STATE OF IDAHO
TRANSPORTATION DEPARTMENT
BOISE

CONTRACT NO. 8960

PROJECT	A021(983)
KEY	21983
WORK AUTH	T206700
LOCATION	N 500 W RECONSTRUCTION
HIGHWAY	OFF SYS
COUNTY	TETON

CONTRACTOR

SUNROC CORPORATION
4015 BANNER ST
BOISE, ID 83714

RESIDENT ENGINEER

MATT KOSTER
208-334-0565
mkoster@lhtac.org

NOTICE OF LETTING

Idaho Federal Aid Project No. A021(983), in Teton County, Key No. 21983; for the work of rehabilitating and widening North 500 West from 7380 North to 10000 North using Recycled Asphalt Base Stabilization, additional ¾" Aggregate and an HMA overlay.

Sealed proposals will be received only at the office of the IDAHO TRANSPORTATION DEPARTMENT, 11331 WEST CHINDEN BLVD. BLDG #8, BOISE, IDAHO 83714 or PO Box 40, BOISE, IDAHO 83707-0040, ATTN: ADVERTISEMENT AND AWARD. Bids may also be submitted electronically through Bid Express (www.bidx.com). All bids must be received by two o'clock p.m., on March 4, 2025.

For any design related questions, please submit through QuestCDN. Instructions on how to use this process are located on the Notice to Contractors page.

Digital copies of the Plans, Proposals, and Specifications must be downloaded for a fee of $22.00. **Bidders must appear on the plan holders list for their proposal to be accepted by the Department.** Please contact QuestCDN.com at 952-233-1632 or info@questcdninfo.com for assistance in downloading and working with this digital project information.

General Bidding information and Specifications may be obtained from the Idaho Transportation Department website at http://itd.idaho.gov/business/

In an effort to achieve ITD's DBE Annual Participation Goal (APG) of 10.11% utilization, ITD requires responder to utilize certified subcontractors and suppliers listed on its DBE Directory located at: https://itd.dbesystem.com/. For this project, it has been determined that there is a DBE availability of 11% or more. For more information regarding ITD's DBE Program please go to https://itd.idaho.gov/civilrights/

This contract requires full compliance with Title VI of the Civil Rights Act of 1964, which protects persons from being denied the benefits of or excluded from participation in programs or activities; or subjected to discrimination based on race, color, national origin, sex, age, disability, Limited English Proficiency or economic status. The Contractor is encouraged to utilize the goods and services of disadvantaged firms in accomplishing the tasks or providing the services of this agreement, and to provide equal opportunity to all sub-bidders and suppliers.

CONTRACT AGREEMENT

THIS AGREEMENT, made and entered into, in duplicate, this 10 day of March, 2025, by and between the State of Idaho, hereinafter called the State, by the Idaho Transportation Board of said State, party of the first part, and SUNROC CORPORATION, hereinafter called the Contractor, party of the second part.

ITD TO DATE UPON AWARD

WITNESSETH: That the contractor, in consideration of the sum to be paid to him by said State, in the matter and at the time hereinafter provided, and of other covenants and agreements herein contained, hereby agrees for themself, their heirs, administrators, successors and assigns to furnish the material and perform the work of: rehabilitating and widening North 500 West from 7380 North to 10000 North using Recycled Asphalt Base Stabilization, additional ¾" Aggregate and an HMA overlay; in Teton County, designated as Idaho Federal Aid Project No. A021(983).

To furnish all necessary machinery, tools, apparatus, materials and labor to complete the work in the most substantial and workmanlike manner according to the plans and specifications therefore on file in the office of the Idaho Transportation Department of said State, and such modifications of the same and other directions that may be made by the State Highway Administrator as provided herein: Provided, however, that the proposed work covered by this contract does not include that portion or portions of the work to be done in right of way to which title is being contested in any court having jurisdiction, until a specific award has been made by the court in each instance and in good and sufficient title to such portion of right of way in dispute has been assured.

CONTRACT DOCUMENTS:

It is further agreed that the said plans and specifications and the schedule of rates and prices set forth in the proposal and the general and special provisions appended to this contract agreement are hereby specifically referred to and made a part of this contract, and shall have the same force and effect as though all of same were fully inserted herein.

PAYMENTS:

For the faithful performance of the work herein embraced, as set forth in the contract agreement, general and special provisions, notice to contractors, instructions to bidders, proposals, general and detailed specifications and plans, which are a part hereof, in accordance with the directions of the State Highway Administrator and to his satisfaction, the State agrees to pay said Contractor the amount earned, computed from the actual quantities of the work performed as shown by the estimates of the Administrator and unit prices named in such proposal, and to make such payments in the manner and at the time provided in such proposal, and to make such payments in the manner and at the time provided in the general provisions thereto appended. Payments shall be made by the State Treasurer of said State, upon warrants of the State Auditor of said State, issued upon vouchers of said State Highway Administrator, which have been approved by the Idaho Transportation Board out of monies legally available for that purpose.

IN WITNESS WHEREOF, The said State of Idaho, by the Idaho Transportation Board, executes this contract and the said SUNROC CORPORATION, does sign and seal the same, the day and year in this contract first above written.

Attest (The State):

I hereby attest that all contract documentation has been checked and included in this final contract, as appropriate.

Name & Title

Contracts Manager

STATE OF IDAHO
Idaho Transportation Board

By:

District Engineer/ HQ Division Administrator
Party of the First Part

TRANSPORTATION BOARD STATE OF IDAHO

CONTRACTOR

Pursuant to Idaho Code Section 9-1406 "I certify (or declare) under penalty of perjury pursuant to the law of the State of Idaho that the foregoing is true and correct." The undersigned is duly authorized to sign this document on behalf of the above referenced company.

Dave M Clifford
Dave M Clifford (Mar 7, 2025 10:32 MST)

Signature

Dave M Clifford

Print Name

Area Manager

Title
Party of the Second Part

Mar 7, 2025

Date

Seal

Bond No. 108227165 Revised 09-09-2021

SURETY

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, That we SUNROC CORPORATION, as Principal, and

Travelers Casualty and Surety Company of America

as Surety are held and firmly bound unto the State of Idaho in the penal sum of

FOUR MILLION TWO HUNDRED FORTY SIX THOUSAND SEVEN HUNDRED TWENTY NINE DOLLARS AND NINETY CENTS

($4,246,729.90) lawful money of the United States, which sum is agreed to be the maximum liability hereunder, well and truly to be paid, and for the payment of which we and each one of us bind ourselves, our heir, executors, administrators and assigns, jointly and severally, firmly by these presents.

The condition of the instrument is such, that whereas the Principal has entered into a certain agreement, hereto attached, with the State of Idaho, dated March 10, 20 25, for the work of rehabilitating and widening North 500 West from 7380 North to 10000 North using Recycled Asphalt Base Stabilization, additional ¾" Aggregate and an HMA overlay; N 500 W RECONSTRUCTION; known as IDAHO FEDERAL AID Key No. 21983 Contract No. 8960, in Teton County.

ITD TO DATE UPON AWARD

NOW, THEREFORE, If the said Principal shall pay all claimants supplying labor or materials to him or his subcontractors in the prosecution of the work provided for in said contract, and any and all authorized modifications of said contract that may hereafter be made, notice of which modifications to the Surety being hereby waived and shall pay all taxes when due, as required by Title 63, Chapter 15, Idaho Code, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, However, that this bond is executed pursuant to the provisions of the Public Contracts Bond Act, and all liabilities on this bond shall be determined in accordance with said provisions to the same extent as if set forth in full herein.

IN WITNESS WHEREOF, the Principal and Surety have executed this instrument to become effective on the date of the contract agreement as set forth above.

CONTRACTOR:

By:

Dave M Clifford

Dave M Clifford (Mar 7, 2025 10:32 MST)

Signature

Dave M Clifford

Print Name

Area Manager

Title

CORPORATE SURETY:

Travelers Casualty and Surety Company of America

Surety Company Name

By:

Danielle Marchant

Signature

Danielle Marchant

Print Name

Attorney-in-Fact

Title

801-685-6860

Phone Number

dmarchant@beehiveinsurance.com

Email Address

SURETY

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, That we SUNROC CORPORATION, as Principal, and

Travelers Casualty and Surety Company of America

as Surety are held and firmly bound unto the State of Idaho in the penal sum of

FOUR MILLION TWO HUNDRED FORTY SIX THOUSAND SEVEN HUNDRED TWENTY NINE DOLLARS AND NINETY CENTS

($4,246,729.90) lawful money of the United States, which sum is agreed to be the maximum liability hereunder, well and truly to be paid, and for the payment of which we and each one of us bind ourselves, our heir, executors, administrators and assigns, jointly and severally, firmly by these presents.

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ITD TO DATE UPON AWARD

NOW, THEREFORE, If the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of said contract and any extensions thereof that may be granted by the State, with or without notice to the Surety and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the Surety being hereby waived, then this obligation to be null and void, otherwise to remain in full force and effect.

PROVIDED, However, that this bond is executed pursuant to the provisions of the Public Contracts Bond Act, and all liabilities on this bond shall be determined in accordance with said provisions to the same extent as if set forth in full herein.

IN WITNESS WHEREOF, the Principal and Surety have executed this instrument to become effective on the date of the contract agreement as set forth above.

CONTRACTOR:

By:

Dave M Clifford

Dave M Clifford (Mar 7, 2025 10:32 MST)

Signature

Dave M Clifford

Print Name

Area Manager

Title

CORPORATE SURETY:

Travelers Casualty and Surety Company of America

Surety Company Name

By:

Danielle Marchant

Signature

Danielle Marchant

Print Name

Attorney-in-Fact

Title

801-685-6860

Phone Number

dmarchant@beehiveinsurance.com

Email Address

ATTACH POWER OF ATTORNEY
CB-2-B

Power Of Attorney ☑

Proposal

In compliance with your bid package to be received for this letting, the undersigned certifies to have examined the location of work and/or materials sites, and is satisfied as to the condition to be encountered, and that the plans, specifications, contract and method of payment for such work is understood. The undersigned hereby proposes to furnish the material and perform the work as described in the Notice of Letting in accordance with the Proposal/Plans purchased through QuestCDN for this project.

On the acceptance of this proposal for said work, the undersigned will execute Contract Forms CA in accordance with the bid as accepted, and furnish the Contract Performance and Payment Bonds on Forms CB with approved and sufficient surety within 15 days after the prescribed forms are presented for signature.

The bidder further agrees that, if awarded, the contract work will be completed as stated in the Special Provisions, after authority to proceed has been given in conformity with and subject to such extensions as may be authorized by the terms of Extension of Contract Time of the Standard Specifications.

Accompanying this proposal is a Certified Check or a Cashier's Check drawn on an Idaho bank in the amount of five percent of the total amount bid, made payable to the Idaho Transportation Department, or a Bidder's Bond in the amount of five percent of the total amount bid.

The undersigned being duly sworn upon oath deposes and says that it complies with the provisions of Section 72-1717 Idaho Code (Drug Free Workplace program).

The contractor/consultant warrants and takes the steps to verify that it does not knowingly hire or engage persons not authorized to work in the United States; and that any misrepresentation in this regard or any employment of person not authorized to work in the United States constitutes a material breach and shall be cause for the imposition of monetary penalties up to five percent (5%) of the contract price, per violation, and/or termination of its contract.

By signature on this proposal, the bidder declares under penalty of perjury under the laws of the United States, that the firm, association, or corporation has not by or through any of its officers, partners, owners, or any other person associated therewith, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this highway project, and is not financially interested in or otherwise affiliated in a business way with any other bidder on this project.

Legal Company Name: Sunroc Corporation

Company Business Address: 901 Pier View Drive, Suite 201

Mailing (Shipping) Address, if different or N/A: N/A

Company organized under the state of: Utah

Legal Name of Highest Officer in Company: Mark Elder

Title of Highest Officer in Company: President

Contact Name: Steve Giles

Title of Contact: Senior Estimator

Contact Phone No.: 208-821-1302 Email: stgiles@depatco.com

Idaho Public Works License No.: PWC-C-17452-U-1-4 Exp. Date: 11-30-2025

Unique Entity Identifier (UEI): Q8RNY8VA6JL5

Submittal, signature, acceptance, authorization and certifications are hereby made by signing this internet bid with a Digital ID. ***

State of Idaho
Idaho Transportation Department
Schedule of Items

LINE NUMBER	ITEM NUMBER	QUANTITY	UNIT	UNIT PRICE	EXTENSION PRICE
SECTION 001 N 500 W RECONSTRUCTION					
0005	107-019A SURVEY MONUMENT PRESERVATION	10000.000	CA	$1.00000	$10,000.00
0010	201-005A CLEARING & GRUBBING	9.700	ACRE	$12,500.00000	$121,250.00
0015	202-005A SELECTIVE REMOVAL OF TREES INCLUDING STUMPS	76.000	EACH	$480.00000	$36,480.00
0020	203-006A REMOVAL OF SIGN	12.000	EACH	$175.00000	$2,100.00
0025	203-123A REMOVAL OF MISCELLANEOUS ITEMS - PIPE	442.000	FT	$50.00000	$22,100.00
0030	205-005A EXCAVATION	7182.000	CY	$9.20000	$66,074.40
0035	205-030A BORROW	2714.000	CY	$16.75000	$45,459.50
0040	205-060A WATER FOR DUST ABATEMENT	1500.000	MG	$15.00000	$22,500.00
0045	205-071A EXCAVATION AND REPAIR OF SOFT SPOTS	1000.000	CY	$69.00000	$69,000.00
0050	209-005A SMALL DITCH	28.000	FT	$30.00000	$840.00
0055	212-011A FIBER WATTLE	8661.000	FT	$4.00000	$34,644.00
0060	212-105A WATER AND POLLUTION	5000.000	CA	$1.00000	$5,000.00
0065	301-005A GRANULAR SUBBASE	12280.000	TON	$32.75000	$402,170.00
0070	303-021A 3/4" AGGREGATE TYPE A FOR BASE	28490.000	TON	$33.50000	$954,415.00
0075	308-015A PULVERIZE EXISTING SURFACE	34345.000	SY	$2.75000	$94,448.75
0080	401-020A CSS-1 DILUTED EMULSIFIED ASPHALT FOR TACK COAT	100.000	GAL	$3.50000	$350.00
0085	405-245A APPROACH - ASPHALT	22.000	EACH	$2,750.00000	$60,500.00
0090	405-245B APPROACH - GRAVEL	11.000	EACH	$2,250.00000	$24,750.00
0095	405-425A SUPERPAVE HMA PAVEMENT INCLUDING ASPHALT & ADDITIVES CLASS SP-2	7820.000	TON	$135.70000	$1,061,174.00
0100	602-035A 18" PIPE CULVERT	655.000	FT	$105.00000	$68,775.00
0105	602-045A	7.000	FT	$270.00000	$1,890.00

		24" PIPE CULVERT			
0110	602-055A	21.000	FT	$285.00000	$5,985.00
		30" PIPE CULVERT			
0115	602-065A	168.000	FT	$165.00000	$27,720.00
		36" PIPE CULVERT			
0120	602-250A	16.000	FT	$335.00000	$5,360.00
		PIPE ARCH - (20" x 28")			
0125	602-250A	57.000	FT	$480.00000	$27,360.00
		PIPE ARCH - (47"x71")			
0130	608-035A	14.000	EACH	$530.00000	$7,420.00
		18" APRON FOR PIPE			
0135	612-005A	12.500	FT	$30.00000	$375.00
		W-BEAM GUARDRAIL			
0140	612-050A	1.000	EACH	$4,500.00000	$4,500.00
		GUARDRAIL TERMINAL			
0145	612-120B	1.000	EACH	$4,400.00000	$4,400.00
		GUARDRAIL TRANSITION, HIGH SPEED			
0150	612-150A	187.500	FT	$175.00000	$32,812.50
		CONCRETE BARRIER			
0155	612-155A	1.000	EACH	$1,525.00000	$1,525.00
		CONCRETE TERMINAL TY A			
0160	616-010A	250.000	SF	$20.00000	$5,000.00
		SIGNS TY B			
0165	616-035A	127.100	LB	$10.00000	$1,271.00
		SIGN BRACKETS & BRACE ANGLES			
0170	616-050A	1207.200	LB	$5.50000	$6,639.60
		BRKAWY STL SIGN POST TY E			
0175	616-070A	28.000	EACH	$425.00000	$11,900.00
		BRKAWY STL SIGN POST INST TY E			
0180	618-025A	8.000	EACH	$950.00000	$7,600.00
		STREET MONUMENT			
0185	621-005A	1.820	ACRE	$1,300.00000	$2,366.00
		SEED BED PREPARATION			
0190	621-010A	1.800	ACRE	$2,600.00000	$4,680.00
		SEEDING - ROADSIDE			
0195	621-010B	0.020	ACRE	$6,300.00000	$126.00
		SEEDING - WETLAND			
0200	624-005A	62.000	CY	$185.00000	$11,470.00
		LOOSE RIPRAP			
0205	626-010A	1211.000	SF	$10.00000	$12,110.00
		TEMPORARY TRAFFIC CONTROL SIGNS			
0210	626-050A	40.000	EACH	$35.00000	$1,400.00
		DRUMS			
0215	626-100A	5000.000	CA	$1.00000	$5,000.00
		MISC TEMPORARY TRAF CONT ITEMS			
0220	626-105A	140.000	HR	$90.00000	$12,600.00
		TRAF CNTL MAINTENANCE			
0225	626-120A	1800.000	HR	$88.00000	$158,400.00

		FLAGGER CONTROL				
0230	626-125A	700.000	HR	$90.00000	$63,000.00	
		PILOT CAR				
0235	626-135A	210.000	EACH	$12.00000	$2,520.00	
		WEIGHTED BASE TUBULAR MARKERS				
0240	630-025A	112120.000	FT	$0.17000	$19,060.40	
		LONGITUDINAL PAVEMENT MARKING - WATERBORNE				
0245	634-005A	7.000	EACH	$500.00000	$3,500.00	
		MAILBOX - TYPE A				
0250	634-005B	3.000	EACH	$1,700.00000	$5,100.00	
		MAILBOX - TYPE B				
0255	640-010A	565.000	SY	$3.75000	$2,118.75	
		RIPRAP/EROSION CONT GEOTEXTILE				
0260	640-015A	3000.000	SY	$2.50000	$7,500.00	
		SUBGRADE SEPARATION GEOTEXTILE				
0265	654-025A	3.640	ACRE	$6,000.00000	$21,840.00	
		COMPOST				
0270	675-005A	1.000	LS	$55,000.00000	$55,000.00	
		SURVEY				
0275	675-010A	10000.000	CA	$1.00000	$10,000.00	
		DIRECTED SURVEYING				
0280	677-005A	1.000	LS	$4,000.00000	$4,000.00	
		RECORD DRAWINGS				
0285	S501-15A	1250.000	SF	$85.00000	$106,250.00	
		RETAINING WALL				
0290	S900-50A	5000.000	CA	$1.00000	$5,000.00	
		CONTINGENCY AMOUNT - MISCELLANEOUS WORK				
0295	S901-05A	1.000	EACH	$13,000.00000	$13,000.00	
		SP - MAILBOX CLUSTER (16 MAILBOXES, 2 PARCEL LOCKERS)				
0300	Z629-05A	1.000	LS	$466,900.00000	$466,900.00	
		MOBILIZATION				
Section 001 Total						$4,246,729.90
Item Total						$4,246,729.90

Rev. 01/2025

IDAHO CODE CERTIFICATION FORM
For Federal - Aid Projects

Failure to comply with the terms of the referenced Idaho Code may result in breach of contract.

Anti-Boycott Clauses

Per the provisions of Idaho Code §§ 67-2346, Anti-Boycott Against Israel Act, and Idaho Code §§ 67-2347A, Prohibition on Contracts with Companies Boycotting Certain Sectors the undersigned certifies that it is not currently engaged in, and will not for the duration of the contract engage in the following:

• Boycott of goods or services from Israel or territories under its control: or
• Boycott of any individual or company because the individual or company engages in or supports the exploration, production, utilization, transportation, sale, or manufacture of fossil fuel-based energy, timber, minerals, hydroelectric power, nuclear energy, or agriculture; or
• Boycott of any individual or company because the individual or company engages in or support the manufacture, distribution, sale, or use of firearms, as defined in Idaho Code §18-3302(2)(d),

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Prohibition on Contracts with Companies Owned or Operated by the Government of China

Idaho Code, §§ 67-2359 states "a public entity in this state may not enter into a contract with a company to acquire or dispose of services, supplies, information technology, or construction unless the contract includes a written certification that the company is not currently owned or operated by the government of China and will not for the duration of the contract be owned or operated by the government of China". Company certifies that it is not owned or operated by the government of China.

By signing below, I certify that this company understands and will comply with the aforementioned requirements

Signature of Contractor's authorized representative:

Signature Dave Clifford

Company Name Sunroc Corporation

Your Safety • Your Mobility
Your Economic Opportunity

DISADVANTAGED BUSINESS ENTERPRISE (DBE) COMMITMENTS

ITD 2396 (Rev. 1/2025)
itd.idaho.gov

This form must be submitted by all primes (Non-DBE and DBE Primes). This form is part of the DBE Submittal Package and must be accompanied by ITD-2399 and/or ITD-2400, along with any documentation relating to good faith efforts. Award of the contract is contingent on good faith efforts to provide opportunity for DBE participation in this project. Failure to complete items will result in an irregular bid. All documentation must either be emailed to DBESubmittal@itd.idaho.gov or delivered to ITD Headquarters at 11331 W. Chinden Blvd, Bldg #8, Boise, ID 83714 by 5:00 pm MT on bid opening day.
Last submittal recieved, regarless of mechanism supercedes any previous submittial

Bid Date: 3/4/2025 Bid Amount: $4,246,729.90

Key Number	Project Number	Project Name		
21983	A021(983)	N 500 W Reconstruction, Teton Co		
Prime Contractor		Prime Contractor EEO Officer	EEO Officer Phone #	Prime Contractor EEO Office Email
Sunroc Corporation		Dusty Fenwick	801.727.2149	dfenwick@sunroc.com
Prime Contractor's Signature (must be handwritten or digitally certified)			Date	Prime Contractor Phone Number
STEVEN GILES			3/4/2025	208.458.4000

Assigned goal for DBE subcontractors and suppliers for this project: 11.0 %

Section 1 - Summary of DBE Goal Commitment (Items below must match commitment amount in Section 2.)

		Commitment
1. One hundred percent (100%) of total amount to be performed by DBE firms, other than those listed in Item 2 through 5.	1) $	477,914.50
2. One hundred percent (100%) of total amount to be paid DBE Equipment leasers	2) $	NA
3. One hundred percent (100%) of total amount to be paid to DBE Manufacturers (e.g., asphalt emulsions, cutback asphalts, fabricated signs, or delivery companies)	3) $	NA
4. Sixty percent (60%) of total amount to be paid to DBE regular dealers/ suppliers — Amount Quoted by Supplier: 4)	x60% = $	$ NA -
5. Net fee of DBE brokers or bonding agents	5) $	NA
6. Forty percent (40%) of total amount to be paid to DBE distributors — Amount Quoted by Distributor: 6)	x40% = $	$ NA -
#DIV/0! % (11.25%)	Total lines 1 through 6	$477,914.50

(Enter the overall total and DBE% above. The approved percentage of commitment is contractual.)

☒ Approved 11.25 % ☐ Not Approved

By: Ronnie Winks Digitally signed by Ronnie Winks Date: 2025.03.04 17:19:30 -07'00'

Idaho Transportation Department Date

Section 2 - Explanation of DBE Commitments

Note: Use 'Alt'+'Enter' to start a new line within a row if completing electronically.

	Name of DBE Firm Being Committed to the Prime for this Project (include person who submitted the quote and contact information, to include phone number and address)	Items Quoted for DBE Credit (List by Contract Item Numbers (not Line Item Number) and Brief Work or Material Description)	For Materials Only: Supplied (S) Leased (L) Manufactured (M) Distributor (D) Broker (B)	Total Amount Quoted by DBE for DBE Credit
1)	Desert Mountain Traffic LLC 21440 S. River Down Pl Meridian, ID 83642 Corina Nguyen - 1.208.949.3072	0626-010A Temporary Traffic Control Signs 0626-050A Drums 0626-100A Misc Temp Traf Control Items 0626-105A Traf Cntl Maintenance	-NA-	$250,079.00
2)		0626-120A Flagger Control 0626-125A Pilot Car 0626-865A Weighted Tubular Markers 2029-05A Mobilization		
3)				
4)	Snake River Reclamation 1235 S. 725 W. Blackfoot, ID 83221 Jennifer Adams 1.208.681.7442	212-011A Fiber Wattle 621-005A Seed Bed Preparation 621-010A Seeding - Roadside 621-010B Seeding - Wetland	-NA-	$66,908.00
5)		634-025A Compost 2029-05A Mobilization		
6)	Coldwater Group CH 1452 W. Stone Field Way RB Pleasant View UT 84404 Matt Montano 801.803.9493	308-015A Pulverize Existing Surface 2029-05A Mobilization	-NA-	$36,158.10
7)	Clear Zone Construction LLC 2457A Farmway Road, Caldwell, ID 83607 Shamalita Martin 208.629.9178.	203-006A Removal of Sign 616-010A Signs Ty B 616-025A Sign Brackets & Brace Angles 616-050A Bikeway Sft Sign Post Ty E	-NA-	$83,269.40
8)		616-070A Bikeway Sft Sign Post Mns Ty E 621-005A Mailbox - Type A 621-005B Mailbox - Type B		
9)		8901-05A SP - Mailbox Cluster (16) 2029-05A Mobilization (Signs) 638-025A Longitudinal Pavement Markings 2029-05A Mobilization (striping)		

Use additional sheets if necessary.

