s) and asphalt pavement mat (inch)	120
7	Reporting resolution for independent surface temperature data – in the paver moving direction (inch)	13
8	Number of lateral surface temperature measurements/sensors	12
9	Number of surface temperature measurement data blocks	5000

Table 3 Required Fields for Each Data Block		
Item No.	Date Field Name	Data Format Examples
1	Date Stamp	20080701 (YYYYMMDD)
2	Time Stamp	090504.0 (9 hr 5 min. 4.0 s.) (HHMMSS.S -military format)
3	Longitude (decimal degrees, with at least 6 significant digits)	94.859204
4	Latitude (decimal degrees, with at least 6 significant digits)	45.227773
5	Distance (feet)	1
6	Direction heading (degree angle, clockwise from the north); or calculated value, in Veta, using values from the other data blocks, ft/min	45
7	Speed (feet per minute or inches per minute)	30.0
8	Surface temperature Reading/Location 1 (°F)*	290
9	Surface temperature Reading/Location 2 (°F)*	295
...
N	Surface temperature Reading/Location N (°F)*	300

* Surface temperature readings/locations are numbered from 1 to N, left to right, in the direction of paving.

CONSTRUCTION REQUIREMENTS

A. General.

The Department does not guarantee the accuracy and compatibility of electronic or supplemental data provided by the Department. The Plan documents, originally provided with the Contract, remain the basis of the Contract. The Contractor is responsible for any necessary conversions of the provided electronic data.

If supplemental data is not provided by the Department, create the design files that are needed.

B. Field Stationing.

Match the centerline stationing from the design files to the field station markers.

C. PMTP System Setup on Paver(s).

Perform independent equipment checks on the PMTP System daily before the start of paving and verify the system is within the Tolerances shown in Table 4

Table 4 Calibration of PMTP System Components	
PMTP System Device	Tolerance
GNSS	± 2 Inches in the horizontal direction (XY)
Temperature	± 5 °F

If a distance measuring instrument (DMI) is utilized with the PMTP system, verify that the correct correction factor is set for accurate stationing according to the manufacturer's procedures.

Instrument all pavers that are paving the traffic and required auxiliary lanes with the PMTP System.

Ensure the installed PMTP System takes measurements within 10 ft of the trailing edge of the screed plate and does not restrict the accuracy and functionality of the GNSS.

Ensure that brackets used for pavement smoothness, that are located in the measurement area, do not affect more than 2 surface temperature readings recorded in the lateral direction (items number 8 through N in Table3). Ensure that other objects (e.g., umbrellas, lights, etc.) are not obstructing the measurements.

D. Definition of Data Lot and Data Sublot for Thermal Profiling.

1. Data Lot Establishment.

A lot for the PMTP System is all asphalt paving for a given day regardless of the following:

- Lift;
- Material type; and
- Centerline offsets.

Identify the data lots for thermal profile measurements using the standardized format shown in Tables 5 and 6.

Table 5 Standardized Naming Convention for Thermal Profile Data Lots	
Standardized Format	Definition
PMTP-ROUTE-MATL-L#- XXX-XXX	Undivided Highways (e.g., PMTP-TH83-HMA-L1-12L-CL)
PMTP-ROUTE-MATL-L#- XXX-XXX-DT	Divided Highways (e.g., PMTP-TH83-HMA-L1-12L-CL-NB)

Table 6 Standardized Abbreviations for Thermal Profile Data Lots													
Abbreviation	Definition												
ROUTE	<p>ROUTE DESIGNATION</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Acronym or Short Form</th> <th style="text-align: center;">Full Name or Meaning</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">TH</td> <td>Trunk Highway (US or State Highway)</td> </tr> <tr> <td style="text-align: center;">CR</td> <td>County Road</td> </tr> <tr> <td style="text-align: center;">MS</td> <td>Municipal Street</td> </tr> </tbody> </table>	Acronym or Short Form	Full Name or Meaning	TH	Trunk Highway (US or State Highway)	CR	County Road	MS	Municipal Street				
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...	...												
Ln	Lift n												
XXX-XXX	<p>CENTERLINE OFFSET. The location of the left and right edge of the production area with respect to the centerline, facing in the direction of increasing stationing. Stationing typically increases from West to East and South to North. Each character of the abbreviation is defined as the following:</p> <div style="text-align: center; margin-bottom: 10px;"> </div> <p>(a) The offset distance (in feet rounded to the whole number) from the centerline to the left edge of the production area (e.g., CL, 12, 24). CL reflects the Center Line.</p> <p>(b) R or L, to reflect Right (R) or Left (L) of Centerline, in the direction of increasing station numbering.</p> <p>(c) The offset distance (in feet rounded to the whole number) from the centerline to the right edge of the production area (e.g., CL, 12, 24). CL reflects the Center Line.</p> <p>(d) R or L, to reflect Right (R) or Left (L) of Centerline, in the direction of increasing station numbering.</p>												

Table 6											
Standardized Abbreviations for Thermal Profile Data Lots											
Abbreviation	Definition										
DT	<p>DIRECTION OF TRAVEL. The direction of travel is designated by the following acronyms or short form:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Acronym or Short Form</th> <th style="text-align: center;">Full Name or Meaning</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">NB</td> <td style="text-align: center;">North Bound</td> </tr> <tr> <td style="text-align: center;">SB</td> <td style="text-align: center;">South Bound</td> </tr> <tr> <td style="text-align: center;">EB</td> <td style="text-align: center;">East Bound</td> </tr> <tr> <td style="text-align: center;">WB</td> <td style="text-align: center;">West Bound</td> </tr> </tbody> </table>	Acronym or Short Form	Full Name or Meaning	NB	North Bound	SB	South Bound	EB	East Bound	WB	West Bound
Acronym or Short Form	Full Name or Meaning										
NB	North Bound										
SB	South Bound										
EB	East Bound										
WB	West Bound										

2. Data Sublot Establishment Using Veta.

A sublot is defined as 150 linear ft. The Engineer will include a partial lot less than or equal to 75 linear feet in the previous lot. Lots greater than 75 linear feet are treated as an independent lot.

Set the data sublot “start” and “end” location for the given data lot in Veta to correspond with the start and end of paving, respectively. Ensure that these locations are immediately adjacent to the beginning and end of the surface temperature readings for the paving operation.

E. Thermal Profile Measurements.

Collect thermal profiles for each lift on the following lanes:

- Traffic lanes
- Continuous left turn lanes; and
- Passing lanes.