Section 2 - Explanation of DBE Commitments

Note: Use 'Alt'+'Enter' to start a new line within a row if completing electronically.

	Name of DBE Firm Being Committed to the Prime for this Project (include person who submitted the quote and contact information, to include phone number and address)	Items Quoted for DBE Credit (List by Contract Item Numbers (not Line Item Number) and Brief Work or Material Description)	For Materials Only: Supplied (S) Leased (L) Manufactured (M) Distributor (D) Broker (B)	Total Amount Quoted by DBE for DBE Credit
1)	All Rail Construction LLC 24574 Farmway Road, Caldwell, ID 83607 Charmolita Martin 208-629-7178	612-0054 W-Beam Guardrail 612-0504 Guardrail Terminal 612-1208 Guardrail Transition, High Speed	—NA—	$10,900.00
2)		612-1504 Concrete Barrier 612-1554 Concrete Terminal Ty A 2109-054 Mobilization		
3)				
4)				
5)				
6)				
7)				
8)				
9)				

Use additional sheets if necessary.

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ITD-2399 (Rev. 1/2025)
itd.idaho.gov

DISADVANTAGED BUSINESS ENTERPRISE (DBE) SUBCONTRACTOR COMMITMENT STATEMENT

This template includes all of the necessary information for the DBE Commitment Statement. The ITD 2399-DBE Subcontractor Commitment statement must be included with the DBE submittal package, which must be submitted by 5:00 pm MT on bid opening day. This is a locked document; thus, if you need additional rows simply attach second copy with the additional information. If you are bidding a partial work item, please include description of work being performed after item name in "item name" box.

Date:	March 3, 2025	
Project Name and/or Key Number:	N 500 W Reconstruction Key No. 21983	
Prime Contractor Name:	All Prime Contractors	
DBE Firm Name:	DESERT MOUNTAIN TRAFFIC LLC	
DBE Address:	2440 S RIVER DOWNS PL MERIDIAN, ID	
DBE Contact Name and Phone Number:	Corina Nguyen 208-949-3072	
DBE Firm Total:	$	250,679.00

DBE WORK ITEMS			
Item Number	**Item Name**	**Item Quote**	
626-010A	TEMPORARY TRAFFIC CONTROL SIGNS	$	10,899.00
626-050A	DRUMS	$	1,200.00
626-100A	MISC TEMPORARY TRAF CONT ITEMS	$	5,000.00
626-105A	TRAF CNTL MAINTENANCE	$	10,080.00
626-120A	FLAGGER CONTROL	$	126,000.00
626-125A	PILOT CAR	$	50,400.00
626-135A	WEIGHTED BASE TUBULAR MARKERS	$	2,100.00
Z629-05A	MOBILIZATION	$	45,000.00

DBE Commitment Statement

As the authorized representative of the DBE, I confirm that my firm has been contacted by the Prime Contractor/Bidder with regard to the above referenced project and work items. If the Prime Contractor is awarded the contract, we will enter into an agreement with them to perform the above referenced bid items and subsequently will meet performance requirments of a commercially useful function (CUF) as a subcontractor.

DBE Authorized Representative _____

DBE Signature which can be in one of the following forms:

a) Handwritten signature or initials
b) An electronic signature that is not typed using software (e.g., Adobe® Reader, Adobe Professional, Adobe E-Signature, DocuSign®);

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Date:	March 4, 2025	
Project Name and/or Key Number:	Key #21983 N 500 W Reconstruction, Teton Co	
Prime Contractor Name:	Sunroc Corporation	
DBE Firm Name:	Snake River Reclamation	
DBE Address:	123 South 725 West Blackfoot, Idaho	
DBE Contact Name and Phone Number:	Jennifer Adams 208-681-7442	
DBE Firm Total:	$	66,908.00

DBE WORK ITEMS

Item Number	Item Name	Item Quote
212-011A	Fiber Wattle	$ 34,644.00
621-005A	Seed Bed Preparation	$ 2,184.00
621-010A	Seeding-Roadside	$ 3,780.00
621-010B	Seeding-Wetland	$ 100.00
654-025A	Compost	$ 18,200.00
Z629-05A	Mobilization	$ 8,000.00

DBE Commitment Statement

As the authorized representative of the DBE, I confirm that my firm has been contacted by the Prime Contractor/Bidder with regard to the above referenced project and work items. If the Prime Contractor is awarded the contract, we will enter into an agreement with them to perform the above referenced bid items and subsequently will meet performance requirments of a commercially useful function (CUF) as a subcontractor.

DBE Authorized Representative Jennifer Adams

DBE Signature which can be in one of the following forms:

a) Handwritten signature or initials
b) An electronic signature that is not typed using software (e.g., Adobe® Reader, Adobe Professional, Adobe E-Signature, DocuSign®);

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Date:	March 4, 2025	
Project Name and/or Key Number:	Key #21983 N 500 W Reconstruction, Teton Co	
Prime Contractor Name:	Sunroc Corporation	
DBE Firm Name:	Coldwater Group, Inc.	
DBE Address:	1452 W Stone Field Way, B3 Pleasant View, UT 84404	
DBE Contact Name and Phone Number:	Trent Webb-208-815-0946	
DBE Firm Total:	$	36,158.10

DBE WORK ITEMS		
Item Number	Item Name	Item Quote
308-015A	Pulverize Existing Surface	$ 33,658.10
Z629-05A	Mobilization	$ 2,500.00

DBE Commitment Statement

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DBE Authorized Representative Matt Montano

DBE Signature which can be in one of the following forms:

a) Handwritten signature or initials
b) An electronic signature that is not typed using software (e.g., Adobe® Reader, Adobe Professional, Adobe E-Signature, DocuSign®);

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Date:	March 4, 2025	
Project Name and/or Key Number:	Key #21983 N 500 W Reconstruction, Teton Co	
Prime Contractor Name:	Sunroc Corporation	
DBE Firm Name:	Clear Zone Construction LLC	
DBE Address:	24574 Farmway Road Caldwell, ID 83607	
DBE Contact Name and Phone Number:	Charmolita Martin-208-629-9178	
	DBE Firm Total:	$ 83,269.40

DBE WORK ITEMS			
Item Number	Item Name	Item Quote	
203-006A	Removal of Sign	$	1,944.00
616-010A	Signs TY B	$	4,962.50
616-035A	Sign Brackets & Brace Angles	$	1,143.90
616-050A	Brkawy Stl Sign Post TY E	$	5,734.20
616-070A	Brkawy Stl Sign Post Inst Ty E	$	10,780.00
634-005A	Mailbox-Type A	$	2,940.00
634-005B	Mailbox-Type B	$	4,500.00
S901-05A	SP-Mailbox Cluster (16 Mailbox)	$	11,918.00
630-025A	Longitudinal-Pavement Marking	$	15,696.80
Z629-05A	Mobilization	$	23,650.00

DBE Commitment Statement

As the authorized representative of the DBE, I confirm that my firm has been contacted by the Prime Contractor/Bidder with regard to the above referenced project and work items. If the Prime Contractor is awarded the contract, we will enter into an agreement with them to perform the above referenced bid items and subsequently will meet performance requirments of a commercially useful function (CUF) as a subcontractor.

DBE Authorized Representative Ch El Mct

DBE Signature which can be in one of the following forms:

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b) An electronic signature that is not typed using software (e.g., Adobe® Reader, Adobe Professional, Adobe E-Signature, DocuSign®);

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Date:	**March 4, 2025**	
Project Name and/or Key Number:	**Key# 21983 N 500 W Reconstruction, Teton Co**	
Prime Contractor Name:	**Sunroc Corporation**	
DBE Firm Name:	**All Rail Construction LLC**	
DBE Address:	**24574 Farmway Rd** **Caldwell, ID 83607**	
DBE Contact Name and Phone Number:	**Charmolita Martin 208-629-9178**	
	DBE Firm Total:	**$ 40,900.00**

DBE WORK ITEMS		
Item Number	**Item Name**	**Item Quote**
612-005A	W-Beam Guardrail	$ 350.00
612-050A	Guardrail Terminal	$ 3,600.00
612-120B	Guardrail Transition High Speed	$ 3,500.00
612-150A	Concrete Barrier	$ 26,250.00
612-155A	Concrete Terminal TY A	$ 1,200.00
Z629-05A	Mobilization	$ 6,000.00

DBE Commitment Statement

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DAVIS-BACON WAGE

GENERAL WAGE DECISION ID250087

PUBLICATION DATE 01/03/2025 ID87

The above referenced wage rates can be obtained

at

http://www.sam.gov

DAVIS-BACON WAGE RATES

Idaho Federal Aid Project No. A021(983)
N 500 W RECONSTRUCTION
Teton County, Key No. 21983

The following Davis Bacon Wage Rates shall be posted by the Contractor using Poster WH-1321 and shall be placed prominently in a location where it will be noticeable and accessible to all workers at the site of the work on each Federal Aid Project.

Should these papers tear or become illegible, they shall be replaced as long as work continues. Posters and additional copies of this form are available from the Engineer.

"General Decision Number: ID20250087 01/03/2025

Superseded General Decision Number: ID20240087

State: Idaho

Construction Type: Highway

Counties: Bear Lake, Caribou, Clark, Fremont, Lemhi, Madison, Oneida and Teton Counties in Idaho.

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 on 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 wage 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.

Modification Number	Publication Date
0	01/03/2025

PLAS0072-001 06/01/2023

ZONE 1:

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER	$ 38.05	16.89

Zone Differential (Add to Zone 1 rate): Zone 2 - $3.00

BASE POINTS: Spokane, Pasco, Lewiston, Wenatchee

Zone 1: 0-45 radius miles from the main post office

Zone 2: Over 45 radius miles from the main post office

SUID2013-015 06/17/2013

	Rates	Fringes
CARPENTER (Form Work Only)	$ 26.57	8.10
ELECTRICIAN	$ 25.00	10.93
HIGHWAY/PARKING LOT STRIPING: Painter	$ 24.80	6.91
LABORER: Asphalt, Includes Raker, Shoveler, Spreader and Distributor	$ 23.37	10.50
LABORER: Common or General	$ 22.68	10.90
LABORER: Concrete Saw (Hand Held/Walk Behind)	$ 23.98	11.05
LABORER: Grade Checker	$ 23.52	11.05
LABORER: Mason Tender - Cement/Concrete	$ 23.42	10.90
OPERATOR: Backhoe/Excavator/Trackhoe	$ 25.74	10.07
OPERATOR: Bobcat/Skid Steer/Skid Loader	$ 25.35	11.55
OPERATOR: Broom/Sweeper	$ 24.95	10.18
OPERATOR: Bulldozer	$ 26.19	9.60
OPERATOR: Crane	$ 26.22	10.00
OPERATOR: Crusher	$ 25.06	9.23
OPERATOR: Grader/Blade	$ 25.96	10.00
OPERATOR: Hydroseeder	$ 24.76	11.51
OPERATOR: Loader	$ 26.22	9.98
OPERATOR: Mechanic	$ 26.91	10.22

OPERATOR: Oiler.....$ 25.66 9.23

OPERATOR: Paver (Asphalt, Aggregate, and Concrete).....$ 26.13 10.40

OPERATOR: Roller (Subgrade).....$ 22.24 8.57

OPERATOR: Roller.....$ 25.54 10.62

OPERATOR: Rotomill.....$ 25.84 10.63

OPERATOR: Screed.....$ 25.42 9.93

TRAFFIC CONTROL: Flagger.....$ 22.68 10.90

TRAFFIC CONTROL: Laborer-Cones/ Barricades/Barrels - Setter/Mover/Sweeper.....$ 22.66 10.90

TRUCK DRIVER: Distributor Truck.....$ 21.66 13.04

TRUCK DRIVER: Dump Truck.....$ 21.86 13.18

TRUCK DRIVER: Lowboy Truck.....$ 21.53 12.96

TRUCK DRIVER: Oil Distributor Truck.....$ 22.54 12.35

TRUCK DRIVER: Water Truck.....$ 21.35 13.33

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

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

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 (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the

discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

a) a survey underlying a wage determination
b) an existing published wage determination
c) an initial WHD letter setting forth a position on a wage determination matter
d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210.

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END OF GENERAL DECISION"

SPECIAL PROVISIONS

IDAHO FEDERAL AID PROJECT NO. A021(983)

N 500 W Reconstruction Teton County

For the work of rehabilitating and widening North 500 West from 7380 North to 10000 North using Recycled Asphalt Base Stabilization, additional ¾" Aggregate and an HMA overlay.

The following special provisions and all addenda issued supplement or modify the 2023 Idaho Transportation Department Standard Specifications for Highway Construction, 2020 Quality Assurance (QA) Manual (10/19), 2024 QA Manual Supplementals to the 2020 QA Manual (7/29/24), 2024 Buy America Insert (4/9/2024), 2023 Quality Assurance Special Provision for State Acceptance (12/07/2023), 2024 Special Provision for 405 Superpave Hot Mix Asphalt (11/29/2023), April 2023 Standard Drawings, Title VI Special Provisions; FHWA-1273 Federal Aid Required Contract Provisions, General Wage Decision ID250087.

SOURCE IDENTIFICATION

Designated source(s): Designated source(s) are not identified for this contract/project.

Contractor provided sources. Provide an approved source(s) for all materials to be embanked or processed for placement. Department owned or controlled sources will not be allowed for this contract.

Cost. Assume all costs incurred in obtaining approvals for use of source(s)

CONTRACT TIME AND LIQUIDATED DAMAGES

Work will not start earlier than April 14, 2025 or later than June 2, 2025 and must be completed within 70 working days.

Once started, work must continuously progress until completion. Return traffic through the work zone to normal operations during any planned or unplanned work stoppage lasting longer than 3 working days.

LIQUIDATED DAMAGES

The amount of liquidated damages for failure to complete the work on time will be $5,000 per day.

Liquidated damages provision does not waive the Department's right to seek other remedies for a breach of contract by the awarded Contractor.

CONTRACTOR NOTES

DBE PROGRAM REQUIREMENTS

10/21

For bidding purposes, the Contractor must comply with the DBE program requirement of **11.0%**. Upon award, the approved percentage % on the ITD-2396 DBE Commitments form becomes contractual and failure to comply is a breach of contract. Any change to this contractual commitment during the administration of the contract must be coordinated through the Office of Civil Rights.

Whenever the Engineer determines, after investigating and obtaining evidence the Contractor has not complied with the DBE program requirement, the Engineer will take corrective action. Refer to the Department's Standard Specifications for Highway Construction, Section 110, Civil Rights.

The Contractor, sub recipient, or subcontractor will not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor will carry out applicable requirements of 49 CFR Part 26 in the award and administration of USDOT-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 (e.g., withholding monthly progress payments, assessing sanctions, liquidated damages, disqualifying the Contractor from future bidding as non-responsible).

For additional DBE Program information see the Department's DBE program requirements located at: https://itd.idaho.gov/civilrights/

AGGREGATE BASE

For aggregate base material added to the roadway ballast to be used in the CRABS or CTB process, In-Place Density acceptance for the aggregate base will be in accordance with density requirements of the CRABS or CTB process. In addition, the aggregate base material in the roadway ballast used in the CRABS or CTB process will not be subject to statistical or quality level analysis or pay factor equations.

BIDDER Q&A **1/25**

Prior to bid opening, submit any project-related questions through QuestCDN – Submit questions by 5:00pm MT on the Thursday prior to the bid opening. We are not obligated to respond to questions received after the stated cutoff date and time.

COMMUNICATION PROTOCOL DURING CONSTRUCTION BIDDING 11/23

During the advertisement period, prospective Contractors/Bidders will address all questions through QuestCDN. After Bid Opening and through Contract Award, all communications between the Department and the Contractor/Bidder, and any unsuccessful bidders, will be through the State Design Engineer at 208.334.8502. The Department will be unable to share any information related to bid submittals or pending Department decisions during this time. After Contract Award, all communications between the Department and the Contractor will be through the Design Construction (Resident) Engineer.

EMPLOYMENT AGENCY **01/23**

To find the nearest employment office, visit https://www.labor.idaho.gov/dnn/Local-Office-Directory.

ENVIRONMENTAL REQUIREMENT - MIGRATORY BIRD PROTECTION ACT COMPLIANCE

Work Window Restriction:

No clearing or removal of vegetation and trees is allowed between April 30th and August 15th unless work is approved by the Engineer. To request approval, submit a survey that verifies the absence of Migratory Birds. The survey shall be:

a. Completed immediately prior to ground disturbing, bridge removal or tree removal activities.
b. Covers an area or work activity including a 50' buffer.
c. Initial survey work is incidental to the contract.

ENVIRONMENTAL REQUIREMENT – NON-REPORTING 404 NATIONWIDE PERMIT 3 (NWP 3)

This project has 404 permit coverage under a US Army Corps of Engineers non-reporting 404 Nationwide Permit 3 (NWP 3) and the associated Idaho Department of Environmental Quality 401 Certification.

Penalties and Damages

Fines, penalties, and costs to the Department for the Contractor's failure to comply with the Clean Water Act, to mitigate environmental damage, or to resolve regulatory actions will be deducted from moneys due the Contractor.

ENVIRONMENTAL REQUIREMENT – POLLINATOR PROTECTION

Implement the following Best Management Practices to support pollinators and pollinator habitat along roadside corridors:

- Protect Existing Habitat: Protect existing stands of native vegetation. Ground disturbing activities will be limited only to those areas deemed necessary for the construction of the project. Disturbing existing areas of native vegetation purely for the convenience of the contractor is prohibited.
- Herbicide Use: Reduce the risk of herbicide exposure to pollinators by:
  (1) Eliminating or reducing herbicide exposure to pollinators by first utilizing non-chemical (manual) methods to eliminate noxious and undesirable weeds.
  (2) If herbicide use is necessary, spot treat specific weeds with selective herbicides that do not leave residuals in the soil.
  (3) Treat weeds before they flower, to avoid spraying when pollinators are present.
  (4) Avoid spray application if winds are above 10 mph.

ENVIRONMENTAL REQUIREMENT – WETLAND PROTECTION

Wetlands are present within the project area. Non-compliance with the Clean Water Act may result in enforcement action by federal regulatory agencies. Disturbances to wetland areas not specifically designated on the plans is strictly prohibited. Discharge of pollutants (including sediments) to the wetland area is strictly prohibited.

Comply with the following conditions to minimize effects to wetlands:
Adjacent wetlands that are identified are to be retained and protected from disturbance and will be fenced off with temporary orange construction fencing and appropriately signed to retain and protect.

GENERAL WAGE DECISION **01/18**

Upon written request 10 calendar days before the bid opening date, the Department will provide a missing job classification, wage rate, and fringe benefit rate as outlined on FHWA-1273 IV.1.b to all plan holders as addenda.

IDAHO IMPLEMENTATION OF AASHTO MANUAL FOR ASSESSING SAFETY HARDWARE, 2ND EDITION (2016)

The following safety hardware must meet AASHTO 2016 MASH criteria, ITD's Standard Drawings, and if the hardware is a proprietary product it must be approved on ITD's Qualified Product List (QPL) for new permanent installations and full replacements:

- W-beam
- Cast-in-place concrete barriers
- W-beam tangent terminals and buried-in-backslope terminals
- W-beam flared terminals and terminals installed on a flare
- Crash cushions
- Transitions
- Permanently installed portable barriers
- Bridge rails
- Cable barriers
- Cable barrier terminals

The following safety hardware may be MASH 2009/2016 or NCHRP 350 compliant for new permanent installations and full replacements:

- Double-sided or median terminals

- Sign supports
- All other breakaway hardware

For projects utilizing December 2018 Standard Drawings release or earlier, replace the 612 series sheets with the 612 series from the latest Standard Drawings release.

Temporary work zone devices (including portable barriers, truck- and trailer-mounted attenuators, portable changeable message signs (PCMS), temporary traffic signals, and camera trailers) manufactured after December 31, 2019, must have been successfully tested to the 2016 edition of MASH. Such devices manufactured on or before this date, and successfully tested to NCHRP Report 350 or the 2009 edition of MASH, may continue to be used throughout their normal service lives.

PLANT CONTROL CHARTS

As noted in ITD Standard Specification Section 405.03, plant control charts will be a required submittal. These submittals must include mix design inputs, and actual aggregate and additive weights as recorded by automated or staff recorded logs.

REFERENCE FILES **01/22**

Pursuant to Subsection 102.03, upon request or at the Department's discretion, the Department will provide electronic design data, also known as reference files, for the project during the advertisement period. It is the bidder's responsibility to check, periodically, to see if reference files have been posted or updated on the ITD Notice to Contractor's page, located at the following link: https://itd.idaho.gov/business/?target=contractor-bidding/

Addendums will not be used to notify the bidder that reference files have been posted. The reference files will only be available during the advertisement period and removed after the bid opening.

SOFT SUBGRADE SOILS

The Contractor should anticipate soft and moisture-sensitive subgrade soils could occur through the project. These soils will be prone to rutting or pumping under construction equipment, especially if they become wetter than optimum moisture content at the time of construction. The Contractor is to protect these soils during construction activities, and the Contractor determines how to best achieve this requirement. No separate measurement of payment will be made for any excavation or replacement of excavated material below subgrade elevation made necessary from construction activities.

UTILITY COORDINATOR PROVIDED BY THE CONTRACTOR **01/18**

Provide an individual whose primary responsibility is to coordinate the work with each utility company and the railroad company that will or may affect the utility company's or railroad company's property, facilities, or operations. Ensure this individual is readily available by telephone whenever there is work being done by the Contractor, subcontractor, lower-tier subcontractor, utility company, or railroad company.
The Department will not make separate payment for coordinating the work that affect each utility company's or railroad company's property, facilities, or operations. This work coordination is incidental and included in the ground disturbing construction contract pay items.
Ensure this individual is responsible for the following activities and makes documents generated by these activities available to the Contractor, utility company, railroad company, and the Engineer:

1. Maintaining and posting a list of emergency telephone numbers for the Contractor and its subcontractors (including lower-tier subcontractors), each utility company, railroad company, and the Engineer.
2. Notifying the Contractor and its subcontractors (including lower-tier subcontractors), each utility company, railroad company, and the Engineer of a method, including telephone number, to contact the utility coordination individual. An alternate contact person with telephone number will be provided for situations when the utility coordination individual is not available.

3. Maintaining and documenting in writing all instructions, general discussions, or meetings notes that involve work on each utility company's or railroad company property or facilities or work which has or may affect the utility or railroad operations.
4. Maintaining and documenting in written or printed format the proposed and actual time schedules of work on utility or railroad property or facilities. Time schedules are to show the Contractor and its subcontractor (including lower-tier subcontractors), and each utility company or railroad company activities.
5. Maintaining and documenting in writing a diary of work each day that involve utility or railroad property and facilities, and any work that has or may affect the utility or railroad operations.
6. Coordinating with each utility company and the Engineer to resolve utility conflict and for any needed change orders to address utility conflicts.

ON PAGE 19, SUBSECTION 101.04 – DEFINITIONS

Delete the following under Working Day.:

4. Days during December, January, and February.

ON PAGE 28, SUBSECTION 104.01.B. – CONSTRUCTION PARTNERING

Delete the entire section.

ON PAGE 36, SUBSECTION 105.04 – COORDINATION OF CONTRACT DOCUMENTS 11/22

Delete items 7 through 12 and add the following:

7. Quality Assurance (QA) Manual Supplementals (BA or otherwise)
8. QA Manual
9. Standard Supplementals
10. Standard Specifications
11. Standard Drawings
12. Electronic Files (if specified as part of the contract)

ON PAGE 37, SUBSECTION 105.07 – UTILITY FACILITIES 04/23

Add the following to the end of the subsection:

Request locates of buried utility facilities by contacting the Utility One-Call Center by calling 1-800-342-1585, e-mailing digline@digline.com or faxing 1-800-342-1586.

Utilities by Fall River Electric are to be retained and protected.

Some utilities by Silver Star Communications are to be relocated adjacent to the proposed retaining wall as needed to avoid conflict.

Be responsible to coordinate with the Engineer to contact the appropriate utility company and arrange the initial utility hook up, when utility service (e.g., electrical, phone, water) for highway components (e.g., luminaries, signals, ITS) is required for the contract work. Supply utility service in a timely manner to allow for testing of highway components. Pay any fees charged by the utility company and provide the Engineer acceptable proof of payment for reimbursement.

Silver Star Communications
P.O. Box 900
Driggs, ID 83422
Contact: Justin Hawkins
Email: jhawkins@silverstar.net
Phone: (208) 354-6721

Fall River Electric
1150 North 3400 East
Ashton, ID 83420
Contact: Dave Peterson

Phone: (208) 652-7431

ON PAGE 68, SUBSECTION 107.10 - RESPONSIBILITY FOR INJURY DAMAGE 01/2024

In the fourth full paragraph, Delete the entire paragraph starting with "Submit a certificate..." and replace it with the following:

Submit a certificate of insurance to the email address provided on the Award letter and do not start work before obtaining approval of the insurance coverage by the Department

ON PAGE 82, SUBSECTION 107.19 – SURVEY MONUMENT PRESERVATION

Under subsection 107.19.2, add the following after the first full sentence:

> Research within the project limits in the MCPD for survey monuments within the work zone to determine the possible existence of survey monuments to preserve and protect or to be reestablished after construction. Document that this research has been completed.

ON PAGE 82, SUBSECTION 107.19 – SURVEY MONUMENT PRESERVATION

Under subsection 107.19.9.g., add the following at the end of the subsection:

> The provisions of Section 107.08 will apply.

ON PAGE 85, SECTION 107.20 – WEED CONTROL

Add the following:

Inspect fill material and locations before transporting and using on the project. The origin of the material and surrounding soils of the source shall be included in the inspection documentation. The State of Idaho Department of Agriculture Seed Laboratory, Boise, Idaho (208) 332-8630, may test source locations at the request of the Engineer.

ON PAGE 87, SUBSECTION 108.01 - SUBLETTING OF CONTRACT 04/23

Delete the second sentence and substitute the following:

> If the Engineer consents to subletting a portion of the work, the Contractor will use its own organization to perform work amounting to at least 30 percent of the original contract amount.

ON PAGE 87, SUBSECTION 108.01 – SUBLETTING OF CONTRACT 08/2023

Delete the fourth paragraph and replace with:

For federal-aid contracts, the subcontractor must have a Unique Entity Identifier (UEI) prior to Engineer approval of subcontract agreement (an "active" account is not required).

ON PAGE 112, SUBSECTION 109.05 – PARTIAL PAYMENTS

Delete the 2nd sentence and replace with the following:

> Partial payments will be made once each month as the work progresses and only if the Contractor performs work in accordance with the contract or as directed.

Delete the 3rd sentence.

ON PAGE 173, SUBSECTION 213.02 – MATERIALS

Add the following:

Do not place fine grained subsurface soils from unsuitable excavation in infiltration basins, retention/detention basins, or within roadside ditches.

ON PAGE 174, SUBSECTION 212.03 CONSTRUCTION REQUIREMENTS

Add to the 3rd paragraph of Part A:

> No more than 5 acres of disturbed soil may be unstabilized on a project at any given time, unless otherwise approved by the Engineer.

ON PAGE 517, SUBSECTION 621.01 – DESCRIPTION

Add the following:

621-005A Seed Bed Preparation – 1.82 acres
621-010A Seeding (Roadside) – 1.80 acres
621-010A Seeding (Wetland) – 0.02 acres
654-025A Compost – 3.64 acres

ON PAGE 518, SUBSECTION 621.01 – DESCRIPTION

Replace the first sentence of the second paragraph with the following:

Perform seeding and placement of soil conditioner, mulch, fertilizers, tackifiers, or other soil amendments between April 1 and June 1 OR September 30 and November 15, or as approved.

ON PAGE 518, SUBSECTION 621.03.B – SEEDBED PREP

Replace fourth paragraph with:

"Roughen and serrate or cross-rip slopes in a horizontal direction that include topsoil application before placement of the topsoil. After spreading topsoil, cultivate areas to be broadcast seeded or hydroseeded by raking or mechanically roughening the soil at least 2 inches deep and leave in a rough condition similar to that obtained by walking a cleated-crawler tractor up and down the slopes, immediately before applying seed, mulch, or soil amendments."

Add the following after 5th paragraph:

Have Engineer preapprove all topsoil material within the project area before moving and placing the topsoil in areas to be seeded. Topsoil material must conform to section 107.20 and section 213 prior to placement.

ON PAGE 519, SUBSECTION 621.03.C – FERTILIZING

Add the following after the fifth paragraph:

Apply approved fertilizer ingredients, soil amendments and organic material as determined from the soil analysis report.

Base adjusted application rates on available nutrients per acre and nutrient content of fertilizer furnished. Submit manufacture's recommended rates for each product prior to application and a copy of the purchase invoices after approval.

ON PAGE 519, SUBSECTION 621.03 – SEEDING

Seed Mix for areas beyond 10 feet of pavement and 3H:1V or steeper slopes:

GRASS
Native Idaho Fescue (FEID) 6 lbs/ac
Bluebunch Wheatgrass (PSSPS) - 6 lbs/ac
Mt Brome (BRMA) – 4 lbs/ac
Canada Bluegrass (POCO) – 3 lbs/ac
Prairie Junegrass (JUCE) – 4 lbs/ac

Wildflowers
Common Yarrow (ACMIL) – 5 lbs/ac
Showy Milkweed (ASSP) – 2 lbs/ac
Silky Lupine (LUSE4) – 4 lbs/ac
Dark-blue Beardtongue (PECY3) – 6 lbs/ac
Cleome Serrulata (CLSE) – 4 lbs/ac
Prairie Coneflower (RACO3) – 4 lbs/ac
Rabbitbrush (CHVI8) – 2 lbs/ac
Canada Goldenrod (SOCA6) – 4 lbs/ac

* ***Do Not seed milkweed if livestock graze roadsides***
* ***Alternate Penstemon species: Thickleaf Penstemon (PEPA6), Venus Penstemon (PEVE2)***

Seed Mix for streambed, wetland or areas with water:

Grass Species Mix
Slender Wheatgrass (ELTR7) – 4 lbs/ac
Thickspike Wheatgrass (ELLA3) – 4 lbs/ac
Tufted Hairgrass (DECE) – 5 lbs/ac
Prairie Junegrass (KOMA) – 5 lbs/ac
Nebraska Sedge (CANE2) – 2 lbs/ac

ON PAGE 521, SUBSECTION 621.03.E – MULCH, MULCH ANCHORING

Replace first sentence of first paragraph with:

"Furnish and apply fertilizers and soil amendments as determined from the soil analysis and provide approved products listed on the QPL List, at manufacturer's recommended rate according to the slope gradient and soil conditions. Submit manufacture's recommended rates for each product prior to application and a copy of the purchase invoices after approval."

ON PAGE 522, SUBSECTION 621.03.E.3.D – HYDRAULICALLY APPLIED EROSION CONTROL

Add the following to paragraph five (after bullet d):

Do not perform mulching when wind interferes with mulch placement. Ensure material applied to the ground allows for the absorption and percolation of moisture. If rainy conditions are anticipated, do not apply hydroseeding mixture outside manufacturer's application recommendations. If an unanticipated rainy condition occurs, re-apply the hydroseeding mixture to uncured areas at no additional cost to the Department.

Temporary erosion control BMPs and all non-biodegrable (synthetic) material must be removed at the end of the project and prior to installing revegetation applications. Non-biodegrable (synthetic) material will not be used for permanent revegetation activities or applications.

Do not allow trucks or equipment to drive on the area after seed is in place.

S501-15A GRAVITY LARGE CONCRETE BLOCK AND SEMI-GRAVITY RETAINING WALL

Description. Design retaining walls, provide, fabricate and install all materials for the walls, including concrete facing elements, leveling pad if required, foundation preparation, wall facing erection, structural excavation and compacting backfill, internal drainage system, and any other incidental items required to complete the retaining walls in accordance with the Contract and AASHTO LRFD.

Contact the Engineer if conflicts arise between the Contractor's proposed wall system and the Contract

Related work may include temporary shoring to construct the walls, scour countermeasures placement and finish grading at the wall toes, and erosion countermeasures construction at the wall ends.

Do not allow any extra surcharge on the constructed retaining walls, such as an accumulation of blasted rock and soil during rock blasting. Repair any damage to retaining walls at no cost to the Department.

Design Requirements.

A. General. Design the retaining walls as shown on the plans. The Department has provided preliminary dimensions for estimating purposes only. Perform a design for a chosen proprietary system that will establish the following criteria, as a minimum:

1. Concrete unit dimensions for each layer.
2. Size of concrete or gravel leveling pad (if required by proprietary system or as shown in the plans).
3. Quality and quantity of backfill.

Design the wall in accordance with the AASHTO LRFD *Bridge Design Specifications, 9th Edition* and with latest revisions. Design the walls for a design life of 75 years for permanent structures, 100 years for walls around bridge abutments (that are supported by spread footings placed on wall backfill), building, critical utilities, and 3 years for temporary structures.

Unless founded on bedrock, embed the wall at least 1 foot at the wall front face (for walls constructed along rivers or streams, this embedment is measured from the bottom of the potential scour depth) or as shown on the plans, whichever is greater. Embedment for walls on slopes must meet global stability requirements.

B. Detailed Design Drawings. Submit design drawings in PDF format with computations to the Engineer. Include details, dimensions, quantities, and cross sections necessary to construct the wall. Prepare plans to ITD standards and include elevation view, plan view, and section view sheets for each wall, containing the following:

1. *Elevation view*. Show the elevations at break points at the top of each wall face and at the top of each leveling pad (or bottom of each wall). Show concrete unit component details in the design drawings.
2. *Plan view.* Show dimensions tying break points at the top of each wall face and top of each leveling pad (or bottom of each wall) to the roadway centerline.
3. *Section (side) views.* Show dimensions tying break points at the top of each wall face and at the top of each leveling pad (or bottom of each wall) to the roadway centerline. Show excavation limits for wall construction.
4. Unit weight of concrete for concrete blocks.

5. Material takeoff for each wall, listing quantities for each main wall components, and incidental items required for construction.
6. Details for concrete units, leveling pads, coping if required. Design for wall end treatment, such as burying the wall ends, turning the wall ends into the slope and show them in the design drawings.
7. Design for drainage system as shown on the plans or this specification. As a minimum, design and provide an underdrain system for draining water away from the backfill and the wall.
8. Concrete coping details (cast in place or precast, if required).

Stamp and sign calculations and design drawings by a Professional Engineer licensed in the State of Idaho.

Provide design calculations and design drawings to the Engineers for review and approval before fabrication of wall elements. Allow at least 15 working days for the Engineer to review and approve the design calculations and design drawings.

Before project completion, provide the Engineer with as-built drawings in PDF format.

Materials.

A. General. Arrange to purchase or manufacture the necessary components for the selected pre-approved wall system from the following supplier list or approved equals. Use only one type of wall in the project unless indicated otherwise in the design.

Wall System	Manufacturer or Supplier	Limitations in Use
REDI-ROCK	- Wilbert Precast, Inc. 2215 E. Brooklyn Ave. Spokane, WA 99217 Phone: 509-325-4573 - CXT/Cougar Mountain Redi Rock 6701 E. Flamingo Ave, Bld 300 Nampa, ID 83687 (208) 891 8800	-Not approved for use within 20 feet of bridge abutments. -Maximum height is 12 ft.
LOCK-BLOCK	Ultrablock, Inc 815 NE 172nd Ave. Vancouver, WA 98684 (800) 377 3877	-Not approved for use within 20 feet of bridge abutments. -Maximum height is 12 ft.
RECON	ReCon Retaining Wall System, Inc. 7600 W 27th Street, # 229 St. Louis Park, MN 55426 (952) 922 0027	-Not approved for use within 20 feet of bridge abutments. -Maximum height is 12 ft.
GRAVIX	Earth Wall Products 1427 Walcutt's Way Marietta, GA 30064 (678) 594-3451	-Not approved for use within 20 feet of bridge abutments. -Maximum height is 25 feet.
Verti-Block- Gravity	Verti-Block PO Box 2347 Sandy, UT 84091 Coeur d'Alene Paving, Inc. 120 E. Anton Avenue Coeur d'Alene, ID 83815	-Maximum height is 12 feet high for walls with level backfill and no traffic loads within 6.0 feet of the back of the top wall block, 10 feet for walls with level backfill and traffic loads adjacent to the wall, and 9 feet for walls with sloping backfill up to as steep as 3:1 (H:V). -Not approved for use within 20 feet of a bridge abutment.

Elevate Precast Concrete Counterfort Retaining Semi-Gravity Wall System	Utility Concrete Products, LLC 2495 W. Bungalow Road Morris, IL 60450	1. Only retaining wall backfill meeting ITD Special Provisions requirements will be allowed. Retaining wall bearing capacity, sliding and passive (if used) resistance must be based on the actual soil type(s) beneath and in front of the wall(s). 2. The retaining wall drainage system must be defined via the use of an approved drain system. All wall designs must account for groundwater accumulation behind the wall below the drain system elevation. Drainage socks around drain pipes will not be allowed. 3. All retaining wall subgrade, support fill and backfill compaction must meet ITD Class A compaction requirements.

Provide a Certificate of Compliance (along with backup test reports) in accordance with 106.04 of the *Standard Specifications* certifying that all materials provided by the Contractor or a manufacturer under these special provisions comply with the specifications for the wall system. Provide certifications before starting wall construction. Obtain written approval from the Engineer for non-specified materials or material from sources not listed in the contract documents.

B. Concrete Requirements. Provide Class 40A Concrete that complies with 502 of the *Standard Specifications*, except as modified in these Special Provisions. Obtain Engineer approval before using retarding or accelerating agents, or additive containing chloride.

1. Testing and Inspection. The Engineer will determine precast unit acceptability on the basis of compressive strength tests and visual inspection. The Engineer will accept precast units before 28 calendar days if strength has reached the 28-day specified value. The Contractor or supplier must provide facilities and perform necessary sampling and testing. Concrete blocks utilizing Type I or II cement are acceptable for placement in the wall when initial compressive strengths (as defined in paragraph (4) of these Special Provisions) exceed 85 percent of 28-day strength requirements. Concrete units utilizing Type III cement are acceptable for placement in the wall before 28 calendar days only when compressive strength exceeds the 28-day strength requirement.

2. Concrete Finish and Color. Unless indicated otherwise, provide units with concrete facing texture and color as provided by the wall manufacturer. Submit the proposed concrete facing texture and color to the Engineer for approval before casting the concrete units.

3. Tolerances. Manufacture concrete blocks within the following tolerances:

   - Dimension within $^{3}/_{16}$ inch for block height.

- Dimension within ½ inch for block width, unless field cut for fitting.
- The block depths must be at least equal to the design depths shown in the shop drawings.

4. Compressive Strength. The Engineer will determine concrete unit acceptance with respect to compressive strength based on production lots. The Department defines a production lot as a group of units represented by a single compressive strength sample that consists of 40 blocks or a single day's production, whichever is less. During the concrete unit production, the manufacturer will randomly sample the concrete in accordance with 502.02 of the *Standard Specifications*. The Engineer may randomly select a single compressive strength sample, consisting of a minimum of five cylinders or for every production lot.

   Prepare cylinders for compressive strength tests in accordance with ASTM C31 and testing in accordance with ASTM C39. For every compressive strength sample, cure at least two cylinders in the same manner as the units and tested at approximately 7 days. The average cylinder compressive strength will determine the initial concrete strength. In addition, cure three cylinders in accordance with 502.02 and tested at 28 calendar days.

   The average 28-day cylinder compressive strength will be the production lot compressive strength.

   If the initial strength test results indicate a compressive strength in excess of 4,000 psi, the Engineer will use these test results for that production lot and waive the requirement for testing at 28 calendar days for that particular production lot.

   The Engineer will accept a production lot if the compressive strength test result is greater than or equal to 4,000 psi.

   If the compressive strength test result is less than 4,000 psi, the Engineer will base production lot acceptance on meeting all the following criteria:

   - Ninety percent of the compressive strength test results exceed 4,150 psi for the overall production.
   - The average compressive strength test results exceed 4,250 psi for six consecutive lots.
   - No individual compressive strength test results must fall below 3,600 psi.

   In the event that a production lot fails to meet the specified compressive strength requirements, the Engineer will reject that production lot.

5. Rejection. In addition to the preceding paragraphs, the Engineer may reject a unit or lot with any of the following defects:

   - Defects that indicate imperfect molding.
   - Defects that indicate honeycombed or open texture concrete.
   - Cracked or chipped units.
   - Front color variation due to excess form oil or other reasons.

6. Handling, Storage and Shipping. Handle units with care to eliminate chipping and fractures.

C. Coping For Walls. Provide Class 40A concrete for coping in accordance with 502 of the *Standard Specifications* when coping is required. Provide metal reinforcement for coping in accordance with 503 of the *Standard Specification*.

D. Leveling Pad. Provide a gravel or non-reinforced concrete leveling pad consisting of Class 22 concrete as shown on the plans.

E. Backfill Material. Provide the material that is free of shale, organic matter, mica, gypsum, clay, or soft, poor durability particles and meets the following property requirements:

1. The material must have a minimum internal friction angle of 34º, determined in accordance to test method AASHTO T-236. Perform this test on material finer than No. 10 sieve compacted to 95% of the maximum dry density as determined by AASHTO T-99. The Engineer may waive the requirement for AASHTO T-236 test if the material has 80% or more material that is larger than ¾ inch and in this case an internal friction angle of 34º can be used in the design.
2. The material must have a soundness loss of less than 30% when tested in accordance to AASHTO T-104 using a magnesium solution with a test duration of 4 cycles (or less than 15% in sodium sulfate solution with a test duration of 5 cycles).
3. The reinforced backfill material must also meet the following property requirements:

Property	Test Method	Sieve Size	Percent Passing
Gradation	AASHTO T-27&11	4 in.	100
		No. 40	0-60
		No. 200	0-15

F. Drainage Aggregate Material for Segmental Block Wall Units. Provide drainage aggregate material for block wall units that is well-graded crushed stone or granular material meeting the following requirements:

Sieve Size	Percent Passing
1 in	100
¾ in	50 - 75
No. 4	0 - 60
No. 40	0 - 50
No. 200	0 - 5

Construction Requirements.

A. General. Ensure a field technical representative from the proprietary wall system to be on site for at least 2 days at the beginning of initial wall erection and available during the remaining wall erection to assist the Contractor and Engineer. The field representative must have been involved in successfully construction of at least three walls with sizes and complexity similar to the walls of this project in the last five years.

B. Wall Excavation. Excavate the wall in accordance with 210 of the *Standard Specifications* and as shown on the plans.

C. Foundation Preparation. Grade the structure foundation level for a width equal to or exceeding the bottom units or as shown on the plans. Before wall construction, compact the foundation, if not in rock, as directed. Remove and replace unsuitable soils (loose or soft soils encountered at the subgrade surface that cannot be effectively compacted by repeated passes of the roller) with Granular Borrow compacted to Class A requirements.

Cure the concrete leveling pad at least 12 hours before beginning wall concrete unit placement.

D. Wall Erection. Place large concrete units in their final position as shown on the design drawings. Handle and place large concrete units by work force or lifting devices. Place concrete units in successive horizontal lifts in the sequence shown on the design drawings as backfill placement and compaction proceeds. Place backfill material behind the concrete units while maintaining the facing in the desired position with temporary wedges or bracing in accordance with the wall supplier's recommendations. Ensure vertical tolerances and horizontal alignment tolerances along the wall line for concrete units are within ¾ inch when measured with a 10 foot straight edge. Ensure the maximum offset in any unit joint is ¾ inch. Check the position and tolerances of each concrete unit row before erecting the next row.

Remove and reconstruct walls, wall portions, or individual units constructed outside the tolerances in these Special Provisions, walls with negative batter (batter in excess of vertical away from the wall), or if the batter becomes negative during construction at no additional cost to the Department

E. Backfill Placement. Follow each erection course of concrete units with backfill placement. Place backfill in 12-inch loose lifts or less. Place backfill in maximum 6" loose lifts within 3' behind the back of wall face. In all cases, decrease lift thicknesses as necessary to obtain the required minimum backfill density.

Avoid facing element damage or misalignment when placing backfill. Remove and replace wall materials that become damaged or disturbed during backfill placement, or correct as directed at no additional cost to the Department. Correct wall facing element misalignment or distortion due to work not associated with these

Special Provisions as directed at no additional cost to the Department.

Compact backfill with the compactor running parallel to the wall face.

Compact backfill within 3' of the back of wall face with a minimum of 5 passes of a lightweight plate compactor or vibratory roller. Plate compactors must have a minimum operating weight of 180 lbs and a minimum plate width (smaller dimension) of 16", operate at a minimum frequency of 90 hertz and produce a minimum centrifugal force of 3000 lbs.

Compact backfill to a minimum of 95 percent of the maximum density as determined by AASHTO T-99, Method C or D (with oversize correction as outlined in this test). Uniformly distribute the backfill material moisture content before and during compaction throughout each layer, unless otherwise directed. Place backfill material with a moisture content range from optimum moisture to optimum moisture minus 4 percentage points, as determined by AASHTO T-99. Remove and rework backfill material that has moisture content in excess of the upper moisture limit until the moisture content is uniformly acceptable throughout the entire lift.

Perform backfill field density testing at the same frequency as for bridge abutments and approach slabs in accordance with the "Structure Backfill" construction type under Item 210- Compacting Backfill in the ITD Quality Assurance Manual.

Do not place backfill materials when they are frozen. Do not place backfill materials on snow cover or frozen materials.

At the end of each day's operation, slope the backfill away from the wall face to direct surface runoff away from the wall. In addition, do not allow surface runoff from adjacent areas to enter the wall construction site.

Method of Measurement. The Engineer will measure acceptably completed work by the square foot of wall surface area from the leveling pad top to the top concrete unit or coping tops (if coping is used).

Basis of Payment. The Department will pay for accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
Gravity Large Concrete Block & Semi-Gravity Retaining Wall	SF

Manufacturer's field representative services costs, coping, leveling pad, wall drainage systems, structural excavation and compacting backfill are incidental.

Temporary shoring to construct the walls, scour countermeasures placement and finish grading at the wall toes, and erosion countermeasures construction at the wall ends are either incidental or paid for under other items.

Final payment will not be made until the as-built drawings are accepted.

S900-50A CONTINGENCY AMOUNT - MISCELLANEOUS WORK 09/23

Description. This item will compensate the Contractor for minor work or material not specified in the project documents that is necessary to the work as directed by the Engineer.

Materials. Provide material as directed by the Engineer and in accordance with the ITD Standard Specifications.

Construction Requirements. Complete construction as directed by the Engineer and in accordance with the ITD Standard Specifications.

Method of Measurement. The Engineer will measure acceptably completed work by the Contingency Amount (CA).

Basis of Payment. The Department will pay for the accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
Contingency Amount - Miscellaneous Work	CA

S901-05A SP - MAILBOX CLUSTER (16 MAILBOXES, 2 PARCEL LOCKERS)

Description. Remove the existing mailbox assemble and provide and install the mailbox cluster.

Materials. Provide a mailbox cluster that is approved by the U.S. Postmaster General. Buy America is in effect for this project.

Fabricate the foundation and concrete pad in accordance with the manufacturer's specifications.

Provide an Aggregate Type A Base foundation that complies with 303 of the *Standard Specifications*.

Provide Class 30 Concrete that complies with 502 of the *Standard Specifications*. Obtain Engineer approval before using retarding or accelerating agents, or additive containing chloride.

Provide reinforcing steel that complies with 503 of the *Standard Specifications.*

Construction Requirements. Remove the existing mailbox assembly and return it to the owner. Provide and install a new mailbox cluster on an approved foundation.

Maintain continuous access to the existing mailboxes and do not interrupt mail service. The Engineer may approve an acceptable temporary mailbox assembly installed during construction operations before the installation of the new mailbox assembly.

Method of Measurement. The Engineer will measure acceptably completed work the by Each.

Basis of Payment. The Department will pay for the accepted quantities at the contract unit price as follows:

Pay Item	Pay Unit
SP - Mailbox Cluster (16 Mailboxes, 2 Parcel Lockers)	EACH

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
BOISE REGULATORY OFFICE
720 EAST PARK BOULEVARD, SUITE 245
BOISE, IDAHO 83712-7757

August 7, 2023

WALLA WALLA DISTRICT
REGULATORY DIVISION

SUBJECT: NWW-2023-00246, North 500 West Road Rehabilitation, Key No. 21983

Darryl Johnson
Teton County Road and Bridge
150 Courthouse Drive
Driggs, Idaho 83422

Dear Mr. Johnson:

We have determined that your proposed project North 500 West Road Rehabilitation, Key No. 21983 is authorized in accordance with Department of the Army (DA) **Nationwide Permit (NWP) No. 03: Maintenance**. This project is located along North 500 West between mile post 101.7 and 104.5 within Section 11, 14, & 23 of Township 6 North, Range 45 East, near coordinates 43.848940º N latitude and -111.110216º W longitude, near Tetonia, Teton County, Idaho. Please refer to File Number NWW-2023-00246 in all future correspondence with our office regarding this project.

Project activities include the discharge of approximately 185 cubic yards (CY) of fill below the ordinary high water mark permanently impacting 0.015 acres of Grouse Creek, 3 unnamed tributaries, and 1 unnamed drain and 0.098 acres of wetlands in order to widen the roadway and create a safe crossing of the aquatic resources. Fill within Grouse Creek, the 3 unnamed tributaries, and the unnamed drain are proposed to replace the existing degraded culverts with new, longer culverts to accommodate the wider road. The project also proposes to temporarily impact 0.196 acres of Grouse Creek, the 3 unnamed tributaries, and unnamed drain including abutting wetlands to construct temporary equipment access, for utilization of BMPs, and for the construction of a coffer dams to include piping in order to by-pass flows around the work area during construction. All work shall be done in accordance with the enclosed drawings, titled: *N 500 W Reconstruction Sheets 2-11, Dated 2-Feb-2023*.

DA permit authorization is necessary because your project may involve the discharge of fill material into waters of the U.S. This authorization is outlined in Section 404 of the Clean Water Act (33 U.S.C. 1344).

You must comply with all general, regional, and special conditions, for this verification letter to remain valid and to avoid possible enforcement actions. The general and regional permit conditions for *NWP No. 03: Maintenance* are attached and also available online[1]. In addition, you must also comply with the special conditions listed below.

The following Special Conditions include:

Special Condition: The permittee is responsible for all work done by any contractor. Permittee shall ensure any contractor who performs the work is informed of and follows all the terms and conditions of this authorization. Permittee shall also ensure these terms and conditions are incorporated into engineering plans and contract specifications.

You must also comply with the conditions detailed in the attached Section 401 Water Quality Certification (WQC) issued by the Idaho Department of Environmental Quality (IDEQ) on December 4, 2020. If you have any questions regarding the conditions set forth in the WQC, please contact IDEQ directly at 208-528-2650, Idaho Falls Regional Office.

Nationwide Permit General Condition 30 (Compliance Certification) requires that every permittee who has received NWP verification must submit a signed certification regarding the completed work and any required mitigation. This Compliance Certification form is enclosed for your convenience and must be completed and returned to us within 30 days of your project's completion.

This letter of authorization does not convey any property rights, or any exclusive privileges and does not authorize any injury to property or excuse you from compliance with other Federal, State, or local statutes, ordinances, regulations, or requirements which may affect this work.