Thermal profiles are not required on the following:

- Auxiliary lane tapers;
- Ramps;
- Shoulders;
- Cross-overs;
- Non-continuous turn lanes;
- Loops;
- Bypass lanes;
- Acceleration/deceleration lanes;
- Circular roadway of roundabouts;
- Splitter Islands or chicanes of roundabouts. and
- Intersecting streets.

Thermal profiles are required only for the lifts shown in the typical sections. Any lifts to bring subcuts to the same elevation as the surrounding surface is excluded from thermal profiles.

Ensure that the PMTP system is not capturing measurements outside of the traffic and required auxiliary lanes, as all of the recorded data is used in the thermal segregation analysis. Turn the data collection and recording off when collecting thermal profiling data is not required

F. PMTP System Failure.

PMTP System failure occurs when the data is not collected or stored.

Contact the Engineer when the PMTP System has a failure and after the PMTP system becomes operational.

When failures occur, provide the Engineer with a written notification of each failure including the following:

- Date and time;
- A brief description; and
- Areas affected by the failure.

The day of PMTP system failure notification and the following 2 working days are accepted as providing a daily thermal coverage of 100 percent, for each day of this grace period. The daily thermal coverage is considered zero during the subsequent days of PMTP system failure.

Price adjustments will not be made for thermal segregation when a PMTP System failure occurs.

G. Thermal Profile Analysis Software.

Use the Veta software to plot thermal profile measurements and to determine thermal segregation and coverage. Produce *.VETAPROJ filenames in the **X-XXX(XXX)XXX ROUTE PMTP** standardized format according to Table 7.

Table 7									
Standardized Naming Convention for *.VETAPROJ Files * 									
Abbreviation	Definition								
X-XXX(XXX)XXX	PROJECT NUMBER. Replace the “X’s” with the project numbers. Do not use any of the letters on the project number.								
ROUTE	<p>ROUTE NUMBER. Replace “ROUTE” with the route system, as designated by the following acronyms or short form, immediately followed by the route number(s) mapped in the given Veta project. (e.g., TH94, TH94-34, TH94-34-56)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Acronym or Short Form</th> <th style="text-align: center;">Full Name or Meaning</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">TH</td> <td style="text-align: center;">Trunk Highway (US or State Highway)</td> </tr> <tr> <td style="text-align: center;">CR</td> <td style="text-align: center;">County Road</td> </tr> <tr> <td style="text-align: center;">MS</td> <td style="text-align: center;">Municipal Street</td> </tr> </tbody> </table>	Acronym or Short Form	Full Name or Meaning	TH	Trunk Highway (US or State Highway)	CR	County Road	MS	Municipal Street
Acronym or Short Form	Full Name or Meaning								
TH	Trunk Highway (US or State Highway)								
CR	County Road								
MS	Municipal Street								
PMTP	PMTP reflects the paver mounted thermal profile method, the data set contained within the Veta project file.								
<p>* Example *.VETAPROJ filename: 1-234(567)890 TH94 PMTP</p> <p> Add the county name at the end of the Veta project file name for instances where design and alignment files were created for multiple counties. This requires creation of a Veta project per county (e.g., 1-234(567)890 TH94 PMTP Barnes; 1-234(567)890 TH94 PMTP Cass).</p>									

Create filter groups, operation filter and data subplot names using the **LOT# MMDDYY LOTNAME** standardized format per Table 8.

Table 8	
Standardized Naming convention for Veta Filter Group, Operation Filter and Data Sublot Names *	
Abbreviation	Definition
LOT#	<p>DATA LOT NUMBER. The data lot number is a two-digit number increasing sequentially (01, 02, 03, ..., n). Create filter groups, operation filters and data subplot names in sequential order with respect to the data lot dates.</p> <p>Data lots containing Exceptions and/or Temporary Exceptions: Include a capital letter, in alphabetical order (A, B, ...), immediately after the two-digit data lot number to designate the side of the exception, or temporary exception, that the thermal profile data reflects (e.g., 01A, 01B, 02A, 02B, ...).</p>
MM	MONTH (include leading zeros)
DD	DAY (include leading zeros)
YY	TWO-DIGIT YEAR
LOTNAME	STANDARDIZED DATA LOT NAME per Table 3
<p>* Example Filter Group/Operation Filter Name (data lot contains no exceptions): 01 070915 TH94-HMA-L1-CL-12R, 02 071015 TH94-HMA-L1-CL-12R, ...</p> <p>* Example Filter Group/Operation Filter Name (data lot contains an exception): 01A 070915 TH94-HMA-L1-CL-12R, 01B 070915 TH94-HMA-L1-CL-12R, 02A 071015 TH94-HMA-L1-CL-12R, 02B 071015 TH94-HMA-L1-CL-12R, ...</p> <p> Temporary exceptions are areas to be paved at a later date.</p>	

Ensure Veta projects include the following:

- (1) **Alignment File (*.LandXML file) and Design (*.kmz file)**
- (2) **Surface Temperature Readings**
- (3) **Filter Groups** per:
 - (3.1) data lot (e.g., 01 090415 TH94-HMA-L1-12L-CL),
 - (3.2) lane and per lift (e.g., TH94-HMA-L1-12L-CL) and
 - (3.3) lift (e.g., TH94-HMA-L1)
- (4) **Operation Filters** per data lot (e.g., 01 090415 TH94-HMA-L1-12L-CL)
- (5) **Data Filter** (Temperature ≥ 180°F)
- (6) **Sublot Creation** per data lot (e.g., 01 090415 TH94-HMA-L1-12L-CL)
- (7) **Override Filters per Machine ID** per:
 - (7.1) lift (e.g., TH94-HMA-L1 Machine ID) and
 - (7.2) lane and per lift (e.g., TH94-HMA-L1-12L-CL Machine ID)

Note – the override filters are used for cases where more than one paver (paving in Echelon) is instrumented with the PMTP system.

H. Veta Software Operator Certification.

Provide a certified Veta software operator who has taken a hands on course in the use of Veta and provide the certification to the Engineer.

I. Calculations.

1. Thermal Segregation.

a. General.

Perform separate thermal segregation analysis on each side of an exception for lots that extend through exceptions. (Table 8 for the standardized labeling conventions using Veta).

b. Surface Temperature Readings.

Evaluate thermal segregation using 100 percent of the recorded data for each data subplot.

The following surface temperatures readings are excluded from each subplot:

- Surface temperature readings less than 180°F; and
- Surface temperature readings for paver stops that last longer than 1 minute within the following distance:
 - 2 ft before the stop; and
 - 8 ft after the stop.

c. Thermal Segregation Index (TSI).

Calculate the Thermal Segregation Index (TSI), reported to the nearest tenth, for each data subplot, use Equations 2016-1 (AMT) and 2016-2 (AMT). Record the TSI values for each data subplot into form AMT-102, which can be found at the following website: https://edocs-public.dot.state.mn.us/edocs_public/DMResultSet/Urlsearch?columns=docnumber,docname&folderid=15848128.

Equation 2016-1 (PMTP): $TSI_0 = 0.77 \left[C \times \left(\frac{StDev}{StDev_{Severe\ Start}} \right) + (100 - C) \times \left(\frac{TSV}{TSV_{Severe\ Start}} \right) \right]$

Equation 2016-2 (PMTP): $TSI = \begin{cases} TSI_0 & \text{when } TSI_0 < 100 \\ 100 & \text{when } TSI_0 \geq 100 \end{cases}$

Where:

- ***TSI₀*** = the thermal segregation index value prior to capping at the upper limits of 100 (rounded to nearest tenth);
- ***TSI*** = the thermal segregation index;
- ***C*** = the percent contribution of standard deviation to the transverse semivariogram (value ranges from 0 to 100, set *C* = 50);
- ***StDev*** = the standard deviation (rounded to the nearest hundredth degree);
- ***StDev_{Severe Start}*** = the standard deviation at the lower limits of the severe thermal segregation category (set ***StDev_{Severe Start}*** = **9**);
- ***TSV*** = Transverse semivariogram index. As calculated in Veta rounded to the nearest hundredth; and
- ***TSV_{Severe Start}*** = transverse semivariogram index at the lower limits of the severe thermal segregation category (***TSV_{Severe Start}*** = **25**);

d. Thermal Segregation Category.

Categorize the surface temperature readings for each subplot according to Table 9.

Table 9	
Data Sublot Thermal Segregation Index	
TSI Equation 2016-1 (PMTP)	Thermal Segregation Category
TSI < 30.0	Low
30.0 ≤ TSI < 70.0	Moderate
TSI ≥ 70.0	Severe

2. Thermal Coverage.

a. General.

Calculate thermal coverage for each lift and material type according to Equation 2016-4 (AMT) using form AMT-101 found at the following website: [MnDOT eDOCS Public Web - Url Search \(state.mn.us\)](http://www.mn.gov/Portals/0/eDocs/Forms/AMT-101.pdf).

b. Thermal Profile Data Lot Length Calculation.

Equation 2016-3 (AMT): Thermal Profile Data Lot Length = $\sum_{i=1}^n \text{Data Sublot Length}_i$

Where:

- **Thermal Profile Data Lot Length** = the total linear length of the surface temperature readings used for the thermal segregation analysis for the given data lot, ft (reported to the nearest whole number);
- **n** = the total number of data sublots; and
- **Data Sublot Length** = the linear length of data subplot *i*, ft (reported to the nearest whole number).

c. Thermal Profile Lift Length Calculation.

Equation 2016-4 (AMT): Thermal Profile Lift Length = $\sum_{i=1}^n (\text{Thermal Profile Lot Length})_i$

Where:

- **Thermal Profile Lift Length** = the total linear length of the surface temperature readings used for the thermal segregation analysis for the entire lift, ft (reported to the nearest whole number);
- **n** = the total number of data lots for the entire *lift* and *material type*; and
- **(Thermal Profile Lot Length)_i** = the total *linear* length of the surface temperature readings used for the thermal segregation analysis for the given data lot *i* and lift as calculated by Veta, ft (reported to the nearest whole number). (See Equation 2016-3 [PMTP])

d. Thermal Coverage Calculation.

Equation 2016-5 (AMT): Thermal Coverage = $\left(\frac{\text{Thermal Profile Lift Length}}{LM \times 5280} \right) \times 100$

Where:

- **Thermal Coverage** = % (reported to the nearest whole number);
- **Thermal Profile Lift Length** = see Equation 2016-4 (AMT), ft (reported to the nearest whole number); and
- **Lane Miles (LM)** = Total number of lane miles for the given lift and material type requiring thermal profiling, miles reported to the hundredth.

J. Submittals.

1. Thermal Profiling Data Submittal.

Upload the thermal profiling data from the PMTP System to cloud storage within 15 minutes of recording.

If cellular coverage is limited or unavailable, notify the Engineer. When cellular coverage is limited upload the thermal profiling data at least once per day. If there is no cellular coverage, transfer the thermal profiling data directly to the Engineer at the end of the days paving.

2. Veta Projects and Forms.

Submit the initial Veta project and forms PMTP-101 and PMTP-102 to the Engineer 3 days after the start of paving using PMTP System. Submit updated Veta project and forms PMTP-101 and PMTP-102 to the Engineer weekly. The Engineer may request data any time during compaction operations.

Submit the final version of Veta Project and forms AMT-101 and AMT-102 to the Engineer within 14 days of completion of paving that required usage of the PMTP System.

The Engineer will review the final versions of the submitted Veta projects and forms by following the Veta Projects and Forms Submittal Review Workflow and using form AMT-101-102-103 which can be found at the following website:
<http://www.dot.state.mn.us/materials/amt/forms.html>.

The PMTP and AMT forms are for informational purposes only.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Interruptions in the availability of network and/or satellite signals to operate this system will not result in any reduction to the daily thermal coverage or adjustment to the "Basis of Payment" for any construction items or to Contract time.

Pay Item	Pay Unit
Paver Mounted Thermal Profiler	LSum

Payment for the Paver Mounted Thermal Profiler will be based on the percentage of the plan quantity HMA placed on each progressive estimate.

No price adjustment will be made based on the information received on the forms.

Such payment is full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

E-Ticketing (Mandatory)

PROJECT # 2-052(054)244 – PCN 24041 & 2-281(050)006 – PCN 24043

DESCRIPTION

This work consists of providing electronic material tickets (E-Ticket) for all loads of asphalt delivered to the project. For materials under 2,000 tons, a paper ticket will be accepted according to Section 109.01 J, "Weighted Materials".

CONSTRUCTION REQUIREMENTS

A. General.

30 days before project start confirm that the material suppliers E-Tickets are compatible with the Department's Electronic Ticketing portal (Haulhub).

If necessary, create a programming interface to integrate with the Department's E-Ticketing Portal. Utilize the interface to provide electronic data from the load read-out weighing system at the material source in a manner that is readable by the Department's E-ticketing Portal. Haulhub will be available to coordinate the interface with the Contractor and Subcontractors.