This verification is valid until **March 14, 2026**, unless the NWP is modified, suspended or revoked. If your project, as permitted under this NWP verification, is modified in any way you must contact our office prior to commencing any work activities. In the event that you have not completed construction of your project by March 14, 2026, please contact us at least 60-days prior to this date. A new application and verification may be required.

[1] http://www.nww.usace.army.mil/Business-With-Us/Regulatory-Division/Nationwide-Permits/

We actively use feedback to improve our delivery and provide you with the best possible service. If you would like to provide feedback, please take our online survey[2]. If you have questions or if you would like a paper copy of the survey, please contact the Walla Walla District Regulatory. For more information about the Walla Walla District Regulatory program, you can visit us online[3].

If you have any questions or need additional information about this permit authorization, you can contact Jacob Cordtz.mil by phone at 208-283-8293, by mail at the address in the letterhead, or email at Jacob.w.Cordtz@usace.army.mil. For informational purposes, a copy of this letter has been sent to: IDEQ, IDWR, LHATC, and ITD HQ.

Sincerely,

James M. Joyner

James Joyner
Chief, Upper Snake & Idaho Panhandle
Branch, Regulatory Division

Encls
Transfer of Nationwide Permit Form
Compliance Certification
Nationwide Permit 03 Terms and Conditions
Drawings Titled: *N 500 W Reconstruction Sheets 2-11, Dated 2-Feb-2023*.

[2] https://regulatory.ops.usace.army.mil/customer-service-survey/
[3] http://www.nww.usace.army.mil/Business-With-Us/Regulatory-Division/

TRANSFER OF NATIONWIDE PERMIT

When the structures or work authorized by this Nationwide Permit, **NWW-2023-00246, North 500 West Road Rehabilitation, Key No. 21983**, are still in existence at the time the property is transferred. The terms and conditions of this Nationwide Permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this Nationwide Permit, the associated liabilities and compliance with the terms and conditions the transferee must sign and date below.

Name of New Owner:

Street Address:

Mailing Address:

City, State, Zip:

Phone Number:

_____ _____

Signature of TRANSFEREE *DATE*

COMPLIANCE CERTIFICATION

US Army Corps of Engineers
Walla Walla District

Permit Number: NWW-2023-00246

Name of Permittee: Darryl Johnson, Teton County

Date of Issuance: August 7, 2023

Upon completion of the activity authorized by this permit and any mitigation required by the permit, please sign this certification and return it to the following address:

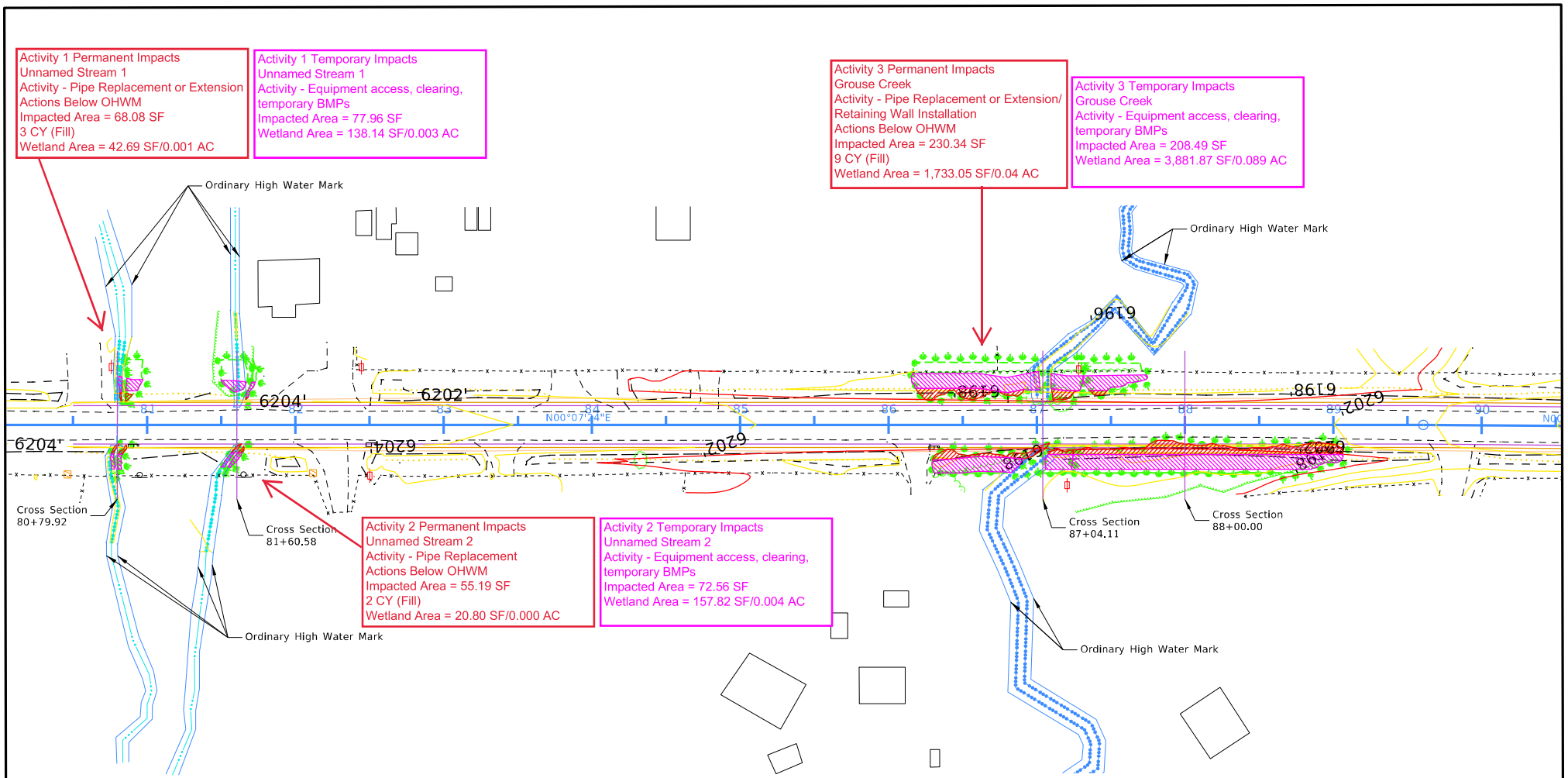
U.S. Army Corps of Engineers
Walla Walla District
Boise Regulatory Office
720 East Park Blvd., Suite 245
Boise, Idaho 83712-7757

Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with all terms and conditions of this permit, the permit is subject to suspension, modification, or revocation and you are subject to an enforcement action by this office.

I hereby certify that the work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of the said permit. The required mitigation was also completed in accordance with the permit conditions.

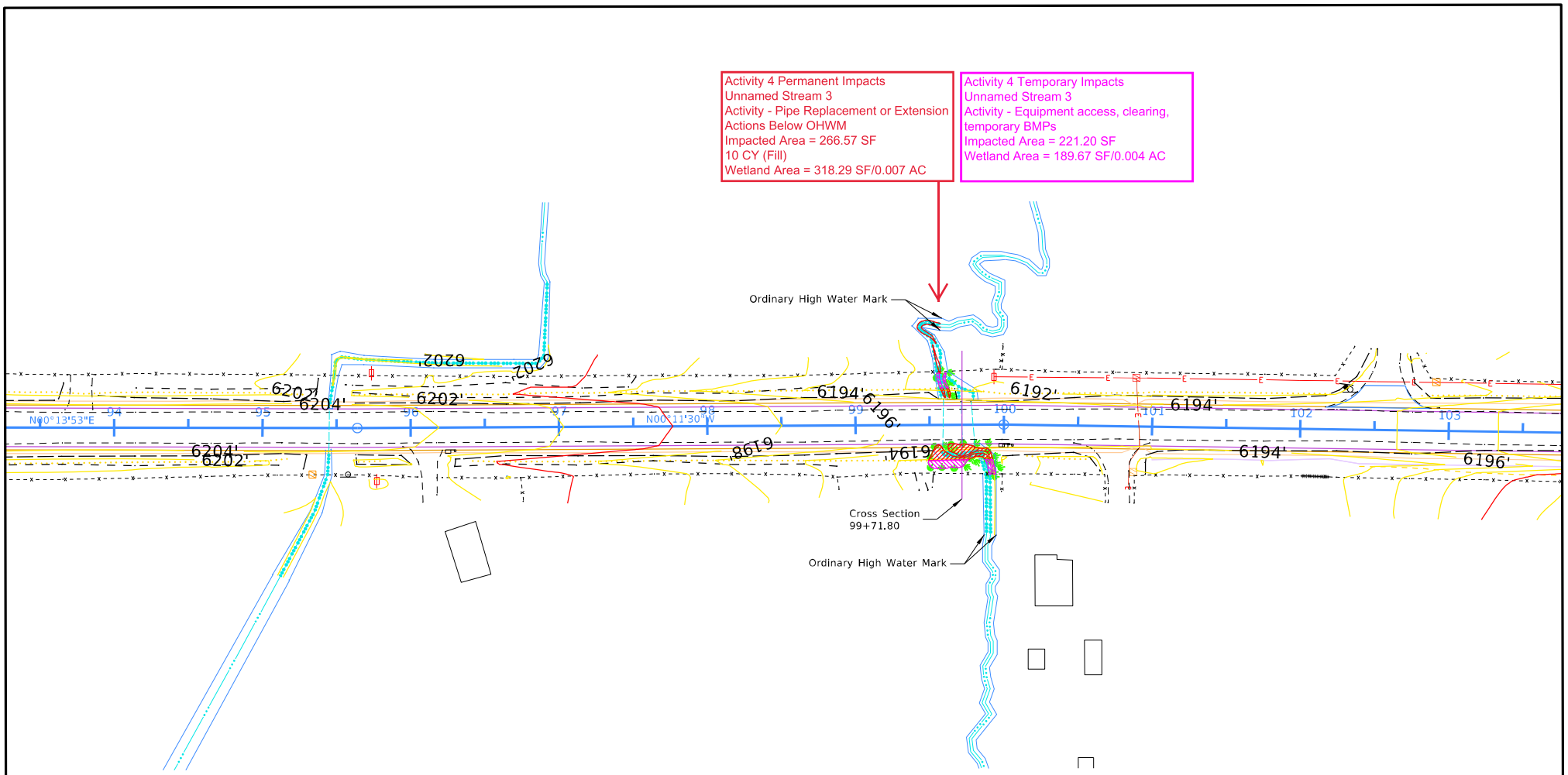
_____ _____

Signature of PERMITEE *DATE*



DESIGNED B. BINGHAM	SCALES SHOWN ARE FOR 8½" X 11" PRINTS ONLY	IDAHO TRANSPORTATION DEPARTMENT	PROJECT NO.	EXHIBIT PLAN VIEW
DESIGN CHECKED			A021(983)	N 500 W RECONSTRUCTION
DETAILED	CADD FILE NAME 21983_Exbt_001.DGN	YOUR Safety→YOUR Mobility→YOUR Economic Opportunity		
DRAWING CHECKED	DRAWING DATE: 2-FEB-2023			

N 500 W Reconstruction (Key No. 21983)
Teton County, Idaho
May 12, 2023
Sheet 2 of 11



Temporary Wetland Impact
Permanent Wetland Impact
Fill Line
Creek/Ditch Bottom
Wetland Boundary

DESIGNED B. BINGHAM	SCALES SHOWN ARE FOR 8½" X 11" PRINTS ONLY	IDAHO TRANSPORTATION DEPARTMENT	PROJECT NO.	EXHIBIT PLAN VIEW
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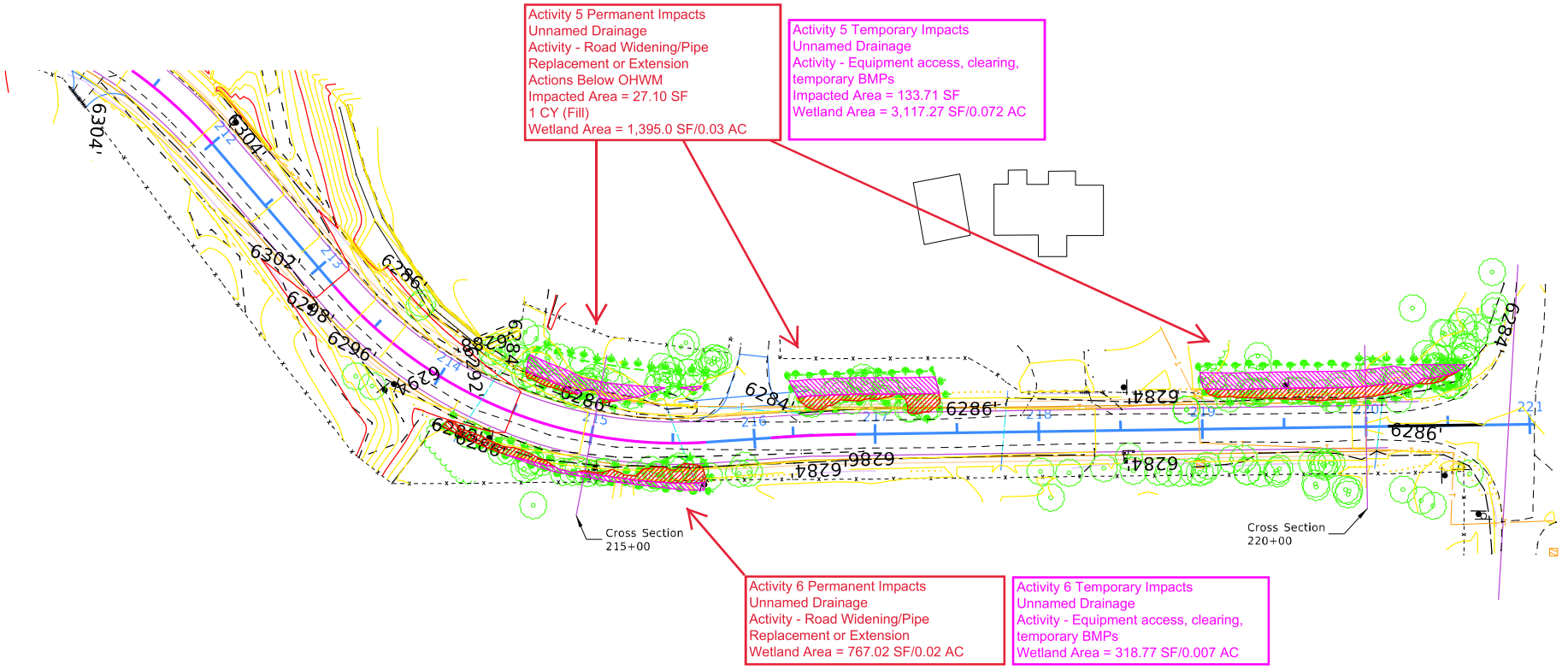
DRAWING CHECKED	DRAWING DATE: 2-FEB-2023			

N 500 W Reconstruction (Key No. 21983)
Teton County, Idaho
May 12, 2023
Sheet 3 of 11



Temporary Wetland Impact
Permanent Wetland Impact
Fill Line
Creek/Ditch Bottom
Wetland Boundary

DESIGNED B. BINGHAM	SCALES SHOWN ARE FOR 8½" X 11" PRINTS ONLY	IDAHO TRANSPORTATION DEPARTMENT	PROJECT NO.	EXHIBIT PLAN VIEW
DESIGN CHECKED			A021(983)	N 500 W RECONSTRUCTION
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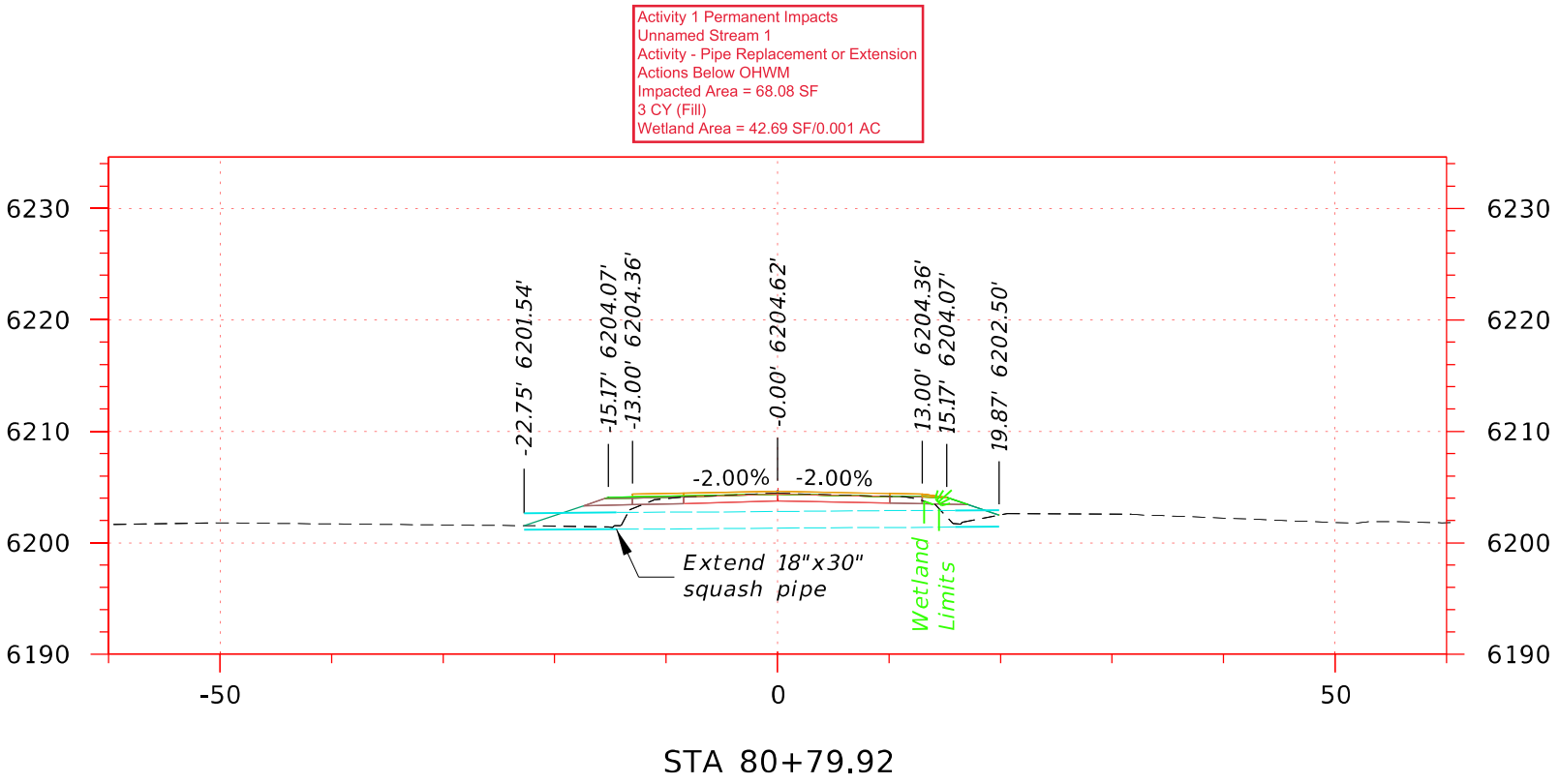
DRAWING CHECKED	DRAWING DATE: 2-FEB-2023			

N 500 W Reconstruction (Key No. 21983)
Teton County, Idaho
May 12, 2023
Sheet 4 of 11



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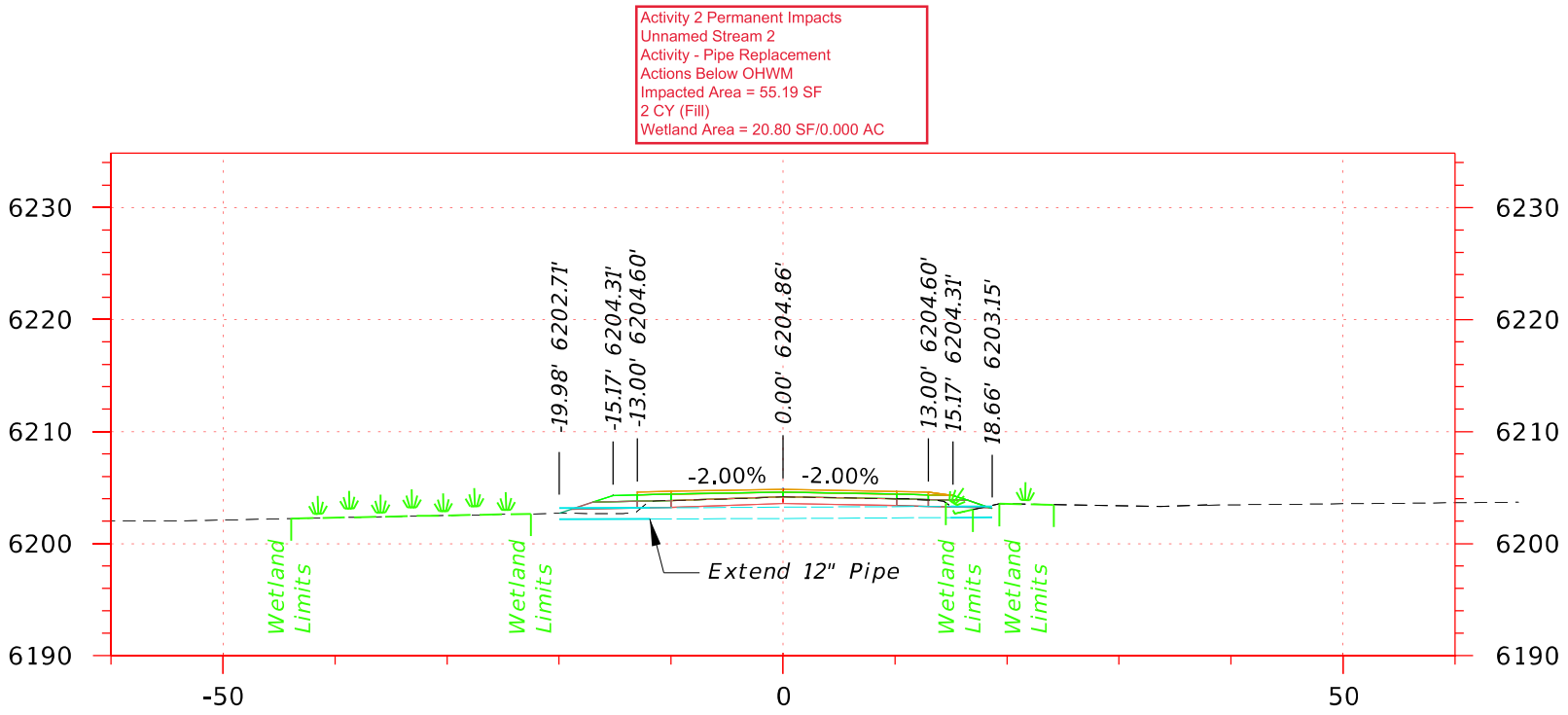
N 500 W Reconstruction (Key No. 21983)
Teton County, Idaho
May 12, 2023
Sheet 5 of 11

DESIGNED B. BINGHAM	SCALES SHOWN ARE FOR 8½" X 11" PRINTS ONLY	IDAHO TRANSPORTATION DEPARTMENT	PROJECT NO.	EXHIBIT CROSS SECTION
DESIGN CHECKED			A021(983)	N 500 W RECONSTRUCTION
DETAILED	CADD FILE NAME 21983_XSEC_001.DGN	YOUR Safety→YOUR Mobility→YOUR Economic Opportunity		
DRAWING CHECKED	DRAWING DATE: 2-FEB-2023			



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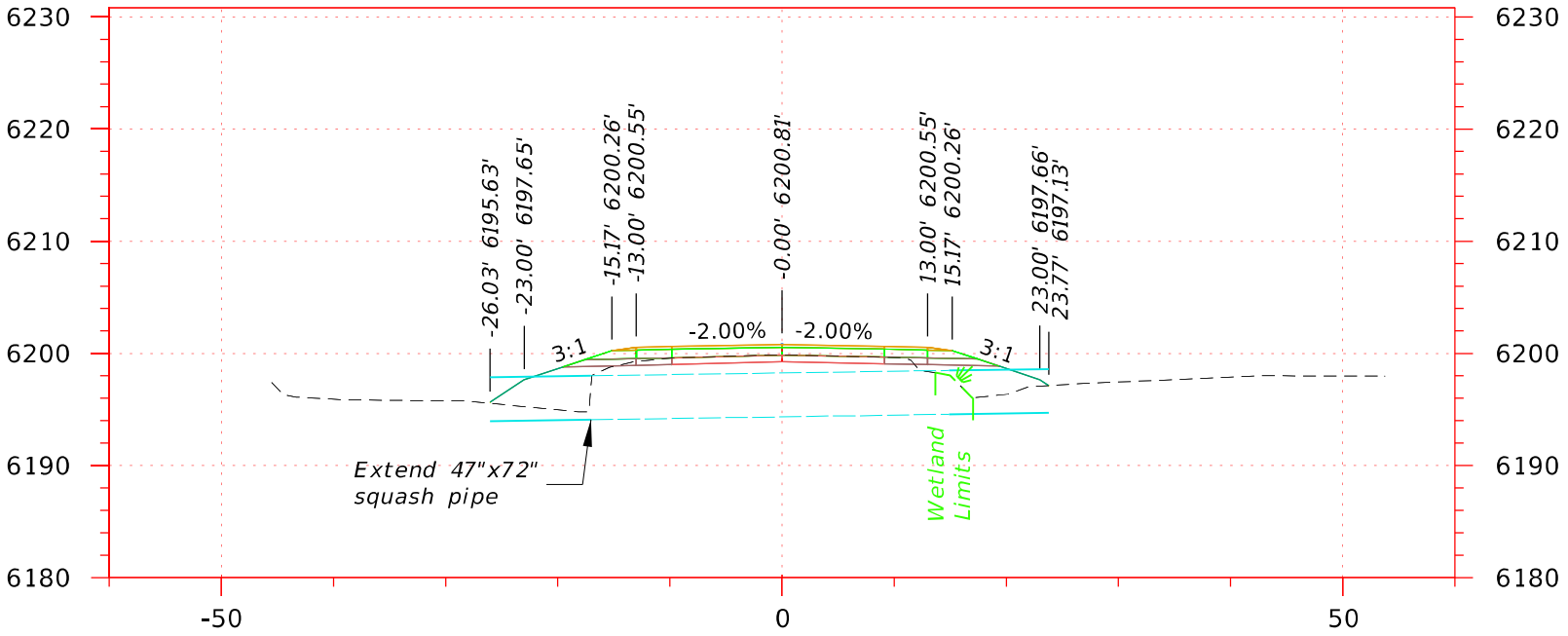
N 500 W Reconstruction (Key No. 21983)
Teton County, Idaho
May 12, 2023
Sheet 6 of 11