As E-Tickets are generated, submit them to the Department using the Department's Electronic Ticketing Portal.

Payment for material weight delivered to the project will be based upon the eTickets marked "Delivered."

Do not reissue or reprint tickets that have been marked "Delivered," "Pending," or "Rejected" without first notifying the Engineer. The Engineer may reject a reissued or reprinted ticket at their discretion. When a reissued or reprinted ticket is rejected, payment will be based upon the original ticket. When a load is rejected, the Engineer will notify the Contractor that all or a portion of the load was rejected.

The Department will reject any load that does not have a corresponding eTicket unless the cause is beyond the Contractor's control. In such circumstances paper tickets may be permitted at the discretion of the Engineer.

B. Calibration and Testing.

Before beginning the project conduct a test of each supplier's integration with the Department's Electronic Ticketing Portal before shipping material. Complete the test at least 15 days before shipping material.

Provide at least 5 calibration E-Tickets from each supplier to be used for the project. The calibration E-Tickets must accurately record the ticket information found in the ticket information below. Mark all categories "TEST". After the Engineer confirms the calibration E-

Tickets are entered correctly into the Department's E-Ticketing Portal, void the E-Ticket with the reason being "Department Calibration Test".

C. Ticket Information.

1. General Information.

Provide the following information on each E-Ticket:

1. Ticket Number
2. DOT Project Number or DOT Project Control Number (PCN);
3. Date;
4. Name of Contractor or Sub Contractor;
5. Time of loading;
6. Unique Truck ID;
7. Material type identified by pay item name;
8. Unit of Measurement
9. Time of Delivery
10. A place for comment
11. A running total of the material placed that day.

2. Weighted Materials.

Provide the following information for each E-Ticket for weighted materials:

1. Gross weight (if not automatic weighed).
2. Tare weight (if not automatic weighed).
3. Net weight.
4. Mix design number.

Measurements of weighted material is to the 0.1 ton of the material.

D. Summary Sheet.

For material paid for by weigh, provided an electronic daily haul summary.

- (1) NDDOT project number or NDDOT PCN (whichever is used on the weigh tickets)
- (2) Delivery date
- (3) Contractor and Subcontractor if applicable
- (4) Pit location and owner
- (5) Identification number of truck
- (6) Each load's net weight and ticket number, with justification for out of sequence numbers
- (7) Material type identified by pay item name
- (8) Total weight of material delivered to the project
- (9) Weight of material voided or "rejected" for the day
- (10) Weight of the day's production
- (11) A signed statement from the Contractor attesting to the accuracy and completeness of the facts represented. A signed statement from a subcontractor or supplier attesting to the accuracy and completeness of the facts represented is required if they operate the scales. The statement shall consist of the following language: "I certify the Daily Haul Summary is true, accurate, and complete."
- (12) Blank for the Engineer's signature. Include the following language: "I certify the Daily Haul Summary has been reviewed, corrected as necessary, and approved."
- (13) Place for comments

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Pay Item	Pay Unit
E-Ticketing	LSUM

Payment for E-Ticketing will be based on the following table:

Activity	Amount Earned
Completion of the Calibration and Testing	50%
Final Material Delivery	50%

Such payment is full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

MATERIALS PIT LIST

GENERAL NOTES

NOTES: All pit data for the **November 14, 2025** bid opening has been carefully prepared and is believed to be correct insofar as reliable preliminary pit information can reasonably be obtained. The contractors are advised to check all pit information before bidding.

It is recommended all bidders discuss pertinent pit data with the Materials and Research Engineer prior to the bid opening. Information such as field notes, field loggings, and comments may not be included in the materials pit list or boring logs. This additional information if present would be in the respective pit file at the Materials and Research Division.

Field logging by prospecting crews may list silt, clay, or silty clay. Our test hole plat will show silt-clay for those listings because the Department does not test to determine what percent is clay and what percent is silt.

Each pit shall be operated to prevent waste and to make the best use of the deposit and to produce a uniform gradation for the item of work under construction. Usually, the material will be removed to the full width and depth of the deposit. The purpose is to exhaust the portion of the pit being worked so the stripping or topsoil can be pushed into this exhausted area and smoothed, thereby eliminating the necessity of covering unused material in the pit unless the owner agrees otherwise.

In the use of pits, the contractor is required to comply with all federal, state, and local laws, regulations and permits.

In the use of department-owned or optioned pits, the contractor shall fulfill all obligations imposed on the Department under the Department's options or agreements.

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
MATERIALS PIT LIST**

Material	Location	Approximate Quantity	Price and Ownership
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PROJECTS NH-2-052(054)244 AND TIED PROJECT NH-2-281(050)006 – THIN OVERLAYS – US 52 FROM JCT ND 36 S TO 4 LANE BUCHANAN AND US 281 FROM TWP LINE N ELLENDALE TO EDGELEY – STUTSMAN AND DICKEY COUNTIES

Aggregate	NW1/4 3-142-66	409,200 ton+	State optioned until December 31, 2030 for 150.0¢ per cu.yd. or 100.0¢ per ton. Paul and Marlene Councilman, 1106 5 th Ave SW Jamestown, ND 58401 Cell Phone: (701) 320-2898
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% Pass	H	I	J	K	L	M	N	O
1"	94	92	93	92	93	94	95	95
3/4"	91	89	89	88	91	91	91	91
5/8"	89	87	85	84	88	87	89	88
1/2"	85	82	80	80	84	84	85	83
No. 4	69	65	64	64	67	70	68	67
No. 8	58	54	54	55	56	60	57	56
No. 10	55	52	51	52	53	57	54	53
No. 16	47	43	42	45	45	49	45	45
No. 30	36	31	33	34	32	37	33	33
No. 40	30	25	26	27	26	30	27	27
No. 50	24	18	21	22	20	23	20	21
No. 100	14	9	12	12	10	12	11	11
No. 200	9.6	5.3	7.6	6.7	6.4	7.9	7.1	7.1
+No. 4 *	0.9	0.8	1.0	0.8	1.3	0.7	0.6	0.9
-No. 4 **	3.0	3.0	2.7	2.6	2.9	2.1	2.2	2.3
Total ***	3.9	3.8	3.7	3.4	4.1	2.7	2.8	3.2

Project: NH-2-052(054)244 and tied project NH-2-281(050)006

Wt/cf ls	99.5	99.8	95.5	95.5	99.5	96.4	96.3	99.7
Wt/cf rd	108.6	110.5	103.9	105.9	109.5	106.1	105.9	108.7
P.I.(-40)	NP	NP	NP	NP	NP	NP	NP	NP

L.A. Abrasion 23.1% Combined Sample

*Plus No. 4 fraction - percent by weight of total sample

**Minus No. 4 fraction - Plus No. 30 fraction - percent by weight of total sample

***In total sample

Size	Aggregate Type	Sieve	Water Absorption
-5/8" +No. 4	natural	+ No. 4	2.9 %
Minus No. 4	natural fines	- No. 4	3.9 %

NOTE: The water absorption data is to be used for information purposes. Water absorption numbers may vary throughout the pit. The contractor shall be responsible for verifying the actual absorption prior to using the material in the project. There is a fair amount of oversize rock throughout the pit with a fair amount of 2"-12" rock with an occasional 24". The south end of this pit we encountered oversize and could not drill any further. Pit was used for two projects but to the best of the Divisions knowledge the prospected area has not been touched as they mined to the west of the drilled-out area. This property has a grassland easement with the U.S. Fish and Wildlife Service and will need to be contacted before work starts. The contractor will be responsible for the cost of reseeding of grass. The contact information would be the Refuge Manager at Chase Lake NWR/WMD/PP, address of 5924 19th Street SE, Woodworth, ND 58496, Phone: (701) 752-4218 ext. 1.

NDDOT Material Source Certificate of Approval is attached at the end of this job pit list.

Interested bidders are advised to investigate all the details concerning these deposits to their own satisfaction before considering them for bidding

Project: NH-2-052(054)244 and tied project NH-2-281(050)006

Aggregate N1/2NW1/4 34-131-65 272,000 ton (see below) State Optioned until December 31, 2029 for 375.0¢ per cu.yd or 250.0¢ per ton (no royalty on reject material, look below for comment on what reject is) Royalty will be paid into the Kaiser Family, LLLP. Frank A. & Margaret A. Kaiser are the contact for this gravel source). 8909 76th Ave SE, Monango, ND 58436
 Telephone: 701-320-3415 Other landowners listed in Notes below.

% Pass	A	B	C	D	E	F	G	H	I	J
1"	91	94	94	97	93	95	91	92	90	95
3/4"	88	89	90	94	89	92	88	87	86	92
5/8"	86	86	87	91	86	90	85	83	83	88
1/2"	82	82	84	86	81	86	81	80	79	84
No. 4	64	65	67	67	62	70	66	65	65	67
No. 8	54	54	58	55	49	58	56	54	51	56
No. 10	51	51	56	52	46	55	53	51	48	54
No. 16	42	42	47	43	37	46	44	43	38	45
No. 30	30	30	34	31	25	34	32	32	27	33
No. 40	24	24	26	25	20	28	26	26	21	27
No. 50	18	17	18	18	15	21	19	19	16	20
No. 100	9	8	8	9	8	12	11	10	9	11
No. 200	5.6	4.4	4.9	5.6	5.3	7.7	6.7	6.4	5.6	6.5
+No. 4*	0.2	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.2	0.4
-No. 4**	0.5	1.1	0.9	0.7	0.9	0.7	0.9	0.8	0.9	0.8
Total***	0.7	1.4	1.2	0.9	1.2	1.0	1.1	1.1	1.1	1.2
Wt/cf ls	105.6	103.9	106.4	103.5	110.2	103.2	108.8	108.3	108.1	102.5

Project: NH-2-052(054)244 and tied project NH-2-281(050)006

Wt/cf rd	114.0	116.2	119.5	115.4	117.6	114.4	117.2	118.1	117.6	112.9
P.I.(-40)	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP

L.A. Abrasion Loss 25% Combined Sample

*Plus No. 4 fraction - percent by weight of total sample

**Minus No. 4 fraction - Plus No. 30 fraction - percent by percent by weight of total sample

***In total sample

<u>Size</u>	<u>Aggregate Type</u>	<u>Sieves</u>	<u>Water Absorption</u>
-5/8" +No. 4	natural rock	+ No. 4	2.9 %
Minus No. 4	natural fines	- No. 4	3.3 %

NOTE: The water absorption data is to be used for information purposes. Water absorption numbers may vary throughout the pit. The contractor shall be responsible for verifying the actual absorption prior to using the material in the project.

Along with the landowner’s contact listed above you have John M. & LouAnn Kaiser 8915 76th Ave SE Monango, ND 58436, and Robert W. & Karen A. Kaiser PO Box 15 Ellendale, ND 58436.

The landowners specifically waive their right to royalty payment for reject material. For purposes of “reject material” this only includes extra “natural fines” that remain after processing material. Crusher Fines, crushed rock, and Class 5 products will be considered processed material and will therefore need to be surveyed after project completion and included with the other processed material that was removed from the pit for the project for payment. Oversize rock cannot be scalped off and hauled away, oversize rock will be property of the landowners, please stockpile oversize rock not crushed into a pile do not bury. The hayfield to the south of the drilled area cannot be disturbed.

A large jaw crusher is advised for this gravel source, large amounts of oversize rock were encountered from 10” rock up to 36” in size. The entire pit had a large amount of oversize, the east half of the drilled area was easier to drill than the west half which tended to have the larger amount and larger size of rock. From the bore log you will see a lot of our test holes end in rock as we were not able to drill to full depth of deposit due to rock encountered, you will also notice how the west half had a lot more test holes ending in rock. This deposit is fairly very clean and has good quality rock. Please check with landowners to see if a cattle guard must be installed and maintained to keep animals from leaving land. This gravel source was used on a project in the 2025 Construction season and the above quantity will not be correct. Talk with landowners to see if project

Project: NH-2-052(054)244 and tied project NH-2-281(050)006

has been completed and the source is available to use. Investigate quantities for yourself before bidding out of this source.

NDDOT Material Source Certificate of Approval is attached at the end of this job pit list.

Interested bidders are advised to investigate all the details concerning these deposits to their own satisfaction before considering them for bidding purposes.