DESIGNED B. BINGHAM	SCALES SHOWN ARE FOR 8½" X 11" PRINTS ONLY	IDAHO TRANSPORTATION DEPARTMENT	PROJECT NO.	EXHIBIT CROSS SECTION
DESIGN CHECKED			A021(983)	N 500 W RECONSTRUCTION
DETAILED	CADD FILE NAME 21983_XSEC_002.DGN	YOUR Safety→YOUR Mobility→YOUR Economic Opportunity		
DRAWING CHECKED	DRAWING DATE: 2-FEB-2023			

Activity 3 Permanent Impacts
Grouse Creek
Activity - Pipe Replacement or
Extension/Retaining Wall Installation
Actions Below OHWM
Impacted Area = 230.34 SF
9 CY (Fill)
Wetland Area = 1,733.05 SF/0.04 AC



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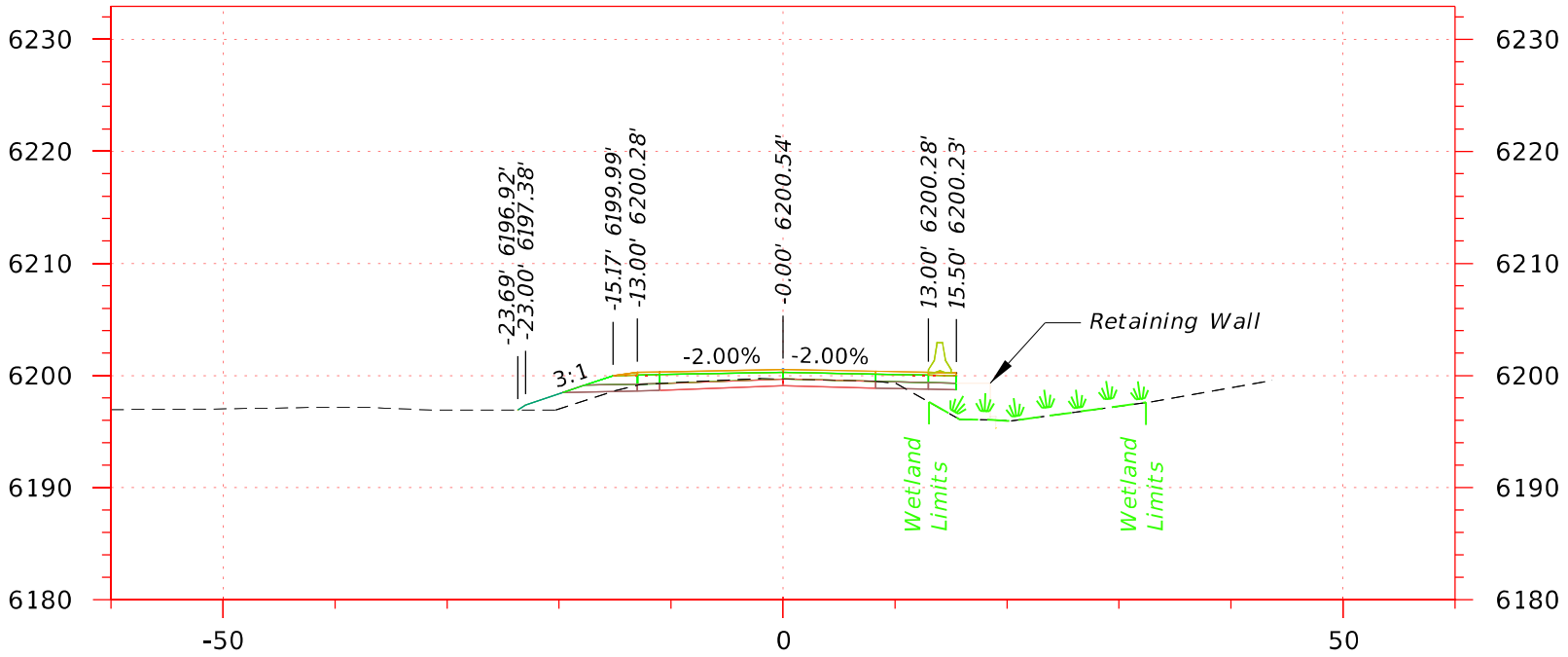
DESIGNED B. BINGHAM	SCALES SHOWN ARE FOR 8½" X 11" PRINTS ONLY	IDAHO TRANSPORTATION DEPARTMENT	PROJECT NO.	EXHIBIT CROSS SECTION
DESIGN CHECKED			A021(983)	N 500 W RECONSTRUCTION
DETAILED	CADD FILE NAME 21983_XSEC_003.DGN	YOUR Safety→YOUR Mobility→YOUR Economic Opportunity		
DRAWING CHECKED	DRAWING DATE: 2-FEB-2023			

N 500 W Reconstruction (Key No. 21983)
Teton County, Idaho
May 12, 2023
Sheet 7 of 11

Activity 3 Permanent Impacts
Grouse Creek
Activity - Pipe Replacement or
Extension/Retaining Wall Installation
Actions Below OHWM
Impacted Area = 230.34 SF
9 CY (Fill)
Wetland Area = 1,733.05 SF/0.04 AC



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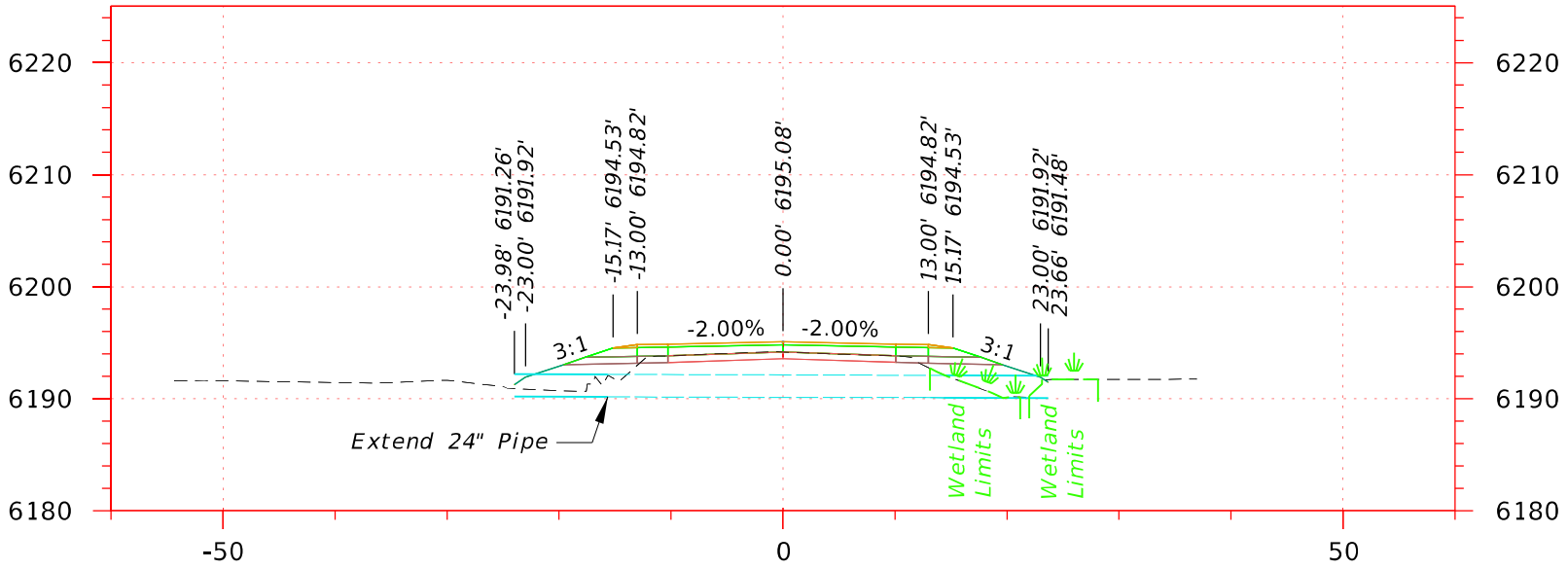
N 500 W Reconstruction (Key No. 21983)
Teton County, Idaho
May 12, 2023
Sheet 8 of 11

DESIGNED B. BINGHAM	SCALES SHOWN ARE FOR 8½" X 11" PRINTS ONLY	IDAHO TRANSPORTATION DEPARTMENT	PROJECT NO.	EXHIBIT CROSS SECTION
DESIGN CHECKED			A021(983)	N 500 W RECONSTRUCTION
DETAILED	CADD FILE NAME 21983_XSEC_004.DGN	YOUR Safety→YOUR Mobility→YOUR Economic Opportunity		
DRAWING CHECKED	DRAWING DATE: 2-FEB-2023			

Activity 4 Permanent Impacts
Unnamed Stream 3
Activity - Pipe Replacement or Extension
Actions Below OHWM
Impacted Area = 266.57 SF
10 CY (Fill)
Wetland Area = 318.29 SF/0.007 AC



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N 500 W Reconstruction (Key No. 21983)
Teton County, Idaho
May 12, 2023
Sheet 9 of 11

DESIGNED B. BINGHAM	SCALES SHOWN ARE FOR 8½" X 11" PRINTS ONLY	IDAHO TRANSPORTATION DEPARTMENT	PROJECT NO.	EXHIBIT CROSS SECTION
DESIGN CHECKED			A021(983)	N 500 W RECONSTRUCTION
DETAILED	CADD FILE NAME 21983_XSEC_005.DGN	YOUR Safety→YOUR Mobility→YOUR Economic Opportunity		
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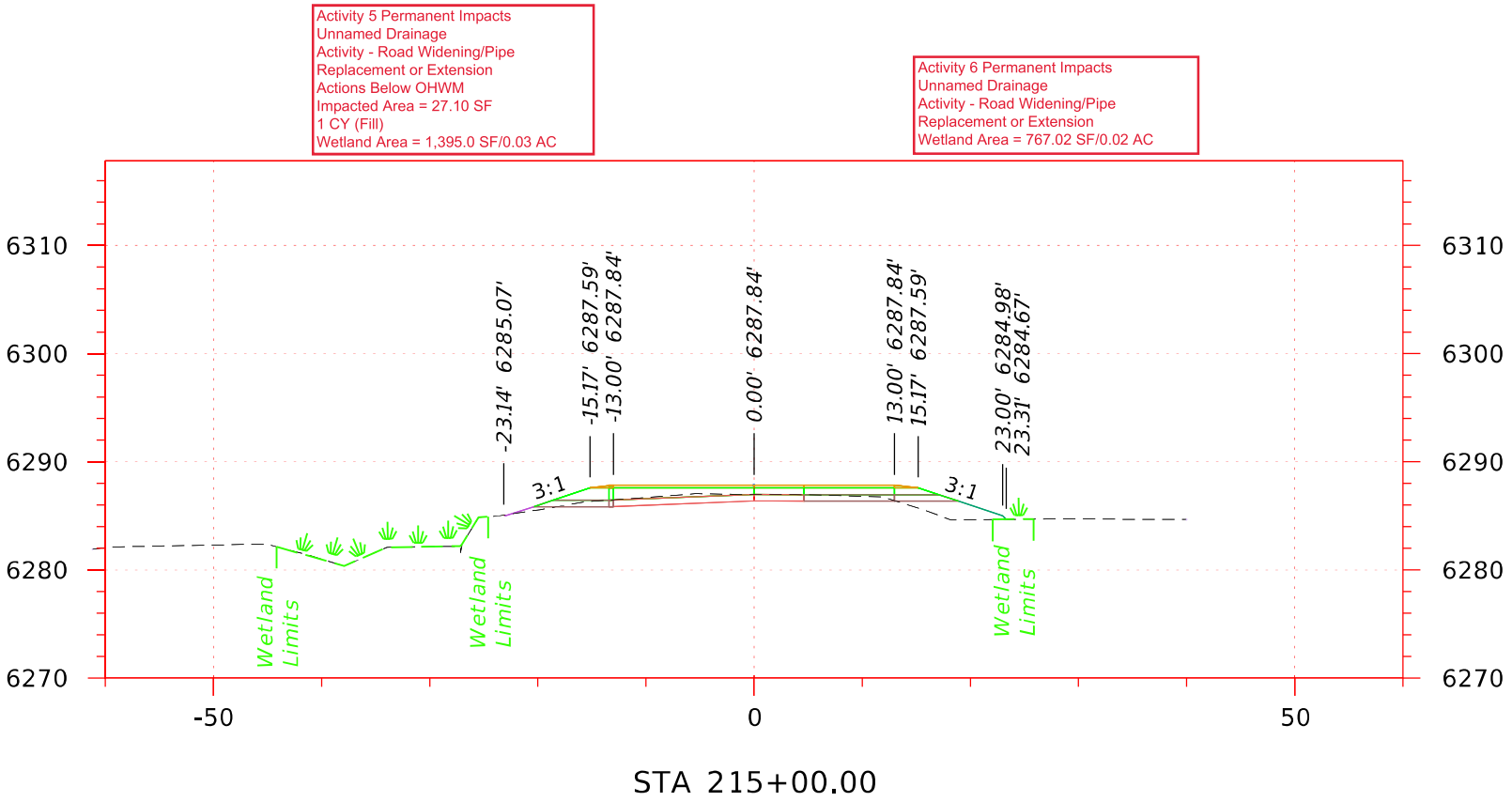

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N 500 W Reconstruction (Key No. 21983)
Teton County, Idaho
May 12, 2023
Sheet 10 of 11

DESIGNED B. BINGHAM	SCALES SHOWN ARE FOR 8½" X 11" PRINTS ONLY	IDAHO TRANSPORTATION DEPARTMENT	PROJECT NO.	EXHIBIT CROSS SECTION
DESIGN CHECKED			A021(983)	N 500 W RECONSTRUCTION
DETAILED	CADD FILE NAME 21983_XSEC_006.DGN	YOUR Safety→YOUR Mobility→YOUR Economic Opportunity		
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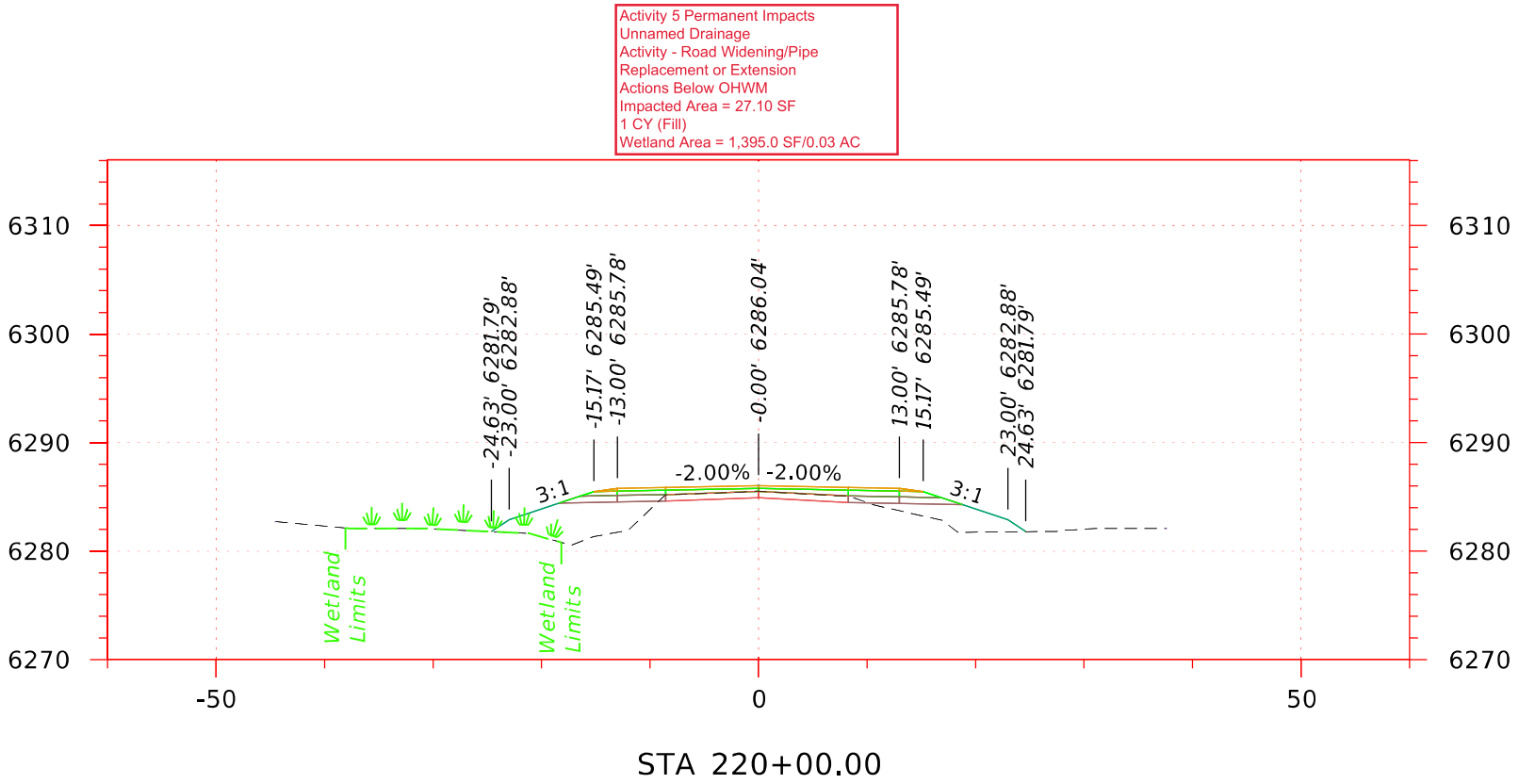

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N 500 W Reconstruction (Key No. 21983)
Teton County, Idaho
May 12, 2023
Sheet 11 of 11

DESIGNED B. BINGHAM	SCALES SHOWN ARE FOR 8½" X 11" PRINTS ONLY	IDAHO TRANSPORTATION DEPARTMENT	PROJECT NO.	EXHIBIT CROSS SECTION
DESIGN CHECKED			A021(983)	N 500 W RECONSTRUCTION
DETAILED	CADD FILE NAME 21983_XSEC_007.DGN	YOUR Safety→YOUR Mobility→YOUR Economic Opportunity		
DRAWING CHECKED	DRAWING DATE: 2-FEB-2023			

NATIONWIDE PERMIT 03

Maintenance:

(a) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, requirements of other regulatory agencies, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized. This NWP authorizes the removal of previously authorized structures or fills. Any stream channel modification is limited to the minimum necessary for the repair, rehabilitation, or replacement of the structure or fill; such modifications, including the removal of material from the stream channel, must be immediately adjacent to the project. This NWP also authorizes the removal of accumulated sediment and debris within, and in the immediate vicinity of, the structure or fill. This NWP also authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the district engineer, provided the permittee can demonstrate funding, contract, or other similar delays.

(b) This NWP also authorizes the removal of accumulated sediments and debris outside the immediate vicinity of existing structures (e.g., bridges, culverted road crossings, water intake structures, etc.). The removal of sediment is limited to the minimum necessary to restore the waterway in the vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend farther than 200 feet in any direction from the structure. This 200-foot limit does not apply to maintenance dredging to remove accumulated sediments blocking or restricting outfall and intake structures or to maintenance dredging to remove accumulated sediments from canals associated with outfall and intake structures. All dredged or excavated materials must be deposited and retained in an area that has no waters of the United States unless otherwise specifically approved by the district engineer under separate authorization.

(c) This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to conduct the maintenance activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills or dewatering of construction sites.

Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. After conducting the maintenance activity, temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

(d) This NWP does not authorize maintenance dredging for the primary purpose of navigation. This NWP does not authorize beach restoration. This NWP does not authorize new stream channelization or stream relocation projects.

Notification: For activities authorized by paragraph (b) of this NWP, the permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 32). The pre-construction notification must include information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals. (Authorities: Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (Sections 10 and 404))

Note: This NWP authorizes the repair, rehabilitation, or replacement of any previously authorized structure or fill that does not qualify for the Clean Water Act Section 404(f) exemption for maintenance.

WATER QUALITY CERTIFICATION, NWP 03:

Agency responsible for administration of water quality, based on project location is listed below. If DENIED, then an Individual Water Quality Certification or Waiver of Certification is required, prior to the commencement of any work activities and/or issuance of a DA verification, authorization and/or permit.

State of Idaho: **PARTIALLY DENIED:** activities authorized by paragraph (b) of NWP 03 are **not certified**.

Coeur d'Alene Tribal Lands: **DENIED**

Shoshone-Bannock Tribal Lands: **DENIED**

U.S. Environmental Protection Agency for all other Tribal Lands: **PARTIALLY DENIED:** activities are denied when the project involves:

- Maintenance, repair, or replacement of shoreline stabilization using hard armoring approaches; or
- Extending existing infrastructure beyond its prior footprint in fish bearing waters of the U.S.; or
- Excavation or dredging in marine waters.

2021/2022 Nationwide Permits
Regional Conditions
Walla Walla District Regulatory Division (State of Idaho)

January 13, 2021

The following Nationwide Permit (NWP) regional conditions are required in the state of Idaho and apply to all 2021/2022 NWPs[1]. Regional conditions are established by individual Corps Districts to ensure projects result in no more than minimal adverse impacts to the aquatic environment and to address local resources concerns. This document also includes regional additions to the NWP General Conditions, notification procedures pertaining to certain NWP's, and regional additions to the definitions.

REGIONAL CONDITIONS

A. Watersheds Requiring Pre-Construction Notification, Specific to Anadromous Fish

This Regional Condition applies to all 2021/2022 NWPs.

- Pre-construction notification (PCN) will be required for the above listed nationwide permits in the geographic area as shown on Figure 1: *Watersheds Requiring Pre-Construction Notification*, dated January 6, 2021.

B. Vegetation Preservation and Replanting

- To avoid impacts to aquatic habitat and to reduce sedimentation and erosion, permittee shall avoid and minimize the removal of vegetation in waters of the U.S. to the maximum extent practicable. Areas subject to temporary vegetation removal in waters of the U.S. during construction shall be replanted with appropriate native[2] species by the end of the first growing season, unless conditioned otherwise. Permittee shall avoid introducing or spreading noxious or invasive plants[3].

- Replanted vegetation that does not survive the first growing season shall be replanted before the end of the next growing season. Re-plantings shall continue to occur until desired vegetation densities are achieved. Re-vegetation densities should be based on reference conditions.

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[1] For the list of 2021/2022 Nationwide Permits please see: https://www.nww.usace.army.mil/Business-With-Us/Regulatory-Division/Nationwide-Permits/

[2] Idaho Department of Transportation, Native Plants for Idaho Roadside Restoration and Revegetation Programs: https://itd.idaho.gov/wp-content/uploads/2016/06/RP171Roadside_Revegetation.pdf

[3] U.S. Department of Agriculture, Natural Resource Conservation Service Plant Database of introduced, invasive, and noxious plants for Idaho: https://plants.usda.gov/java/noxious?rptType=State&statefips=16.

C. De-watering & Re-watering (as applicable)

- Cofferdams shall be constructed of non-erosive material such as concrete jersey barriers, bulk bags, water bladders, sheet pile, and other similar non-erosive devices. Cofferdams may not be constructed by using mechanized equipment to push streambed material through flowing water.

- Diversion channels constructed to bypass flow around the construction site shall be lined with plastic, large rock, pipe or otherwise protected from erosion prior to releasing flows into or through the diversion channel.

- Water removed from within the coffered area shall be pumped to a sediment basin or otherwise treated to remove suspended sediments prior to its return to the waterway.

- To prevent unwanted passage of state or federally-protected fish, if present, from the coffered area, Water pipe intakes shall be screened with openings measuring < 3/32 inch to prevent entrainment of fish trapped in the coffered area.

- Should fish be present within the coffered areas contact your local Idaho Department of Fish and Game (IDFG) office prior to performing fish removal or salvage. Fish shall be collected by electrofishing, seining or dip net, or otherwise removed and returned to the waterway upstream of the project area. If electrofishing is used, the National Marine Fisheries Service (NMFS) guidelines for electrofishing should be followed[4], unless conditioned otherwise.

- Stream channels that have been dewatered during project construction shall be re-watered slowly to avoid lateral and vertical erosion of the de-watered channel, prevent damage to recently reclaimed work areas and/or damage to permitted work.

- Temporary stockpiles in waters of the United States shall be removed in their entirety so as not to form a berm or levee parallel to the stream that could confine flows or restrict overbank flow to the floodplain.

D. In-Water Structures and Complexes

- PCN notification in accordance with General Condition 32 is required for all non-federal applicants with activities involving gabion baskets placed below the ordinary high water mark.
- Stream meanders, riffle and pool complexes, pool stream structures, rock/log barbs, rock J-hooks, drop structures, sills, engineered log jams or similar structures/features when used shall be site specifically designed by an appropriate professional with experience in hydrology or fluvial geomorphology.

[4] Guidelines for Electrofishing Waters Containing Salmonids Listed Under the Endangered Species Act (June 2000) http://www.westcoast fisheries.noaa.gov/publications/reference_documents/esa_refs/section4d/electro2000.pdf

E. Temporary Sidecasting

- Materials from exploratory trenching and installation of utility lines may be temporarily side cast into a de-watered coffered area for up to 30 days but not within flowing waters. Material from exploratory trenching and installation of utility lines in wetlands may be temporarily side cast for up to 30 days.

F. Suitability of Sediments for Open Water Disposal and us as Fill

- Sampling for determination of suitability of sediments for open water disposal or for use as fill, must comply with the Sediment Evaluation Framework for the Pacific Northwest (SEF)[5].

G. Avoidance and Minimization

- In addition to information required under General Condition 32(b), the applicant shall include information about previous discharges of fill material into waters of the United States within the project area. This is only for non-federal applicants where a PCN is required.

- Discharges of dredged or fill material into waters of the U.S., including wetlands, to meet set back requirements are not authorized under NWP.

H. Erosion Control

- Erosion control blanket or fabric used in or adjacent to waters of the U.S. shall be comprised of biodegradable material, to ensure decomposition and reduced risk to fish, wildlife and public safety, unless conditioned otherwise. If the applicant proposes to use materials other than as indicated above they must demonstrate how the use of such materials will not cause harm to fish, wildlife and public safety.

I. Reporting Requirement for Federal Permittees

- Federal Agencies with projects that require compensatory mitigation for loss of waters of the U.S. and who propose to purchase credits from an approved wetland and/or stream mitigation bank must provide proof of purchase within 30 days of when the credits were purchased. Purchase of credits from an approved mitigation bank must be IAW the Mitigation Banking Instrument of Record.

[5] Northwest Regional Sediment Evaluation Team (RSET) 2016. Sediment Evaluation Framework for the Pacific Northwest. Prepared by the RSET Agencies, July 2016, 160 pp plus appendices. http://nwd.usace.army.mil/Missions/Civil-Works/Navigation/RSET/SEF

REGIONAL ADDITIONS TO THE GENERAL CONDITIONS

General Condition 4. Migratory Bird Breeding Areas. Regional Addition: For additional information please contact the US Fish and Wildlife Service at the following field office locations: State Office (Boise) at (208) 387-5243; Northern Idaho Field Office (Spokane) at (509) 891-6839; or the Eastern Idaho Field Office (Chubbuck) at (208) 237-6975. https://www.fws.gov/idaho/promo.cfm?id= 177175802

General Condition 6. Suitable Material. Regional Addition: Erosion control blanket or fabric used in or adjacent to waters of the U.S. shall be comprised of biodegradable material, to ensure decomposition and reduced risk to fish, wildlife and public safety, unless conditioned otherwise. If the applicant proposes to use materials other than as indicated above they must demonstrate how the use of such materials will not cause harm to fish, wildlife and public safety.

General Condition 9. Management of Water Flows. Regional Addition: To obtain information on State of Idaho definition of high water refer to Idaho Department of Water Resources (IDAPA 37.03.07. Rule 62.03.04.a). For culverts or bridges located in a community qualifying for the national flood insurance program, the minimum size culvert shall accommodate the 100-year flood design flow frequency (IDAPA 37.03.07. Rule 62.03.04.c).

General Condition 12. Soil Erosion and Sediment Controls. Regional Addition: For additional information refer to the Idaho Department of Environmental Quality Catalog of Stormwater Best Management Practices for Idaho Cities and Counties, available online at: https://www.deq.idaho.gov/public-information/laws-guidance-and-orders/guidance/.

General Condition 18. Endangered Species. Regional Addition: For additional information on ESA listed species in north Idaho please contact the US Fish and Wildlife Service (USFWS) Northern Idaho Field Office (Spokane) at (509) 893-8009, for all other counties in Idaho contact the USFWS State Office (Boise) at (208) 378-5388.

General Condition 20. Historic Properties. Regional Addition: Property is generally considered “historic” if it is at least 50 years old, and is not limited to buildings. For additional information on the potential for cultural resources in proximity to the project site, contact the Idaho State Historic Preservation Office at (208) 334-3847 located in Boise, Idaho.

NOTIFICATION PROCEDURES BY THE CORPS FOR CERTAIN NATIONWIDE PERMITS

Waivers: For nationwide permits with a waiver provision, District coordination with Idaho Department of Environmental Quality (IDEQ) and Environmental Protection Agency (tribal lands) will be conducted prior to the District Engineer making a waiver determination to ensure the proposed activity is in compliance with Section 401 Water Quality Standards.

Select Waters and Wetlands: The Corps will coordinate with the Idaho Department of Fish and Game (IDFG) for activities in the following waters and wetlands that require notification and are authorized by NWP:

- Waters: Waters: Anadromous waters as shown on Figure 1: *Watersheds Requiring Pre-Construction Notification*, dated January 6, 2021; Henry's Fork of the Snake River and its tributaries; South Fork Snake River and its tributaries; Big Lost River and its tributaries upstream of the US 93 crossing; Beaver, Camas, and Medicine Lodge Creeks; Snake River; Blackfoot River above Blackfoot Reservoir; Portneuf River; Bear River; Boise River including South Fork, North Fork and Middle Fork; Payette River including South Fork, North Fork and Middle Fork; Coeur d'Alene River, including the North Fork; St. Joe River; Priest River; Kootenai River; Big Wood River; and Silver Creek and its tributaries.

- Wetlands identified in Idaho Department of Fish and Game, Wetland Conservation Strategy as Class I, Class II and Reference Habitat Sites[6].

- Wetlands identified in the Idaho Wetland Conservation Prioritization Plan-2012[7].

NWP 27-Aquatic Habitat Restoration, Establishment, and Enhancement Activities

Prior to verification, the Corps will coordinate the project with the Idaho Department of Fish and Game for activities in perennial, fish bearing streams.

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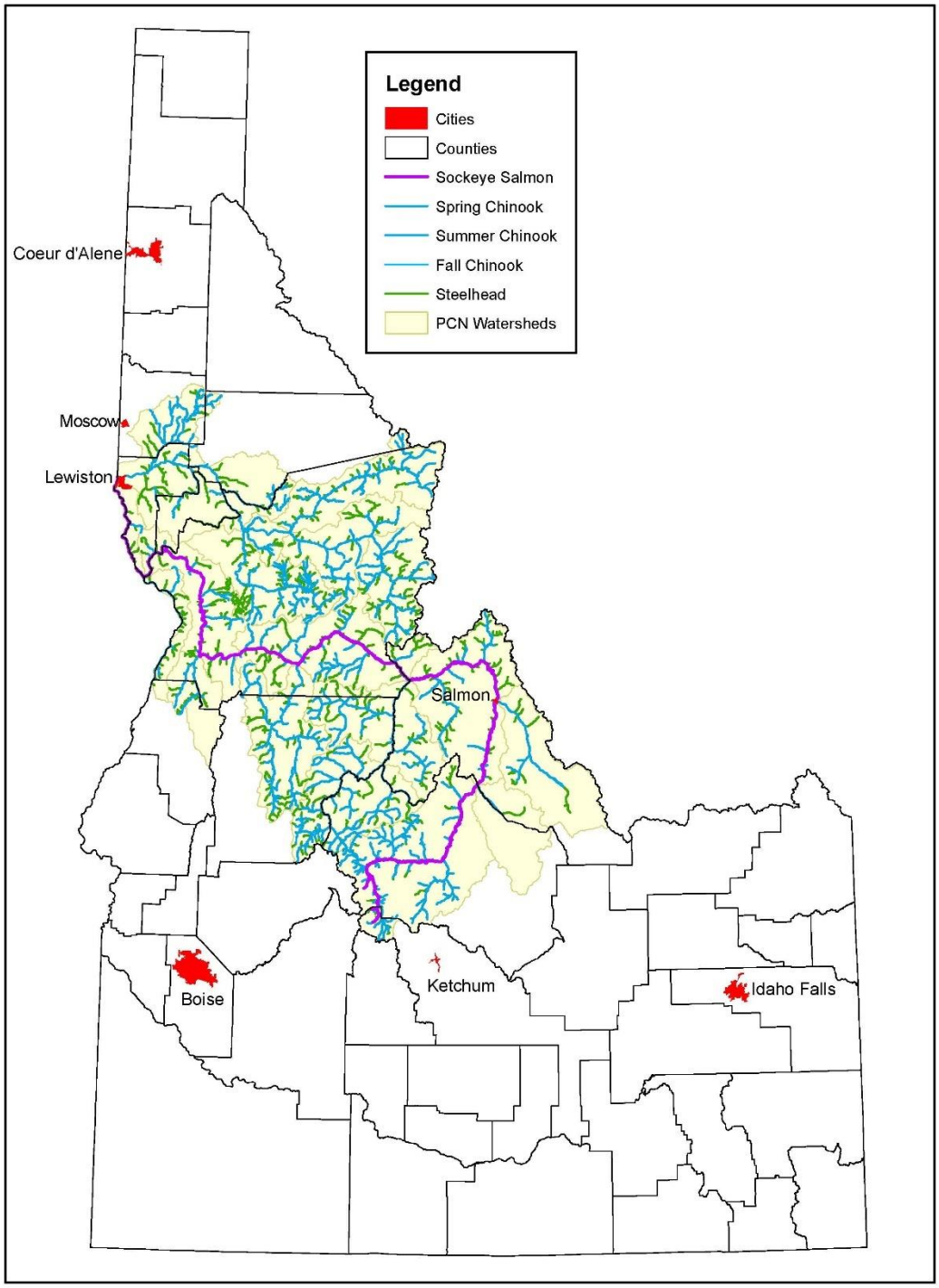
[6] Idaho Department of Fish and Game (IDFG) Wetland Conservation Strategies have been developed for the Henrys Fork Basin, Northern Idaho, Big Wood River, Southeast Idaho, East-Central Idaho and Spokane River Basin, Middle and Western Snake River and tributaries, and the Upper Snake River–Portneuf Drainage, Weiser River Basin, and West Central Mountain Valleys and adjacent wetlands. Closed basins of Beaver-Camas Creeks, Medicine Lodge Creek, Palouse River and lower Clearwater River sub-basins, Middle Fork and South Fork Clearwater Basins and Camas Prairie in northern Idaho. Refer to the internet site at: http://fishandgame.idaho.gov/content/page/wetlands-publications-idaho-natural-heritage-program#reports

[7] Murphy, C., J. Miller and A. Schmidt. 2012. https://parksandrecreation.idaho.gov/sites/default/files/uploads/documents/SCORTP/Update/Apdx%20.%20Wetlands%Priority%Plan%20(Part %20I)%Compressed1.pdf

Figure 1

Watersheds Requiring Pre-Construction Notification



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Miles

US Army Corps of Engineers

6 January 2021

2021 Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. Navigation

(a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements

No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. Spawning Areas

Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas

Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds

No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material

No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. Water Supply Intakes

No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments

If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows
To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains
The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment
Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls
Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Structures and Fills
Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance
Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project
The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers
(a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency

with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov/.

17. Tribal Rights

No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species

(a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of "effects of the action" for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding "activities that are reasonably certain to occur" and "consequences caused by the proposed action."

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be

affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. For activities where the non-Federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA section 7 consultation or conference has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.

(e) Authorization of an activity by an NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at

http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.nmfs.noaa.gov/pr/species/esa/ respectively.

19. Migratory Birds and Bald and Golden Eagles

The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties

(a) No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)).

Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect.

(d) Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts

Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters

Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment,

additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.

23. <u>Mitigation</u>

The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of

streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14)

must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. <u>Safety of Impoundment Structures</u>

To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have

been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality

(a) Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA section 401, a CWA section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.

(b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.

(c) The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management.

In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions

The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits

The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:

(a) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated

bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1⁄3-acre.

(b) If one or more of the NWPs used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWPs cannot exceed their respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States for the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.

29. Transfer of Nationwide Permit Verifications

If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

_____

_____

(Transferee)

_____

_____

(Date)

30. Compliance Certification

Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory

mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States

If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification

(a) *Timing*. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) *Contents of Pre-Construction Notification*: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) (i) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.

(ii) For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs.

(iii) Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining

why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatenedspecies (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and

(10) For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.

(c) *Form of Pre-Construction Notification*: The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) *Agency Coordination*: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iii)

NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 N Hilton Street, Boise, ID 83706
(208) 373-0502

Brad Little, Governor
Jess Byrne, Director

December 4, 2020

Kelly J. Urbanek, Chief
U.S. ACOE Regulatory Division
Walla Walla District
720 East Park Boulevard, Suite 245
Boise, Idaho 83712-7757

Subject: Final §401 Water Quality Certification for 2020 Nationwide Permits in Idaho

Dear Ms. Urbanek:

Enclosed please find the Idaho Department of Environmental Quality (DEQ) final water quality certification for the 2020 Nationwide Permits in Idaho. DEQ offered a 21-day public comment period, beginning on November 2, 2020, and ending on November 23, 2020.

DEQ received a single comment letter. After review of the comments received, minor modifications were made to the final certification in order to provide additional clarity.

If you have any questions or concerns regarding this certification, please contact Jason Pappani at (208) 373-0515 or via email at jason.pappani@deq.idaho.gov.

Sincerely,

Mary Anne Nelson, PhD
Surface and Wastewater Division Administrator

MAN:JP:lf

cc: Jason Pappani, DEQ State Office
DEQ Regional Administrators
James Joyner, ACOE Walla Walla District
Brent King, Idaho Attorney General's Office

Idaho Department of Environmental Quality

Final §401 Water Quality Certification

December 4, 2020

2020 U.S. Army Corps of Engineers §404 Nationwide Permits (NWPs)

Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended; 33 U.S.C. Section 1341(a)(1); and Idaho Code §§ 39-101 et seq. and 39-3601 et seq., the Idaho Department of Environmental Quality (DEQ) has authority to review activities receiving Section 404 dredge and fill permits and issue water quality certification decisions.

Based upon its review of the proposed 2020 Nationwide Permits published in the Federal Register on September 15, 2020, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permits, including the Regional Conditions set forth by the Army Corps of Engineers (ACOE), along with the conditions set forth in this water quality certification, then activities will comply with the applicable water quality requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02), and other appropriate water quality requirements of state law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations, or permits, including without limitation, the approval from the owner of a private water conveyance system, if one is required, to use the system in connection with the permitted activities.

1 Antidegradation Review

The WQS contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

- Tier I Protection. The first level of protection applies to all water bodies subject to Clean Water Act jurisdiction and ensures that existing uses of a water body and the level of water quality necessary to protect those existing uses will be maintained and protected (IDAPA 58.01.02.051.01; 58.01.02.052.01). Additionally, a Tier I review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).
- Tier II Protection. The second level of protection applies to those water bodies considered high quality and ensures that no lowering of water quality will be allowed unless deemed necessary to accommodate important economic or social development (IDAPA 58.01.02.051.02; 58.01.02.052.08).

- Tier III Protection. The third level of protection applies to water bodies that have been designated outstanding resource waters and requires that activities not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

DEQ is employing a water body by water body approach to implementing Idaho's antidegradation policy. This approach means that any water body fully supporting its beneficial uses will be considered high quality (IDAPA 58.01.02.052.05.a). Any water body not fully supporting its beneficial uses will be provided Tier I protection for that use, unless specific circumstances warranting Tier II protection are met (IDAPA 58.01.02.052.05.c). The most recent federally approved Integrated Report and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05).

1.1 Pollutants of Concern

The primary pollutant of concern, for projects permitted under the 2020 NWPs administered by the ACOE, is sediment. In locations where heavy metals are present due to mining activities, or where high concentrations of nutrients may be associated with sediments, additional considerations may be necessary. If the project reduces riparian vegetation, then temperature (thermal loading) may also be of concern.

The procedures outlined in the Sediment Evaluation Framework for the Pacific Northwest[1] may be applied to assess and characterize sediment to determine the suitability of dredged material for unconfined aquatic placement, to determine the suitability of post dredge surfaces, and to predict effects on water quality during dredging (See Section 2.4 for more details).

As part of the Section 401 water quality certification, DEQ is requiring the applicant to comply with various conditions to protect water quality and to meet Idaho WQS, including the criteria applicable to sediment.

1.2 Receiving Water Body Level of Protection

The ACOE NWPs authorize construction activities in waters of the United States. In Idaho, jurisdictional waters of the state can potentially receive discharges either directly or indirectly from activities authorized under the NWPs. DEQ applies a water body by water body approach to determine the level of antidegradation protection a water body will receive. (IDAPA 58.01.02.052.05).

All waters in Idaho that receive discharges from activities authorized under a NWP will receive, at minimum, Tier I antidegradation protection because Idaho's Tier I antidegradation policy applies to all state waters (IDAPA 58.01.02.052.01). Water bodies that fully support their aquatic life or recreational uses are considered *high quality waters* and will receive Tier II antidegradation protection (IDAPA 58.01.02.051.02). Because of the statewide applicability, the antidegradation review will assess whether the NWP permit complies with both Tier I and Tier II antidegradation provisions (IDAPA 58.01.02.052.03).

Although Idaho does not currently have any Tier III designated outstanding resource waters (ORWs), it is possible for a water body to be designated as an ORW during the life of the NWPs.

[1] Northwest Regional Sediment Evaluation Team (RSET). 2018. Sediment Evaluation Framework for the Pacific Northwest. *Prepared by* the RSET Agencies, May 2018, 183 pp plus appendices.

Because of this potential, the antidegradation review also assesses whether the permit complies with the outstanding resource water requirements of Idaho's antidegradation policy (IDAPA 58.01.02.051.03).

To determine the support status of the receiving water body, the most recent EPA-approved Integrated Report, available on Idaho DEQ's website, is to be used: http://www.deq.idaho.gov/water-quality/surface-water/monitoring-assessment/integrated-report/. (IDAPA 58.01.02.052.05).

High quality waters are identified in Categories 1 and 2 of the Integrated Report. If a water body is in either Category 1 or 2, it is a Tier II water body.

Unassessed waters are identified in Category 3 of DEQ's Integrated Report. These waters require a case by case determination to be made by DEQ based on available information at the time of the application for permit coverage (IDAPA 58.01.02.052.05.b). For activities occurring on unassessed waters under this certification, DEQ has determined that complying with the conditions of the NWP, the regional conditions, and this certification will ensure the provisions of IDAPA 58.01.02.052 are met.

Impaired waters are identified in Categories 4 and 5 of the Integrated Report. Category 4(a) contains impaired waters for which a TMDL has been approved by EPA. Category 4(b) contains impaired waters for which controls other than a TMDL have been approved by EPA. Category 5 contains waters which have been identified as "impaired", for which a TMDL is needed. These waters are Tier I waters, for the use which is impaired. With the exception, if the aquatic life uses are impaired for any of these three pollutants—dissolved oxygen, pH, or temperature—and the biological or aquatic habitat parameters show a healthy, balanced biological community, then the water body shall receive Tier II protection, in addition to Tier I protection, for aquatic life uses (IDAPA 58.01.02.052.05.c.i).

DEQ's webpage also has a link to the state's map-based Integrated Report which presents information from the Integrated Report in a searchable, map-based format: http://www.deq.idaho.gov/assistance-resources/maps-data/.
Water bodies can be in multiple categories for different causes. If assistance is needed in using these tools, or if additional information/clarification regarding the support status of the receiving water body is desired, please feel free to contact your nearest DEQ regional office or the State Office (Table 1).

Table 1. Idaho DEQ Regional and State Office Contacts

Regional Office	*Address*	*Phone Number*	*Email*
Boise	1445 N. Orchard Rd., Boise 83706	208-373-0550	kati.carberry@deq.idaho.gov
Coeur d'Alene	2110 Ironwood Parkway, Coeur d'Alene 83814	208-769-1422	chantilly.higbee@deq.idaho.gov
Idaho Falls	900 N. Skyline, Suite B., Idaho Falls 83402	208-528-2650	troy.saffle@deq.idaho.gov
Lewiston	1118 "F" St., Lewiston 83501	208-799-4370	sujata.connell@deq.idaho.gov
Pocatello	444 Hospital Way, #300 Pocatello 83201	208-236-6160	matthew.schenk@deq.idaho.gov
Twin Falls	650 Addison Ave. W., Suite 110, Twin Falls 83301	208-736-2190	balthasar.buhidar@deq.idaho.gov
State Office	1410 N. Hilton Rd., Boise 83706	208-373-0502	jason.pappani@deq.idaho.gov

1.3 Protection and Maintenance of Existing Uses (Tier I Protection)

A Tier I review is performed for all new or reissued permits or licenses, applies to all waters subject to the jurisdiction of the Clean Water Act, and requires demonstration that existing uses and the level of water quality necessary to protect existing uses shall be maintained and protected (IDAPA 58.01.02.051.01; 052.01 and 04). The numeric and narrative criteria in the WQS are set at levels that ensure protection of existing and designated beneficial uses.

Water bodies not supporting existing or designated beneficial uses must be identified as water quality limited, and a total maximum daily load (TMDL) must be prepared for those pollutants causing impairment (IDAPA 58.01.02.055.02). Once a TMDL is completed, discharges of causative pollutants shall be consistent with the allocations in the TMDL (IDAPA 58.01.02.055.05). Prior to the completion of a TMDL, the WQS require the application of the antidegradation policy and implementation provisions to maintain and protect beneficial uses (IDAPA 58.01.02.055.04).

The general (non-numeric) effluent limitations in the NWPs and associated Regional Conditions for the ACOE Walla Walla District address best management practices (BMPs) aimed at minimizing impacts to the aquatic environment, especially sediment and turbidity impacts including: vegetation protection and restoration, de-watering requirements, erosion and sediment controls, soil stabilization requirements, pollution prevention measures, prohibited discharges, and wildlife considerations. Although the NWPs do not contain specific (numeric) effluent limitations for sediment or turbidity, the conditions identified in the permits and in this water quality certification will ensure compliance with DEQ's water quality standards, including the narrative sediment criteria (IDAPA 58.01.02.200.08) and DEQ's turbidity criteria (IDAPA 58.01.02.250.02.e).

In order to ensure compliance with Idaho WQS, DEQ has included a condition requiring the permittee(s) to comply with Idaho's numeric turbidity criteria, developed to protect aquatic life

uses. The criterion states, "Turbidity shall not exceed background turbidity by more than 50 nephelometric turbidity units (NTU)[2] instantaneously or more than 25 NTU for more than 10 consecutive days" (IDAPA 58.01.02.250.02.e). DEQ is requiring turbidity monitoring when project activities result in a discharge to waters of the United States that causes a visible sediment plume (IDAPA 58.01.02.054.01) (See Section 2.5 for more details).

If an approved TMDL exists for a receiving water body that requires a load reduction for a pollutant of concern, then the project must be consistent with the provisions of that TMDL (IDAPA 58.01.02.055.05).
For authorized activities requiring a pre-construction notification (PCN), the Corps will have the opportunity to evaluate the NWP activities on a case by case basis to ensure that the activity will not cause more than a minimal adverse environmental effect, individually and cumulatively. The Corps has agreed to forward the verification letters to the appropriate DEQ regional office (Table 1) for all authorized activities including the NWP activities that require a PCN. This will better inform DEQ of the authorized activities that are occurring throughout the state and determine if additional conditions will need to be implemented when the ACOE reissues the NWPs.

1.3.1 DEQ's Determination

DEQ concludes that, given the nature of the activities authorized by the 2020 NWPs, such activities will comply with Idaho's Tier I requirements under IDAPA 58.01.02.051.01 and 58.01.02.052.07, provided the permitted activities are carried out in compliance with the limitations and associated requirements of the 2020 NWPs, Regional Conditions, and conditions set forth in this water quality certification.

1.4 Protection of High-Quality Waters (Tier II Protection)

Water bodies that fully support their beneficial uses are recognized as high-quality waters and will be provided Tier II protection in addition to Tier I protection (IDAPA 58.01.02.051.02; 58.01.02.052.05.a). Water quality parameters applicable to existing or designated beneficial uses must be maintained and protected under Tier II, unless a lowering of water quality is deemed necessary to accommodate important economic or social development (IDAPA 58.01.02.051.02; 58.01.02.052.08).

The ACOE does not authorize projects with more than minimal individual and cumulative impacts on the aquatic environment under a NWP (33 U.S.C.A. § 1344(e)). As required by the National Environmental Policy Act (NEPA) the Corps has analyzed the individual and cumulative effects for the NWP activities. DEQ recognizes that short term changes in water quality may occur with respect to sediment as a result of the authorized activities, but has determined that adherence to the terms and conditions imposed by the permits, including the Regional Conditions set forth by the Army Corps of Engineers (ACOE or Corps), along with the conditions set forth in this water quality certification will ensure that there are no long-term adverse changes to water quality or beneficial use support as a result of any activity authorized under this certification (IDAPA 58.01.02.052.03). As a general principle, DEQ believes degradation of water quality should be viewed in terms of permanent or long-term adverse

[2] *NTU is a unit of measure of the concentration of suspended particles in the water (turbidity). It is determined by shining a light through a sample and measuring the incident light scattered at right angles from the sample.*

changes. Short-term or temporary reductions in water quality, if reasonable measures are taken to minimize them (such as the certification conditions in Section 2), may occur without triggering a Tier II analysis (IDAPA 58.01.02.052.03; 080.02).

To ensure proposed regulated activities will not cause more than minimal individual and cumulative impacts on the aquatic environment, certain NWPs require project proponents to notify district engineers (in the form of a PCN) of their proposed activities prior to conducting regulated activities. This level of review gives the district engineer the opportunity to evaluate activities on a case by case basis to determine whether additional conditions or mitigation requirements are warranted to ensure that the proposed activity results in no more than the minimal individual and cumulative impacts on the aquatic environment.