NDDOT Material Source Certificate of Approval



SN-1244

Pit Name:

Councilman

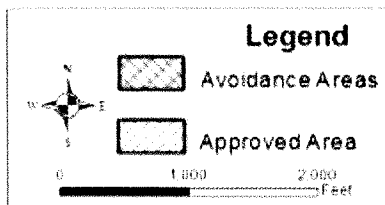
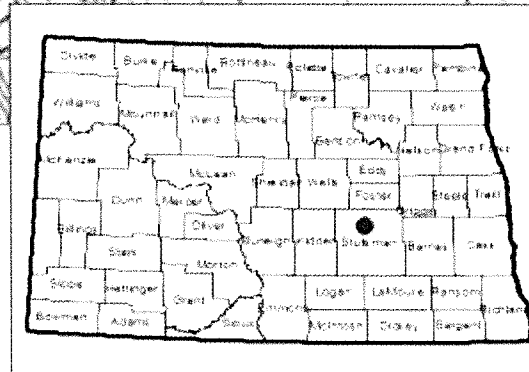
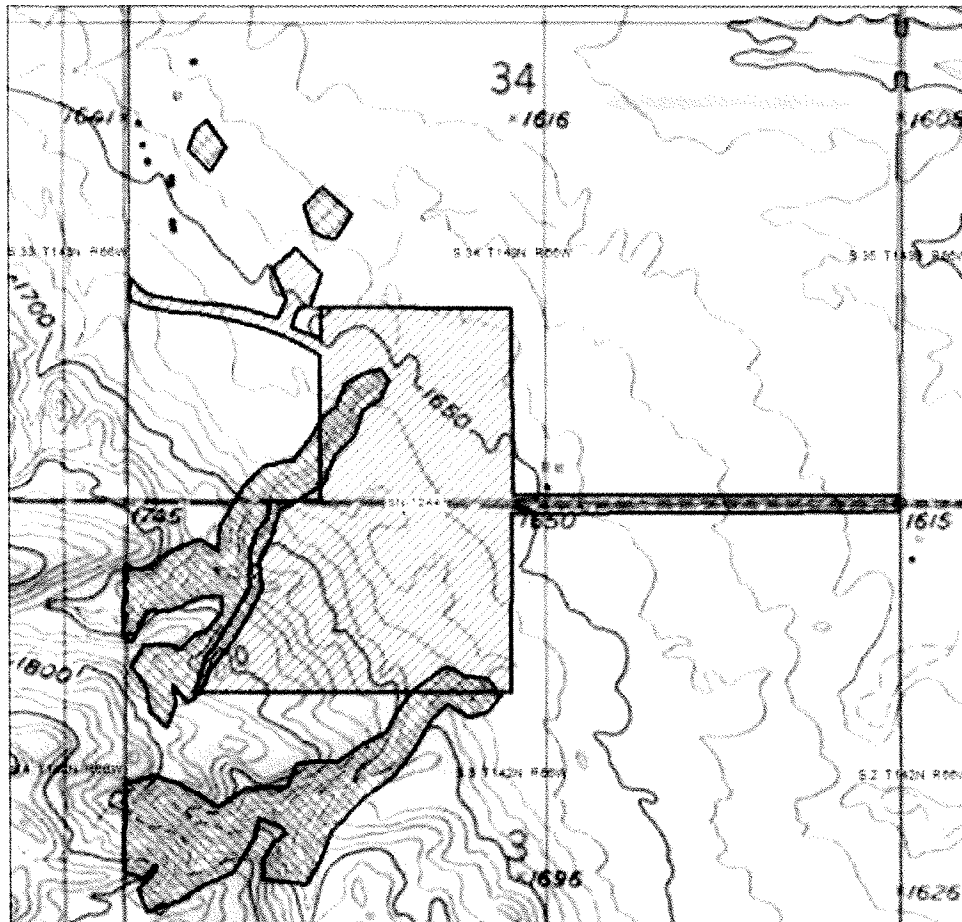
S. 3, 142/66 and S. 34, 143/66

Conditions: The source is located on property encumbered by a USFWS easement. Please coordinate with the USFWS, Chase Lake Wetland Management District Office (701-752-4218) and landowner regarding any terms and conditions before using material from this source.

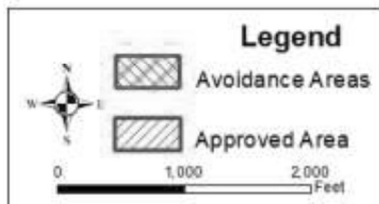
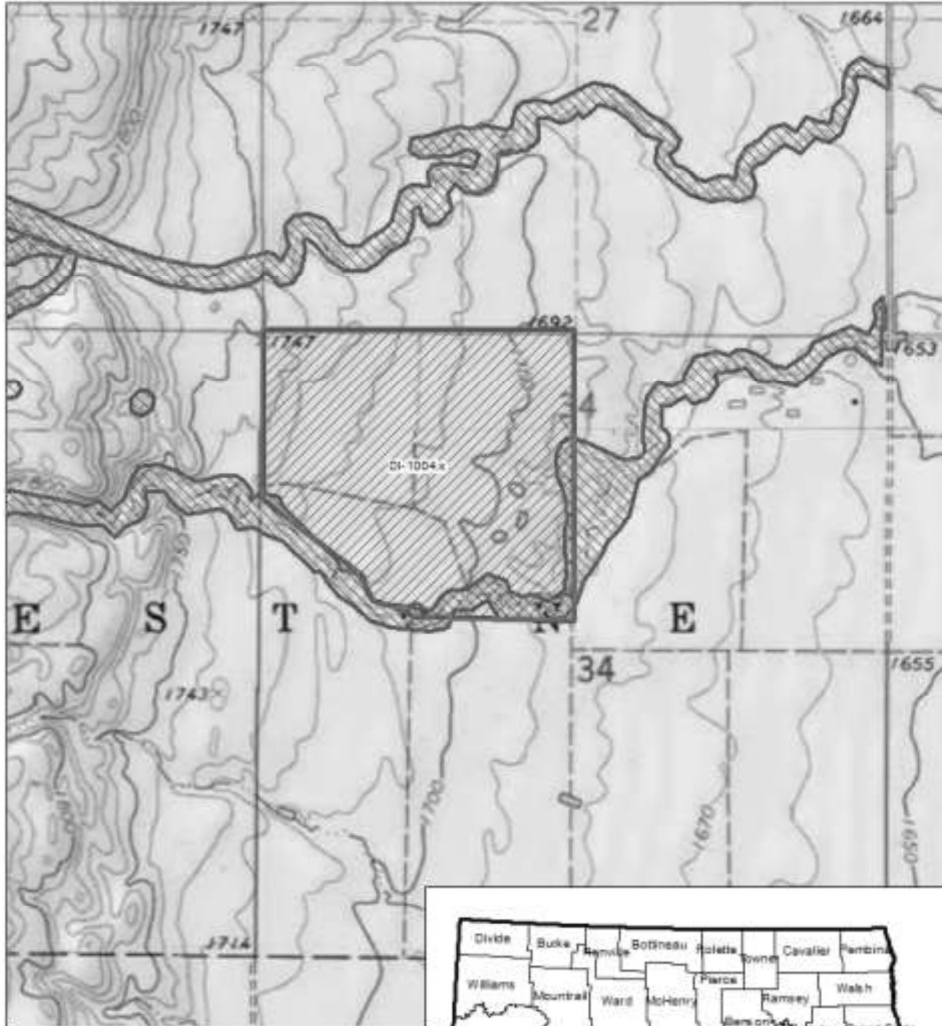
This location is approved for use, provided all avoidance areas shown on the map are avoided and all Conditions listed above and below are complied with.