DEQ has denied certification for NWP 16, NWP 23, and NWP 53 (see Section 3.1); and for certain activities associated with NWP 3, NWP 12, NWP 13, NWP 14, NWP 21, NWP 29, NWP 39, NWP 40, NWP 42, NWP 43, NWP 44, NWP 50, NWP 51, NWP 52, NWP C, NWP D, and NWP E (see Section 3.2). Projects seeking coverage under these NWPs will need to request individual certification from DEQ. DEQ will consider any additional conditions or denial of certification if necessary to ensure no lowering of water quality occurs for any of these projects proposed on Tier II water.

Additionally, if an authorized project causes a visible sediment plume then turbidity monitoring is required (see Section 2.5 for more details).

1.4.1 DEQ's Determination

DEQ concludes that the activities authorized by the 2020 NWPs and this certification will comply with Idaho's Tier II requirements under IDAPA 58.01.02.051.02 and 58.01.02.052.08 providing permitted activities are carried out in compliance with the limitations and associated requirements of the 2020 NWPs, Regional Conditions, and conditions of this water quality certification.

1.5 Protection of Outstanding Resource Waters (Tier III Protection)

Idaho's antidegradation policy requires that the quality of outstanding resource waters (ORWs) be maintained and protected from the impacts of point and nonpoint source activities (IDAPA 58.01.02.051.03). No water bodies in Idaho have been designated as ORWs to date. Because it is possible waters may become designated during the term of the 2020 NWPs, DEQ has evaluated whether the NWPs comply with the ORW antidegradation provision.

DEQ has denied certification for any activities on any Outstanding Resource Water (ORW) (see Section 3) and is requiring that any activities proposed on an ORW apply for individual certification (see Section 2.3).

1.5.1 DEQ's Determination

DEQ concludes that the activities authorized by the 2020 NWPs and this certification will comply with Idaho's Tier III requirements under IDAPA 58.01.02.051.03 providing permitted activities are carried out in compliance with the limitations and associated requirements of the 2020 NWPs, Regional Conditions, and conditions of this water quality certification.

2 Conditions Necessary to Ensure Compliance with Water Quality Standards or Other Appropriate Water Quality Requirements of State Law

For all activities covered under this certification, the following conditions are necessary to ensure that permitted projects comply with water quality requirements.

2.1 Design, Implementation, and Maintenance of Appropriate Best Management Practices

Best Management Practices (BMPs) must be designed, implemented, and maintained by the permittee to fully protect and maintain the beneficial uses and ambient water quality of waters of the state and to prevent exceedances of WQS (IDAPA 58.01.02.350.01.a).

BMPs must be selected and properly installed. Proper installation and operation of BMPs are required to ensure the provisions of IDAPA 58.01.02.052 are met. In order to ensure that BMPs are operating properly and to demonstrate that degradation has not occurred, the permittee must monitor and evaluate BMP effectiveness daily during project activities to assure that water quality standards are being met.

Approved BMPs for specific activities (mining, forestry, stream channel alteration, etc.) are codified in IDAPA 58.01.02.350. Additionally, DEQ provides a catalog of storm water best management practices, available at: http://www.deq.idaho.gov/media/60184297/stormwater-bmp-catalog.pdf. This catalog presents a variety of BMPs that can be used to control erosion and sediment during and after construction. Other sources of information are also available and may be used for selecting project appropriate BMPs.

This condition is necessary meet the following water quality requirements:

Control of erosion, sediment, and turbidity to maintain beneficial use support and compliance with the following water quality standards:

- General Surface Water Criteria for Sediment (IDAPA 58.01.02.200.08)
- Numeric Turbidity Criteria for Aquatic Life (IDAPA 58.01.02.250.02.e)
- Numeric turbidity criteria for protection of domestic water supply (IDAPA 58.01.02.252.01.b)
- Point source wastewater treatment requirements (IDAPA 58.01.02.401.02)

2.2 TMDL Compliance

If there is an approved or established TMDL, then the permittee must comply with the established loads in the TMDL. Approved TMDLs can be found on DEQ's website (https://www.deq.idaho.gov/water-quality/surface-water/tmdls/table-of-sbas-tmdls/) or by contacting the appropriate regional office contact (Table 1).

This condition is necessary to meet the following water quality requirements:

Ensure projects are consistent with waste load and load allocations established in approved TMDLs (IDAPA 58.01.02.055.04 and .05).

2.3 Outstanding Resource Waters

If waters become designated as ORWs during the term of the NWPs, a permittee proposing a project on an ORW must contact the appropriate DEQ regional office and apply for individual certification.

This condition is necessary to meet the following water quality requirements:

Ensure there is no lowering of water quality in any ORW as required by the Idaho Antidegradation Policy (IDAPA 58.01.02.051.03).

2.4 Fill Material

Material subject to suspension, including suspended dredge material, shall be free of easily suspended fine material. The fill material to be placed in waters of the United States shall be clean material only. If dredged material is proposed to be used as fill material and there is a possibility the material may be contaminated, then the permittee must apply the procedures in the *Sediment Evaluation Framework for the Pacific Northwest* (RSET, 2018) to assess and characterize sediment to determine the suitability of dredged material for unconfined-aquatic placement; determine the suitability of post dredge surfaces; and to predict effects on water quality during dredging.

This condition is necessary to meet the following water quality requirements:

Prevent suspension of fine sediment and turbidity in order to provide beneficial use support and compliance with the following water quality standards:

- General Surface Water Criteria for Sediment (IDAPA 58.01.02.200.08)
- Numeric Turbidity Criteria for Aquatic Life (IDAPA 58.01.02.250.02.e)
- Numeric turbidity criteria for protection of domestic water supply (IDAPA 58.01.02.252.01.b)
- Point source wastewater treatment requirements (IDAPA 58.01.02.401.02)

Prevent suspension of hazardous, toxic, or deleterious materials or other pollutants that may be associated with fill material in order to ensure beneficial use support and compliance with the following water quality standards:

- General Surface Water Criteria for hazardous materials (IDAPA 58.01.02.200.01), toxic substances (IDAPA 58.01.02.200.02), deleterious materials (IDAPA 58.01.02.200.03), excess nutrients (IDAPA 58.01.02.200.06), or oxygen demanding materials (IDAPA 58.01.02.200.09)
- Numeric toxics criteria for aquatic life and human health (IDAPA 58.01.02.210)

2.5 Turbidity

If no visible sediment plume is present, it is reasonable to assume that there is no potential violation of the water quality criteria for turbidity (IDAPA 58.01.02.250.02.e). Therefore, turbidity monitoring is only required when activities cause a visible sediment plume.

A properly and regularly calibrated turbidimeter is required for measurements analyzed in the field, but grab samples may be collected and taken to a laboratory for analysis. When monitoring is required a sample must be taken at an undisturbed area immediately up-current from in-water disturbance or discharge to establish background turbidity levels. Background turbidity, latitude/longitude, date, and time must be recorded prior to monitoring down-current. Then a sample must be collected immediately down-current from the in-water disturbance or point of discharge and within any visible sediment plume. The turbidity, latitude/longitude, date, and time must be recorded for each sample. The downstream sample must be taken immediately following the upstream sample in order to obtain meaningful and representative results.

Results from the down-current sampling point must be compared to the up-current or background level to determine whether project activities are causing an exceedance of state WQS. If the downstream turbidity is 50 NTUs or more greater than the upstream turbidity, then the project is causing an exceedance of the WQS (IDAPA 58.01.02.250.02.e).
Any exceedance of the turbidity standard must be reported to the appropriate DEQ regional office (Table 1) within 24 hours.

The following steps should be followed to ensure compliance with the turbidity standard:

1. If a visible plume is observed, collect turbidity measurements at 1) an upstream location; and, 2) from within the plume, and compare the results to Idaho's instantaneous numeric turbidity criterion (50 NTU over background).
2. If turbidity in the plume is less than 50 NTU instantaneously over the background turbidity continue monitoring as long as the plume is visible. If turbidity exceeds background turbidity by more than 50 NTU instantaneously then stop all earth disturbing construction activities immediately and proceed to Step 3. If turbidity exceeds background turbidity by more than 25 NTU, or if a visible plume is observed for more than 10 consecutive days, then stop all earth disturbing construction activities and proceed to Step 3.
3. Notify the appropriate DEQ regional office within 24 hours of any turbidity criteria exceedance. Take action to address the cause of the exceedance. That may include inspecting the condition of project BMPs. If the BMPs are functioning to their fullest capability, then the permittee must modify project activities and/or BMPs to correct the exceedance.
4. Earth disturbing activities may continue once turbidity readings return to within 50 NTU over background instantaneously; or, if turbidity has exceeded 25 NTU over background for more than ten consecutive days, once turbidity readings have no longer exceeded 25 NTU over background for at least 24 consecutive hours.

Copies of daily logs for turbidity monitoring must be available to DEQ upon request. The report must describe all exceedances and subsequent actions taken, including the effectiveness of the action.

This condition is necessary to meet the following water quality requirements:

Ensure that activities do not impair beneficial uses, and ensure and document compliance with the following water quality standards:

- General Surface Water Criteria for Sediment (IDAPA 58.01.02.200.08)
- Numeric Turbidity Criteria for Aquatic Life (IDAPA 58.01.02.250.02.e)
- Numeric turbidity criteria for protection of domestic water supply (IDAPA 58.01.02.252.01.b)

2.6 Mixing Zones

No mixing zones are authorized through this certification. If a mixing zone, or alternatively, a point of compliance, is desired, the permittee must apply for an individual certification and must contact the appropriate DEQ regional office (Table 1) to request authorization for a mixing zone.

This condition is necessary to meet the following water quality requirements:

Ensure any mixing zone is properly authorized in accordance with the Idaho Mixing Zone Policy (IDAPA 58.01.02.060).

2.7 Culverts

To prevent road surface and culvert bedding material from entering a stream, culvert crossings must include best management practices to retain road base and culvert bedding material. For perennial waters, the permittee should consider the Idaho Stream Channel Alterations rules (IDAPA 37.03.07). Another source of BMPs for culvert installation can be found in the Idaho Forest Practices Act (IDAPA 20.20.01). Examples of best management practices include, but are not limited to: parapets, wing walls, inlet and outlet rock armoring, compaction, suitable bedding material, anti-seep barriers such as bentonite clay, or other acceptable roadway retention systems.

This condition is necessary to meet the following water quality requirements:

Control of erosion, sediment, and turbidity to provide beneficial use support and compliance with the following water quality standards:

- General Surface Water Criteria for Sediment (IDAPA 58.01.02.200.08)
- Numeric Turbidity Criteria for Aquatic Life (IDAPA 58.01.02.250.02.e)
- Numeric turbidity criteria for protection of domestic water supply (IDAPA 58.01.02.252.01.b)

2.8 Wood Preservatives

DEQ's *Guidance for the Use of Wood Preservatives and Preserved Wood Products In or Around Aquatic Environments* must be considered when using treated wood materials in the aquatic environment. Within this guidance document DEQ references the *Best Management Practices*

for the Use of Treated Wood in Aquatic and Wetland Environments[3]. This document provides recommended guidelines for the production and installation of treated wood products destined for use in sensitive environments.

This condition is necessary to meet the following water quality requirements:

Ensure that toxic chemicals are not introduced into waters and to ensure compliance with the following water quality standards:

- General Surface Water Criteria for hazardous materials (IDAPA 58.01.02.200.01), toxic substances (IDAPA 58.01.02.200.02), and deleterious materials (IDAPA 58.01.02.200.03)
- Numeric toxics criteria for aquatic life and human health (IDAPA 58.01.02.210)

2.9 Reporting of Discharges Containing Hazardous Materials or Deleterious Materials

All spills of hazardous material, deleterious material or petroleum products which may impact waters (ground and surface) of the state shall be immediately reported. Call 911 if immediate assistance is required to control, contain or clean up the spill. If no assistance is needed in cleaning up the spill, contact the appropriate DEQ regional office in Table 2 during normal working hours or Idaho State Communications Center after normal working hours. If the spilled volume is above federal reportable quantities, contact the National Response Center.

For immediate assistance: Call 911

National Response Center: (800) 424-8802

Idaho State Communications Center: (800) 632-8000

Table 2. Idaho DEQ regional contacts for reporting discharge or spill of hazardous or deleterious materials.

Regional Office	*Toll Free Phone Number*	*Phone Number*
Boise	888-800-3480	208-373-0550
Coeur d'Alene	877-370-0017	208-769-1422
Idaho Falls	800-232-4635	208-528-2650
Lewiston	877-541-3304	208-799-4370
Pocatello	888-655-6160	208-236-6160
Twin Falls	800-270-1663	208-736-2190

[3] Western Wood Preservers Institute, Wood Preservation Canada, Southern Pressure Treaters' Association, and Southern Forest Products Association. 2011. "Best Management Practices: For the Use of Treated Wood in Aquatic and Wetland Environments" Vancouver, WA: Western Wood Preservers Institute.

This condition is necessary to meet the following water quality requirements:

Ensure compliance with the following water quality standards:

- Hazardous Material Spills (IDAPA 58.01.02.850)
- Petroleum release reporting, investigation, and confirmation (IDAPA 58.01.02.851)
- Petroleum release response and corrective action (IDAPA 58.01.02.852)

2.10 Other Conditions

This certification is conditioned upon the requirement that if there are material modifications of the NWPs or the permitted activities—including without limitation, significant changes from the draft NWPs to final NWPs, or significant changes to the draft Regional Conditions, then DEQ must re-evaluate the certification to determine compliance with Idaho WQS and to provide additional certification pursuant to Section 401.

This condition is necessary to ensure that DEQ can evaluate any material modification to ensure it meets water quality requirements and complies with the Idaho antidegradation policy (IDAPA 58.01.02.051) and its implementation (IDAPA 58.01.02.052), general surface water quality criteria (200), numeric toxics criteria for aquatic life and human health (IDAPA 58.01.02.210), numeric criteria for aquatic life (IDAPA 58.01.02.250), recreation (IDAPA 58.01.02.251), and water supply uses (IDAPA 58.01.02.252).

3 Projects for Which Certification Is Denied

DEQ cannot certify that the following activities will comply with water quality requirements, including State WQS and other appropriate requirements of state law, and is therefore denying certification for the activities listed below.

For activities for which certification has been denied, the applicant will be required to request an individual certification before the activity can be conducted. Individual certification requests will provide DEQ with the opportunity to review project details and determine if additional conditions are necessary to ensure that water quality requirements will be met.

Upon review and evaluation of individual certification requests, DEQ may 1) certify without condition, 2) provide individual certification with conditions necessary to ensure water quality requirements will be met, or 3) deny certification for projects that will not meet water quality requirements.

3.1 NWPs denied

DEQ denies certification for all activities proposed to occur on waters designated as ORWs during the term of the permit. This denial is necessary to ensure compliance with the water quality requirements of Idaho's antidegradation policy (IDAPA 58.01.02.051.03) and implementation procedures (IDAPA 58.01.02.052.09.g).

In addition, the following NWPs are denied certification for all Idaho waters. Projects seeking coverage under these NWPs must request individual certification from DEQ.

NWP 16 - Return Water from Upland Contained Disposal Areas

Basis for denial:

Return water from upland disposal areas has the potential to contribute turbidity, sediment, and other toxic and non-toxic pollutants to receiving waters.

To ensure that discharge from upland contained disposal areas meets water quality requirements, DEQ must evaluate the quality of the return water and evaluate the potential pollutants associated with return water on a case-by-case basis to determine compliance with general surface water quality criteria (IDAPA 58.01.02.200); numeric toxics criteria for aquatic life and human health (IDAPA 58.01.02.210); and use specific criteria for aquatic life (IDAPA 58.01.02.250), recreation (IDAPA 58.01.02.251), and water supply uses (IDAPA 58.01.02.252).

NWP 23 - Approved Categorical Exclusions

Basis for denial:

DEQ is unable to determine that meeting the requirements for categorical exclusion under the National Environmental Policy Act will meet state water quality requirements.

DEQ will evaluate categorically excluded activities on a case-by-case basis to determine compliance with general surface water quality criteria (IDAPA 58.01.02.200); numeric toxics criteria for aquatic life and human health (IDAPA 58.01.02.210); and use specific criteria for aquatic life (IDAPA 58.01.02.250), recreation (IDAPA 58.01.02.251), and water supply uses (IDAPA 58.01.02.252).

NWP 53 – Removal of Low-Head Dams

Basis for denial:

Material released from the removal of low head dams has the potential to contribute turbidity, sediment, and other toxic and non-toxic pollutants to receiving waters.

In order to ensure that release of materials from the removal of low head dams meets water quality requirements, DEQ must evaluate the potential pollutants associated with this release on a case-by-case basis to determine compliance with general surface water quality criteria (IDAPA 58.01.02.200); numeric toxics criteria for aquatic life and human health (IDAPA 58.01.02.210); and use specific criteria for aquatic life (IDAPA 58.01.02.250), recreation (IDAPA 58.01.02.251), and water supply uses (IDAPA 58.01.02.252).

3.2 NWPs partially denied

The following activities have the potential to disturb significant areas and could disturb a significant fraction of entire Assessment Units, causing permanent and significant impairment of designated and existing beneficial uses. The conditions associated with the NWP, regional conditions, and the conditions associated with this certification are not sufficient to provide DEQ with assurance that projects of this magnitude would not result in impairment of existing or

designated beneficial uses in all waters, and potentially increase degradation in high quality (Tier II) waters.

In order to meet the requirements of Idaho's antidegradation implementation procedures (IDAPA 58.01.02.052), ensure that beneficial uses are not impaired, and ensure compliance with general surface water quality criteria for sediment (IDAPA 58.01.02.200.08), DEQ must evaluate these projects on a case-by-case basis and provide individual certification where applicable.

3.2.1 NWPs 3, 13, and 14

The 2020 NWPs 3, 13, and 14 require preconstruction notification (PCN) for certain activities when it is necessary for the district engineer to review activities to ensure only minimal adverse environmental effects.

While the additional district engineer review is intended to ensure that activities will cause only minimal adverse environmental effects, it is not reasonable to expect that the district engineer review will consider the requirements of Idaho's antidegradation implementation procedures (IDAPA 58.01.02.052) when making their determination. Consequently, DEQ cannot certify that activities requiring PCN under these NWPs would not cause degradation of water quality, and therefore cannot certify that these activities would meet Idaho's antidegradation implementation procedures (IDAPA 58.01.02.052).

Therefore, DEQ is denying certification for the following activities that require PCN under the proposed 2020 NWPs:

NWP 3 – Maintenance

Activities Denied Certification

- Activities authorized by paragraph (b) of NWP 3

NWP 13 – Bank Stabilization

Activities Denied Certification:

- activities involving discharge into special aquatic sites;
- activities in excess of 500 linear feet;
- activities that involve discharge of greater than one cubic yard per running foot measured along the length of the treated bank below the plane of the ordinary high water mark

NWP 14 – Linear Transportation Projects

Activities Denied Certification:

- activities resulting in the loss of waters of the United States in excess of 1/10 acre;
- discharge in a special aquatic site, including wetlands

3.2.2 NWPs 12, C, and D

The 2017 NWP 12 included activities proposed to be permitted under the 2020 NWPs C and D.

The 2017 NWP 12 required PCN for activities that, among other thresholds, involved mechanized clearing in forested wetlands, exceeded 500 linear feet, or that resulted in loss of greater than 1/10 acre of waters of the United States. The 2020 NWP proposes removal of these thresholds for PCN, and does not require additional review from the ACOE district engineer to ensure only minimal adverse environmental effects.

Without the requirement for PCN and additional review from the district engineer, DEQ cannot certify that these activities will not result in degradation. Therefore, DEQ is denying certification for the following activities:

NWP 12 – Oil or Natural Gas Pipeline Activities

Activities Denied Certification:

- activities that involve mechanized clearing of a wooded wetland;
- oil or natural gas pipelines in waters of the United States that exceed 500 linear feet or that run adjacent to a water body for greater than 500 linear feet;
- activities where discharge will result in loss of greater than 1/10-acre, as determined by ACOE, of waters of the United States

NWP C – Electric Utility Line and Telecommunications Activities

Activities Denied Certification:

- activities that involve mechanized clearing of a wooded wetland;
- electric utility line and telecommunications activities in waters of the United States that exceed 500 linear feet;
- activities where discharge will result in loss of greater than 1/10-acre, as determined by ACOE, of waters of the United States

NWP D – Utility Line Activities for Water and Other Substances

Activities Denied Certification:

- activities that involve mechanized clearing of a wooded wetland;
- utility line activities in waters of the United States that exceed 500 linear feet;
- activities where discharge will result in loss of greater than 1/10-acre, as determined by ACOE, of waters of the United States

3.2.3 NWPs 21, 29, 39, 40, 42, 43, 44, 50, 51, 52, and E

The 2017 NWPs for the following activities had a 300 linear foot limit for losses of stream bed. The 2020 NWP proposes removal of the 300 linear foot limit for losses of stream bed and instead rely solely on the ½ acre limit.

The median bankfull width measured from 48 wadeable streams monitored in 2010 as part of DEQ's Beneficial Use reconnaissance Program (BURP) was 19.7 feet. A loss of ½ acre at this stream width would correspond to 1,105 linear feet of loss, or the equivalent of 0.2 miles of stream. DEQ cannot certify that losses of this magnitude of stream bed, or that losses of stream

bed based solely on the ½ acre limit, would not result in permanent degradation. Therefore, DEQ is denying certification for the following activities that exceed the 300 linear foot limit previously imposed by the 2017 NWP:

NWP 21 – Surface Coal Mining Activities

Activities Denied Certification:

- activities resulting in loss in excess of 300 linear feet of streambed
- activities resulting in loss in excess of ½ acre of jurisdictional wetlands

NWP 29 – Residential Developments

Activities Denied Certification:

- activities resulting in loss in excess of 300 linear feet of streambed
- activities resulting in loss in excess of ½ acre of jurisdictional wetlands

NWP 39 – Commercial and Institutional Developments

Activities Denied Certification:

- activities resulting in loss in excess of 300 linear feet of streambed
- activities resulting in loss in excess of ½ acre of jurisdictional wetlands

NWP 40 – Agricultural Activities

Activities Denied Certification:

- activities resulting in loss in excess of 300 linear feet of streambed
- activities resulting in loss in excess of ½ acre of jurisdictional wetlands

NWP 42 – Recreational Facilities

Activities Denied Certification:

- activities resulting in loss in excess of 300 linear feet of streambed
- activities resulting in loss in excess of ½ acre of jurisdictional wetlands

NWP 43 – Stormwater Management Facilities

Activities Denied Certification:

- activities resulting in loss in excess of 300 linear feet of streambed
- activities resulting in loss in excess of ½ acre of jurisdictional wetlands

NWP 44 – Mining Activities

Activities Denied Certification:

- activities resulting in loss in excess of 300 linear feet of streambed
- activities resulting in loss in excess of ½ acre of jurisdictional wetlands

NWP 50 – Underground Coal Mining Activities

Activities Denied Certification:

- activities resulting in loss in excess of 300 linear feet of streambed
- activities resulting in loss in excess of ½ acre of jurisdictional wetlands

NWP 51 – Land Based Renewable Energy Generation Facilities

Activities Denied Certification:

- activities resulting in loss in excess of 300 linear feet of streambed
- activities resulting in loss in excess of ½ acre of jurisdictional wetlands

NWP 52 – Water-Based Renewable Energy Generation Pilot Projects

Activities Denied Certification:

- activities resulting in loss in excess of 300 linear feet of streambed
- activities resulting in loss in excess of ½ acre of jurisdictional wetlands

NWP E – Water Reclamation and Reuse Facilities

Activities Denied Certification:

- activities resulting in loss in excess of 300 linear feet of streambed
- activities resulting in loss in excess of ½ acre of jurisdictional wetlands

4 Right to Appeal Final Certification

The final Section 401 Water Quality Certification may be appealed by submitting a petition to initiate a contested case, pursuant to Idaho Code § 39-107(5) and the "Rules of Administrative Procedure before the Board of Environmental Quality" (IDAPA 58.01.23), within 35 days of the date of the final certification.

Questions or comments regarding the actions taken in this certification should be directed to Jason Pappani, State Office IDEQ, at (208) 373-0515 or via email at jason.pappani@deq.idaho.gov.

Mary Anne Nelson, PhD
Surface and Wastewater Division
Administrator

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 N Hilton Street, Boise, ID 83706
(208) 373-0502

Brad Little, Governor
Jess Byrne, Director

MEMORANDUM

TO: James Joyner, Chief, Upper Snake and Idaho Panhandle Branch, U.S. Army Corps of Engineers

FROM: Mary Anne Nelson, Surface and Wastewater Division Administrator of the Department of Environmental Quality

DATE: 01/10/23

SUBJECT: 2020 Final § 401 Water Quality Certification Contact and Hyperlink Updates

The Department of Environmental Quality (DEQ) is submitting an update for agency contacts and hyperlinks to be included as an attachment to the § 401 Water Quality Certification dated December 4, 2020, upon authorization of a federal permit or license.

Table 1. DEQ state and regional office contacts.

Regional Office	Address	Phone Number	Email
Boise	1445 N. Orchard St., Boise, ID 83706	(208) 373-0490	*chase.cusack@deq.idaho.gov*
Coeur d'Alene	2110 Ironwood Parkway, Coeur d'Alene, ID 83814	(208) 666-4605	*chantilly.higbee@deq.idaho.gov*
Idaho Falls	900 N. Skyline, Suite B., Idaho Falls, ID 83402	(208) 528-2679	*alex.bell@deq.idaho.gov*
Lewiston	1118 "F" St., Lewiston, ID 83501	(208) 799-4874	*sujata.connell@deq.idaho.gov*
Pocatello	444 Hospital Way, #300 Pocatello, ID 83201	(208) 239-5007	*matthew.schenk@deq.idaho.gov*
Twin Falls	650 Addison Ave. W., Suite 110, Twin Falls, ID 83301	(208) 737-3877	*sean.woodhead@deq.idaho.gov*
State Office	1410 N. Hilton St., Boise, ID 83706	(208) 373-0570	*tambra.phares@deq.idaho.gov*

Table 2. Updated hyperlinks.