NDDOT advises that all applicants (contractors or their representatives) may be subject to meeting certain legal responsibilities pursuant to one or more of the following authorities administered by the USFWS: Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.); Endangered Species Act (ESA) (16 U.S.C. 1531 et seq.); and Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668-668d, 54 Stat. 250). It is the responsibility of the applicants and/or any individual conducting activities at any approved site to fulfill the requirements of these Acts. The contractor will be responsible obtaining all applicable permits outlined in Section 107 of the Standard Specifications for Road and Bridge Construction (SSRBC). Additionally, contractor will be responsible for any impacts to wetlands, including permitting those impacts and mitigating the loss of the wetlands. As with all projects, if cultural artifacts and/or features (e.g., stone tools, fire hearths, stone circles, burials) are encountered, provisions outlined in Section 107.06 of SSRBC shall be followed.

This approval does not imply landowner permission to acquire material at this location. An agreement with the landowner is still necessary. If you have any questions regarding material sources please email materialsourc@nd.gov



NDDOT Material Source Certificate of Approval



DI-1004.x



Pit Name:
Kaiser

NW1/4 S. 34 T. 131 N, R 65 W

County: Dickey

Conditions:

This location is approved for use, provided all avoidance areas shown on the map are avoided and all Conditions listed above and below are complied with.

NDDOT advises that all applicants (contractors or their representatives) may be subject to meeting certain legal responsibilities pursuant to one or more of the following authorities administered by the USFWS: Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.); Endangered Species Act (ESA) (16 U.S.C. 1531 et seq.); and Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668-668d, 54 Stat. 250). It is the responsibility of the applicants and/or any individual conducting activities at any approved site to fulfill the requirements of these Acts. The contractor will be responsible obtaining all applicable permits outlined in Section 107 of the Standard Specifications for Road and Bridge Construction (SSRBC). Additionally, contractor will be responsible for any impacts to wetlands, including permitting those impacts and mitigating the loss of the wetlands. As with all projects, if cultural artifacts and/or features (e.g., stone tools, fire hearths, stone circles, burials) are encountered, provisions outlined in Section 107.06 of SSRBC shall be followed.

This approval does not imply landowner permission to acquire material at this location. An agreement with the landowner is still necessary. If you have any questions regarding material sources please email materialsource@nd.gov

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION

FUEL COST ADJUSTMENT CLAUSE

Revision Date: 9/8/2006

Introduction

This Special Provision provides for price adjustments to the Contract when significant changes in the cost of motor fuels and burner fuels occur while completing the Contract work. Participation in fuel cost adjustment program is not mandatory. A Contractor is not required to notify the Department at the time of submitting bids whether the Contractor will or will not participate in the fuel cost adjustment provision.

The North Dakota Department of Transportation (NDDOT) will send the low responsible bidder a "Fuel Cost Adjustment Affidavit" (SFN 58393) with the proposed Contract. The Contractor shall return a completed Fuel Adjustment Affidavit with the signed Contract as specified in Standard Specification Section 103.06, Execution and Approval of the Contract. The affidavit shall be returned on all Contracts with this provision even if the Contractor elects not to participate in the provision.

Compensation adjustments for motor fuels and burner fuels consumed in prosecuting the Contract shall be determined by the Engineer in accordance with the provisions set forth herein. Compensation adjustments will be assessed monthly for the cost of the motor fuels and burner fuels whenever the Current Fuel Index (CFI) is outside the given threshold of the Base Fuel Index (BFI) for the Contract.

If the Contractor has a fixed price for fuel for motor or burner fuels to complete the work, no fuel cost adjustments will be made for that fuel type. If there is no fixed fuel price for motor or burner fuels, participation in the Fuel Adjustment provision is the decision of the prime Contractor.

If the prime Contractor decides not to participate, no fuel cost adjustments will be made to the Contract for the Contractor or any subcontractors. If the prime Contractor elects to participate in the fuel cost adjustment provision, the prime Contractor shall include the anticipated fuel cost of subcontractors who wish to participate. If fuel cost adjustments are made to the Contract, the prime Contractor shall ensure that participating subcontractors including second and lower tier, are included in the adjustments in proportion to the percentage of work and anticipated fuel cost by that subcontractor.

Fuel Indexes

Each month, NDDOT will record the average wholesale price for No. 2 diesel fuel and the average wholesale price for unleaded gasoline (87 octane). The monthly average will be the average of the daily rack prices for the month as reported by DTN Energy for Fargo ND.

The burner fuel index will be the No. 2 diesel fuel index regardless of the type of burner fuel actually used.

The Base Fuel Index (BFI) price for motor fuels and burner fuel to be used in the Contract will be the average wholesale price for the month prior to the bid opening.

The Current Fuel Index (CFI) price for motor fuels and burner fuel to be used for each monthly adjustment will be the average wholesale price for the month prior to the adjustment month.

Fuel Ratio

For motor fuels diesel and unleaded gas, the fuel ratio of the Contract will be determined by dividing the Contractor's affidavit costs for each motor fuel by the original Contract amount.

For burner fuels, the fuel ratio of the contract will be determined by dividing the Contractor's affidavit cost for burner fuels by the original Contract amount of plant-mixed hot bituminous pavement paid by the ton. Asphalt cement, binders and other miscellaneous bituminous items shall not be included.

The fuel ratio of the contract for motor and burner fuels will remain the same throughout the length of the contract. The sum of the affidavit fuel costs shall not exceed 15% of the original Contract amount.

The fuel ratio for the three fuel types will be determined by the following equation:

Fuel Ratio_(x, y, z) = Affidavit Cost_(x, y, z) / Original Contract Amount_(x, y, z)		
(x)	=	Motor Fuel (Diesel)
(y)	=	Motor Fuel (Unleaded)
(z)	=	Burner Fuel
Fuel Ratio _(x, y, z)	=	Fuel ratio of the contract for each respective fuel type
Affidavit Cost _(x, y, z)	=	Fuel costs from Fuel Adjustment Affidavit (SFN 58393)
Original Contract Amount _(x, y)	=	Total of the original contract amount excluding lane rental, and Part B of the bid (when A+B bidding is used), if applicable.
Original Contract Amount _(z)	=	Total original contract amount for all hot bituminous pavement bid items combined, excluding bid items for asphalt cement, sawing and sealing joints, coring, etc. Only hot bituminous pavement bid items measured by the Ton will be included in the calculation.

Cost Change

The monthly change in fuel costs will be determined by the following equation:

Cost Change_(x, y, z) = (CFI_(x, y, z) - BFI_(x, y, z)) / BFI_(x, y, z)		
(x)	=	Motor Fuel (Diesel)
(y)	=	Motor Fuel (Unleaded)
(z)	=	Burner Fuel (use diesel prices)
Cost Change _(x, y, z)	=	The relative change in the current CFI and the BFI for each fuel type
CFI _(x, y, z)	=	Current Fuel Index for each fuel type
BFI _(x, y, z)	=	Base Fuel Index for each fuel type

Contract Adjustments

Contract adjustments will be made for the cost of motor and burner fuels whenever the cost change exceeds a ±0.10 threshold. No fuel cost adjustment will be made for work done under liquidated damages. Adjustments will be determined for Motor Fuel (diesel), Motor Fuel (unleaded), and Burner Fuel (burner) separately and shall be computed on a monthly basis.

When the cost change is greater than 0.10, the rebate to the Contractor for each fuel type shall be computed according to the following formulas:

$FCA_{(x, y, z)} = \text{Fuel Ratio}_{(x, y, z)} \times \text{Estimate}_{(x, y, z)} \times (\text{Cost Change}_{(x, y, z)} - 0.10)$		
(x)	=	Motor Fuel (Diesel)
(y)	=	Motor Fuel (Unleaded)
(z)	=	Burner Fuel
$FCA_{(x, y, z)}$	=	Fuel Cost Adjustment for each of the fuel types
$\text{Fuel Ratio}_{(x, y, z)}$	=	Fuel Ratio for each of the fuel types
$\text{Estimate}_{(x, y)}$	=	The monthly total of work done on estimates issued in the current month excluding incentive or disincentive payments, pay factor adjustments and any work completed under liquidated damages.
$\text{Estimate}_{(z)}$	=	The monthly total of hot bituminous pavement work done on estimates issued in the current month, excluding bid items for asphalt cement, sawing and sealing joints, coring, etc. Only hot bituminous pavement bid items measured by the Ton will be included in the calculation. Hot bituminous pavement work completed under liquidated damages will not be included.
$\text{Cost Change}_{(x, y, z)}$	=	The monthly change in fuel costs for each of the fuel types

When the cost change is less than -0.10, the credit to the Department for each fuel type shall be computed according to the following formulas:

$FCA_{(x, y, z)} = \text{Fuel Ratio}_{(x, y, z)} \times \text{Estimate}_{(x, y, z)} \times (\text{Cost Change}_{(x, y, z)} + 0.10)$		
(x)	=	Motor Fuel (Diesel)
(y)	=	Motor Fuel (Unleaded)
(z)	=	Burner Fuel
$FCA_{(x, y, z)}$	=	Fuel Cost Adjustment for each of the fuel types
$\text{Fuel Ratio}_{(x, y, z)}$	=	Fuel Ratio for each of the fuel types
$\text{Estimate}_{(x, y)}$	=	The monthly total of work done on estimates issued in the current month excluding any incentive or disincentive payments, pay factor adjustments and any work completed under liquidated damages.
$\text{Estimate}_{(z)}$	=	The monthly total of hot bituminous pavement work done on estimates issued in the current month, excluding bid items for asphalt cement, sawing and sealing joints, coring, etc. Only hot bituminous pavement bid items measured by the Ton will be included in the calculation. Hot bituminous pavement work completed under liquidated damages will not be included.
$\text{Cost Change}_{(x, y, z)}$	=	The monthly change in fuel costs for each of the fuel types

Payments

Adjustments will be determined by the Engineer monthly. Adjustments will be made under the following spec and code for each fuel type:

109 0100	Motor Fuels (Diesel)
109 0200	Motor Fuels (Unleaded)
109 0300	Burner Fuel

When significant payment adjustments are made on final estimates to account for final in-place measured quantities, the Engineer may prorate the adjustments back to the months when the work was done.

Attachments

For informational purposes, a 'Fuel Cost Adjustment Affidavit' (SFN 58393) is included as Attachment A.

FUEL COST ADJUSTMENT AFFIDAVIT

North Dakota Department of Transportation, Construction Services
 SFN 58393 (8-2017)

SP Fuel Cost Adjustment Clause
 6 of 6

Attachment A

PCN	Project Number		
The Contractor is not required to notify the Department at the time of submitting bids whether he will or will not participate in the fuel cost adjustment program. The Contractor shall return the affidavit on all Contracts with this Provision even if the Contractor elects not to participate.			
Check the box for each fuel type that has a fixed price. No adjustments in fuel price will be made for the boxes that are checked.			
<input type="checkbox"/> Diesel <input type="checkbox"/> Unleaded <input type="checkbox"/> Burner			
Does your company elect to participate in a fuel adjustment for this contract for the fuels that do not have a fixed price? No adjustments in fuel prices will be made if No is checked .			
<input type="checkbox"/> Yes <input type="checkbox"/> No			
If yes, provide the total dollars for each of the applicable fuels:			
Diesel (D)		% of Original Contract Amount *	
Unleaded (U)			
Burner Fuel (B)			
Sum (D+U+B)			
*The sum of the D, U, and B may not exceed 15% of the original contract amount.			
Under the penalty of law for perjury of falsification, the undersigned,			
Name (print or type)		Title (print or type)	
Contractor (print or type)			
hereby certifies that the documentation is submitted in good faith, that the information provided is accurate and complete to the best of their knowledge and belief, and that the monetary amount identified accurately reflects the cost for fuel, and that they are duly authorized to certify the above documentation on behalf of the company.			
I hereby agree that the Department or its authorized representative shall have the right to examine and copy all Contractor records, documents, work sheets, bid sheets and other data pertinent to the justification of the fuel costs shown above.			
Signature			Date

Acknowledgement

State of	
County of	
Signed and sworn to (or affirmed) before me on this day _____ (month, day, year)	
Name of Notary Public or other Authorized Officer (Type or Print)	Affix Notary Stamp
Signature of Notary Public or other Authorized Officer	
Commission Expiration Date (if not listed on stamp)	