Section	Hyperlink
1.2	*Integrated Report*
1.2	*Final 2022 Integrated Report Interactive Mapper*
2.1	*Catalog of Storm Water Best Management Practices*
2.2	*Approved TMDLs*
2.8	*Guidance for the Use of Wood Preservatives and Preserved Wood Products In or Around Aquatic Environments*
2.8	*Best Management Practices for the Use of Treated Wood in Aquatic and Wetland Environments*

Please direct questions or comments about the actions taken in the 2020 Final § 401 Water Quality Certification to Tambra Phares, State Office DEQ, (208) 373-0187, or email at *tambra.phares@deq.idaho.gov*.

APPROVAL: 01/10/2023

Mary Anne Nelson, PhD
Department of Environmental Quality
Surface and Wastewater Division Administrator

Date

Place this on sign visible from ROW – remove this note
THIS SIGN ONLY FOR TRIBAL LANDS

SWPPP

Contractor Permit # XXXX

For more information contact:

XXXXXX

#208-XXX-XXXX

LHTAC Permit

Local Sponsor Permit

For more information contact:

#208-344-0565

If you observe indicators of storm water pollutants in the discharge or in the receiving waterbody, contact the EPA through the following website: https://www.epa.gov/enforcement/report-environmental-violations.

Place this on sign visible from ROW – remove this note
THIS IS FOR IPDES PERMITTED PROJECTS

SWPPP

Contractor Permit # XXXX
for additional construction information contact:
XXXXXX
#208-XXX-XXXX
LHTAC Permit #
information contact:
Karissa Nelson
#208-344-0565

If you would like to obtain a copy of the SWPPP, contact the Site Construction Representative above.

If you observe indicators of storm water pollutants in the discharge or in the receiving waterbody, contact DEQ through the following website:
https://www.deq.idaho.gov/about-us/contact-us/
IPDES Discharge Permit No. IDR100000
Storm water Pollution Prevention Plan (SWPPP)

Narrative for Construction Activities

itd.idaho.gov

Insert Project Name Here

N 500 W Reconstruction

- Disclaimer: All references to the EPA 2017 CGP are no longer valid. References in this SWPPP are now changed to the 2022 DEQ CGP and/or the 2022 EPA CGP.

Estimated Project Start Date	(mm/dd/yyyy)
Estimated Date of ITD Permit Termination	(mm/dd/yyyy)
SWPPP Preparation/Certification Date	(mm/dd/yyyy)

Contents

Section 1: SWPPP Framework

Regulatory and Policy Overview

This narrative is a part of the Storm water Pollution Prevention Plan (SWPPP) and is a requirement of the Idaho Pollutant Discharge Elimination System (IPDES) Construction General Permit for Discharge Activities (CGP) (EPA and NPDSE for tribal lands). CGP coverage is required from the "Commencement of Earth-Disturbing Activities" and "Commencement of Pollutant-Generating Activities" until "Final Stabilization" as defined in the 2022 CGP. The SWPPP may reference the following regulations, specifications, protocols, provisions, best management practices (BMPs), and standard drawings including, but not limited to: CGP and referenced Codes of Federal Regulation (CFR) requirements, February 2022; ITD Best Management Practices Manuals; ITD Standard Specifications for Highway Construction; ITD Supplemental Specifications; ITD Special Contract Provisions; LHTAC Contractor's Notes, Approved Project Bid Plans; on-site policies adopted and approved by the Engineer during construction; United States Army Corps of Engineers (USACE) 404 permit (if applicable); Idaho Department of Environmental Quality (IDEQ) 401 Certifications (if applicable), Idaho Department of Water Resources (IDWR) Stream Alteration Permit requirements (if applicable), and any change orders that apply.

Notice of Intent and CGP Requirements

To obtain coverage for storm water discharges under the 2022 CGP, all Operators, including operators of a "Construction Support Activity", as defined in Appendix A of the CGP, must prepare and submit a complete and accurate Notice of Intent (NOI) which meets CGP Part 1 requirements. It is the responsibility of all operators to fully understand the information requirements to be provided when filling out a NOI. Discharges are not authorized if the NOI is incomplete or inaccurate. Authorization to discharge storm water from construction activities under the terms and conditions of the CGP will be permitted no sooner than fourteen (14) calendar days after the submittal of a complete and accurate NOI is acknowledged on IDEQ's website, unless IDEQ notifies you that your authorization has been delayed or denied.

Note: This SWPPP must be finalized and certified by all Operators prior to submittal of NOIs for permit coverage. Copies of the Idaho Department of Environmental Quality (IDEQ) Notice of Intent (NOI) submittal form and IDEQ NOI acknowledgement from the IPDES E-permitting System notifying the operator of an administratively complete NOI and approved authorization must be included as a component of this SWPPP in Appendix.

Operator Requirements

As an operator, compliance with all applicable terms and conditions of the CGP as it relates to operator controls and activities on the construction site or construction support activities, is the sole responsibility of the operator. All operators including, but not limited to; project owners or sponsors, Contractors, applicable subcontractors, or any other entity who has operational control over construction plans and specifications, operational control over day-to-day activities, or operational controls within a construction support activity that is a portion of a larger project; must ensure CGP compliance.

Design Specifications and Requirements

Follow all manufacturers design specifications for the installation and maintenance of controls. In the absence of specific manufacturer's specifications, follow ITD standard drawings and the ITD Best Management Practices Manuals. These can be referenced at itd.idaho.gov.

For special conditions not covered in the design specifications or ITD guidance materials, consult with the Resident Engineer or ITD SWPPP practitioners to ensure proper application and installation of BMPs. Many of the commonly used storm water controls used by ITD are on the Qualified Products List (QPL). In order for a product to get approved on this list, design specifications are reviewed by a QPL committee. Therefore, if a QPL approved product is used on this project, and it is installed and maintained properly, it is being utilized per the manufacturer's design specifications. The ITD Qualified Products List can be referenced at:

http://apps.itd.idaho.gov/apps/materials/QPL.aspx

Section 2: Contact Information/Responsible Parties/Storm water Team Members

Operator(s) - See definition of "Operator" in CGP

Idaho Transportation Department		SWPPP Developer Name Rob Ramsey / Civil Science	
Address 3330 W Grace Street	City Boise	State ID	Zip Code 83703
Fax Number 208-344-0789	Telephone Number 208-344-0565	E-Mail Contact lhtac@lhtac.org	

Prime Contractor

Company or Organization Name		Name	
Address	City	State	Zip Code
Fax Number	Telephone Number	E-Mail Contact	
Area of Control (if more than one operator at site)			

Earth Disturbing Subcontractor(s)

Company or Organization Name		Name	
Address	City	State	Zip Code
Fax Number	Telephone Number	E-Mail Contact	
Area of Control (if more than one operator at site)			

Repeat as needed for all additional Earth Disturbing Subcontractors.

Contractor's Emergency 24-Hour Contact (Water Pollution Control Manager)

Company or Organization Name		Name	
Address	City	State	Zip Code
Fax Number	Telephone Number	E-Mail Contact	

Storm water Team

Role or Responsibility	Position Agency/CEI Storm water Inspector(s)	Name	
City	State ID	Zip Code	
Telephone Number	E-Mail Contact		

Role or Responsibility	Position Contractor's WPCM(s)	Name	
City		State	Zip Code
Telephone Number	E-Mail Contact		

Role or Responsibility	Position Agency Resident Engineer	Name	
City		State ID	Zip Code
Telephone Number	E-Mail Contact		

Role or Responsibility Certifier and Signature Authority	Position LHTAC Construction Manager or LHTAC Environmental Engineer	Name Megan Kautz/Karissa Nelson	
City Boise		State ID	Zip Code 837063
Telephone Number 208-344-0565	E-Mail Contact mkautz@lhtac.org; knelson@lhtac.org		

Role or Responsibility Certifier and Signature Authority	Position Prime Contractor's Responsible Corporate Officer	Name	
City		State	Zip Code
Telephone Number	E-Mail Contact		

Role or Responsibility	Position Teton County Public Works Director	Name Darryl Johnson	
City Driggs		State ID	Zip Code 83422
Telephone Number 208-313-0245	E-Mail Contact djohnson@co.teton.id.us		

Describe additional storm water team members here. Copy and paste for additional team members.

Role or Responsibility SWPPP Guidance	Position LHTAC Environmental Engineer	Name Karissa Nelson	
City Boise		State ID	Zip Code 83703
Telephone Number 208.344.0565	E-Mail Contact knelson@lhtac.org		

Section 3: Site Evaluation, Assessment, and Planning

3.1 Project/Site Information

Project/Site Name			
N 500 W Reconstruction			
Project Street/Location/Address/Mileposts			
N 500 W, MP 101.79 to MP 104.45			
City	State	Zip Code	County or Similar Subdivision
Tetonia	ID	83452	Teton

Project Latitude/Longitude

*(Use **one** of three possible formats: 1) degrees, minutes, seconds; 2) degrees, minutes, decimal; or 3) decimal)	
Latitude: 43°50'54"N	Longitude: 111° 06'37"W

Specify method for determining latitude/longitude (enter X in box next to appropriate answer)

☐ United States Geological Survey (USGS) topographic map (if used, specify scale) _____

☐ EPA Web site ☐ GPS ☒ Other (please specify) Google Earth

Horizontal Reference Datum

☐ NAD 27 ☐ NAD 83 or WGS 84 ☐ Unknown

Additional Project Information

Is the project/site located on Indian country lands, or located on a property of religious or cultural significance to an Indian tribe?

☐ Yes ☒ No

If yes, provide the name of the Indian tribe associated with the area of Indian country (include the name of Indian reservation if applicable), or if not in Indian country, provide the name of the Indian tribe associated with the property.

If you are conducting earth-disturbing activities in response to a public emergency, document the cause of the public emergency *(e.g., natural disaster, extreme flooding conditions)*, information substantiating its occurrence *(e.g., state disaster declaration)*, and a description of the construction necessary to reestablish effective public services.

Description of Soil Type(s):
Non-Plastic Sandy Silt, Silty Clay with Sand, Sandy Lean Clay, Poorly Graded Gravel with Silt and Sand per submitted materials report

Description of Slopes: (describe existing slopes and note any changes due to grading or fill activities)
Varying grades sloping from roadway. After construction 3:1 slopes within clear zone with 1.5:5 slope outside of clear zone

Description of Drainage Patterns: (describe existing drainage patterns and note any changes dues to grading or fill activities)
Install new culverts and provide ditch to convey water away from the roadway. Extend or replace existing culverts to maintain existing drainage patterns.

Description of existing or baseline vegetation on or immediately surrounding the project area:
Weeds are on both side slopes of the roadway where there is less gravel as well as trees on the north end of the project.

Climate/Rainfall Patterns: - check the box that applies

☐ Arid (0-10” annual rainfall) ☒ Semi-Arid (10”-20” annual rainfall)

☐ (20-30” annual rainfall) ☐ (30”-40” annual rainfall)

Provide a description of unique or sensitive features (such as wetlands) that are to be preserved or protected Delineated Wetlands 1-6, Unnamed Streams 1-3, Grouse Creek, Haden Canal, Unnamed Drainage.
Describe measures to protect these unique or sensitive features Fiber wattle will be used around every culvert area and areas where drainage leads to canal waters and wetlands.

3.2 Discharge Information

Note: Information entered here should be consistent with the "Discharge Information" of the project's NOI form

	Yes	No
Does your project/site discharge storm water into a Municipal Separate Storm Sewer System (MS4)?	☐	☒
Does your project have construction support activities that discharge storm water into a MS4?	☐	☒
Are there any surface waters (Waters of the U.S.) that are located within 50 feet of your construction site disturbances?	☒	☐
Are there any surface waters (Waters of the U.S.) that are located within 50 feet of your construction support activities?	☐	☒

Table 1 – Names of Receiving Waters

List name(s) of the first surface water (Waters of the U.S.) that receives storm water directly from your project and/or from the MS4 (Note: multiple rows are provided where your site has more than one point of discharge that flows to different surface waters which is not uncommon on linear transportation projects).

1.	Haden Canal
2.	Grouse Creek
3.	
4.	

Add additional rows as needed by hitting Tab in the last cell of the table

Table 2 – Impaired Waters / TMDLs

For each surface water listed in Table 1 above, answer the following: **Is this surface water listed as "Impaired"?** Impaired waters will be on IDEQ's 303(d) list waiting for an EPA approved TMDL, or already have an EPA approved TMDL. If your answer is Yes, then provide required information following on that row.

	Yes	No	List pollutant(s) that are causing the impairment	A TMDL has been completed Yes	A TMDL has been completed No	Title of the TMDL Document	Pollutant(s) with a TMDL
1.	☐	☒		☐	☒		
2.	☒	☐	Temperature	☒	☐	Teton River TMDL, Temperature #9476 Teton River Subbasin TMDL (2016) #67400	Temperature
3.	☐	☐		☐	☐		
4.	☐	☐		☐	☐		

Add additional rows as needed by hitting Tab in the last cell of the table

IDEQ Turbidity Monitoring Requirements

Turbidity monitoring must comply with the CGP. Monitoring for dewatering discharges is only required when a site discharges into WOTUS, with no intervening conveyance systems or other intermediaries.

Operators must also conduct turbidity monitoring during construction activities when there is a discharge of pollutants from an unstabilized portion of the site to a water of the U.S. during operating hours.

The permittee must conduct turbidity monitoring during construction activities and thereafter on days where there is a direct discharge from the construction site to WOTUS or if there is a visible plume to a water of the United States during operating hours. See CGP for more information. Also, see ITD/LHTAC's Turbidity Monitoring contract Special Provision for additional information regarding monitoring locations and documentation/reporting requirements. If applicable, insert a copy of these documents, including the monitoring log book documentation (as per the contract Special Provision) into the corresponding SWPPP Appendix.

At least one turbidity sample must be taken from the dewatering discharge after any treatment process, before mixing with the receiving water, on each day of discharge from dewatering activities. The following criteria must be met:

- The daily sample must be under 50 NTU instantaneously above background of the receiving water, or
- The running 10 calendar day average of the daily results must be under 25 NTU above background of the receiving water.

If either of these criteria is not met, you must stop the dewatering discharge and implement corrective actions to address the cause of the exceedance before resuming dewatering operations.

The turbidity measurements must be taken in the field using a turbidimeter. The turbidimeter must be calibrated properly and regularly. Records of monitoring information must include:

a. All relevant calibration and maintenance records;
b. All original strip chart recordings or other forms for continuous monitoring instrumentation;
c. The date, place, and time of sampling or measurement;
d. The name of any individuals who performed the sampling or measurements;
e. The dates any analyses were performed;
f. The name of any individuals who performed the analyses;
g. The analytical techniques or methods used; and
h. The results of the analysis.

The turbidity measurements must be taken in the field using a turbidimeter. The turbidimeter must be calibrated properly and regularly.

Copies of daily logs for turbidity monitoring must be available to DEQ/EPA upon request. The monitoring log must describe all exceedances and subsequent actions taken, including the effectiveness of the action. Include the date the plume was identified, the calibration records of the turbidimeter, the dates on which pollutant generating activity ceased, and the dates on which pollutant generating activities resumed, as applicable. Keep the monitoring log in your SWPPP.

Table 3 – Tier 2 Waters
For each surface water listed in Table 1 above, answer the following: **Is this surface water designated as a Tier 2 water?**
Notes:

- There are currently only Tier 1 and Tier 2 waters in Idaho. No water bodies have been designated as Tier 3 by the Idaho legislature;
- If you listed a water body as impaired in Table 2 above, it is most likely not a Tier 2 water, although IDEQ does retain the authority to determine that a 303(d) listed water body is actually a high quality Tier 2 water.
- Tier 2 waters are fully supporting their designated beneficial uses according to the most recent IDEQ Integrated Report. See CGP Section 3.2 for more information.

	Yes	No	If you answered Yes, specify which surface water is designated as Tier 2?
1.	☐	☒	
2.	☐	☒	
3.	☐	☐	

4.	☐	☐	

Method Used to Determine Receiving Water Quality Status

Describe the method(s) you used to determine the status of your receiving waters above. In Idaho, the options for making this determination are:

☒ IDEQ's most recent Integrated Report

☐ IDEQ's Integrated Report Mapping Tool

☐ Written correspondence with your regional IDEQ office to confirm your determination

Provide additional information or comments below on how this determination was made. Also see CGP part 9.7.1.

3.3 Nature of the Construction Activity

General Description of Project

Provide a general description of the construction project. (Describe the major phases of construction in SWPPP Section 3.4.)
The purpose of the project is to rehabilitate the existing pavement and provide minor widening to improve safety along N 500 W from milepost (MP) 101.79 (W 7380 N) to MP 104.45 (W 10000 N).

Size of Construction Project

Construction Project Size	Total Area Expected to be Disturbed (Must match area entered in Part IV of the project NOIs)	Maximum Area Disturbed at Any One Time
9.75 acres		5.0 acres

Construction Support Activities (if applicable)
Describe any construction support activities for the project (e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) and their associated disturbances to the nearest ¼ acre. Support Activity disturbances should be added to the Construction Site disturbances to sum up the Total Area Expected to be Disturbed box above. Repeat as necessary for each applicable support activity and add to the total.

Construction Support Activity Description		
Size of Disturbance for Support Activity	Support Activity Address or Latitude/Longitude	
Construction Support Activity Contact Person's Name	Phone Number	E-Mail Address

Repeat as needed for additional Support Activity areas or locations.

3.4 Sequence and Estimated Dates of Construction Activities

Note: The Critical Path Method (CPM) schedule on many projects contains detailed information about grading, stabilization, and storm water control installation practices and associated timelines or phases. If a CPM is available containing at least the details prompted in this SWPPP section, place it in the "Grading and Stabilization" Activities SWPPP Appendix, in lieu of completing 3.4.

Phases of Construction - Describe all major phases of construction.
Phase I

General Description of Construction Phase - Include estimated area of disturbance associated with this phase. Installation of culverts, install retaining wall, excavation, granular subbase		
Estimated Start Date of Disturbances for This Phase	Estimated End Date of Disturbances for This Phase	
Storm water Control(s) Fiber Wattles	Estimated Date(s) of Installation	Estimated Date(s) of Removal
Stabilization Measures Required Re-vegetation of disturbed areas		Estimated Date of Application(s)

Phase II

General Description of Construction Phase - Include estimated area of disturbance associated with this phase. RABS, ¾" Aggregate, Superpave HMA		
Estimated Start Date of Disturbances for This Phase	Estimated End Date of Disturbances for This Phase	
Storm water Control(s) Fiber Wattles	Estimated Date(s) of Installation	Estimated Date(s) of Removal
Stabilization Measures Required Re-vegetation of disturbed areas		Estimated Date of Application(s)

Repeat as needed for all additional construction phases.

3.5 Allowable Non-Storm water Discharges

Notes:

- CGP requirement to identify the likely locations of allowable non-storm water discharges on the site map(s).
- The most commonly occurring non-storm water ITD discharges are highlighted below, but others may be present on your project.

Type of Allowable Non-Storm water Discharge	**Likely to be Present at This Site**	
	Yes	**No**
1. Discharges from emergency fire-fighting activities	☐	☒
2. Fire hydrant flushings	☐	☒
3. Landscape irrigation	☒	☐
4. Waters used to wash vehicles and equipment	☐	☒
5. Water used to control dust	☒	☐
6. Potable water including uncontaminated water line flushings	☐	☒
7. Routine external building wash down	☐	☒
8. Pavement wash waters	☐	☒
9. Uncontaminated air conditioning or compressor condensate	☐	☒
10. Uncontaminated, non-turbid discharges of ground water or spring water	☐	☒
11. Foundation or footing drains	☐	☒
12. Construction dewatering water	☐	☒
Non-storm water discharges are not applicable to this project ☐		

List allowable non-storm water discharges **using the same number** as marked above and the measures used to eliminate or reduce them and to prevent them from becoming contaminated. Delete the table if "Non-storm water discharges are not applicable to this project" box is checked above.

Measures that will be Implemented to Eliminate or Reduce Non-Storm water Contamination	
3.	Coordinate with owners to install culverts and small ditches when no irrigation water is going through ditches.
5.	Use min amount of water necessary for dust abatement. Ensure that water truck is moving while dispensing water so as not to allow water to puddle and wash off the site. Watering will be done inside run off controlled area.

Add additional rows as needed by hitting Tab in the last cell of the table

3.6 Site Maps

Insert site maps in "Site Maps" Section SWPPP Appendix. For most projects, a series of site maps is necessary to meet the minimum CGP mapping requirements and will consist of site maps and SWPPP plan sheets or drawings. Maps must also show construction support activities associated with this project.

Section 4: Documentation Of Compliance With Other Federal Requirements

4.1 Endangered Species Protection

(See the "Endangered Species" Section of the SWPPP Appendix.)

Eligibility Criterion - Under which criterion listed in CGP Appendix C is the site eligible for coverage under this permit?

Criterion	Supporting Documentation
☐ **A**	**No ESA-listed species and/or designated critical habitat present in action area.** Using the process outlined in Appendix C of the CGP, you certify that ESA-listed species and designated critical habitat(s) under the jurisdiction of the USFWS or NMFS are not likely to occur in your site's "action area" as defined in Appendix A of the CGP.
☒ **C**	**Discharges not likely to adversely affect ESA-listed species and/or designated critical habitat.** Include the following information in the Endangered Species Documentation Section in the Appendix: • List the ESA species and/or designated habitat located in your "action area" using the process outlined in Appendix C of the CGP • Indicate the distance between the site and the listed species and/or designated critical habitat in the action area (in miles); • Include the rationale describing specifically how adverse effects to ESA-listed species will be avoided from the discharges and discharge-related activities. You must also include a copy of your site map from your SWPPP showing the upland and in-water extent of your "action area".
☐ **D**	**Coordination with USFWS and/or NMFS has successfully concluded.** Include the following information in the Endangered Species Documentation Section in the "Endangered Species" Section in the SWPPP Appendix: • Copies of the correspondence with the participating agencies. • Basis statement supporting the selection of this criterion should identify whether USFWS or NMFS or both agencies participated in coordination, the field office/regional office(s) providing that coordination, and the date that coordination concluded.
☐ **E**	**ESA Section 7 consultation has successfully concluded.** Include the following information in the Endangered Species Documentation Section in the "Endangered Species" section of the SWPPP Appendix: • A Biological Opinion from USFWS and/or NMFS that concludes that the action in question (taking into account the effects of your site's discharges and discharge-related activities) is not likely to jeopardize the continued existence of listed species, nor the destruction or adverse modification of critical habitat; OR • A written concurrence from USFWS and/or NMFS with a finding that the site's discharges and discharge-related activities are not likely to adversely affect ESA-listed species and/or designated critical habitat.

4.2 Historic Preservation
As a state permit, IPDES does not require determination of effect under Section 106. If this SWPPP is for an EPA NOI, include Section 106 compliance documentation.

4.3 Safe Drinking Water Act, Underground Injection Control Requirements
(See CGP and IDAPA 37.03.03-Rules and Minimum Standards for the Construction of Injection Wells)

Check any or all of the following controls being installed. If any controls are installed, insert copies of letters, emails, permitting information, or other communication between you and the IDWR into the "Additional Tribal, State, or Local Program" section of the SWPPP Appendix.
☐ Infiltration trenches (if storm water is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system)
☐ Commercially manufactured pre-cast or pre-built proprietary subsurface detention vaults, chambers, or other devices designed to capture and infiltrate storm water flow
☐ Drywells, seepage pits, or improved sinkholes (if storm water is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system)

4.4 Other Applicable Federal, Tribal, State or Local Programs

Examples would include, but not be limited to, a project falling within an MS4 permit area, the county requiring a grading permit, additional tribal requirements, or the project has a Section 404 permit for wetlands. Briefly describe these here as documentation in the SWPPP, and insert any additional information or supporting documentation into the "Additional Tribal, State, or Local Program" section of the SWPPP Appendix.

Section 5: Erosion and Sediment Controls

5.1 Natural Buffers or Equivalent Sediment Controls
(CGP)

Are there any surface waters (Waters of the U.S) within 50 feet of the project's earth disturbances?

☐ No - If No, no further documentation is required for this section. Delete information until SWPPP Section 5.2 below.

☒ Yes - If Yes, check the Compliance Alternative or applicable Buffer Exception(s) below that has been chosen. To condense this section, once applicable sections are checked, delete non-applicable sections.

Note: Because of the linear nature of ITD projects, the answers/conditions to the Buffer Alternatives and/or Buffer Exceptions may change multiple times along a project's limit. This may make multiple evaluations necessary for some projects. If applicable, specify the locations of the different evaluations and conclusions by mile-marker or stationing.

Buffer Compliance Alternatives – Choose one of four

☐ A 50-foot undisturbed natural buffer will be provided, as per the requirements in CGP.

☐ An undisturbed natural buffer that is less than 50 feet and supplemented by erosion and sediment controls, achieving the sediment load reduction equivalent to a 50-foot undisturbed natural buffer, will be provided and maintained, as per the requirements in CGP.

☒ It is infeasible to provide and maintain an undisturbed natural buffer of any size. Erosion and sediment controls to achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer will be implemented, as per the requirements in CGP.

☐ A buffer exception applies, mark appropriate box below.

Buffer Exceptions – Choose any that apply.
*Note: If multiple exceptions apply to one portion of the project, or different exceptions apply to different portions of the project, specify by mile-marker or stationing.

☐ The disturbances within 50 feet of a water of the U.S. include one of the conditions below. Therefore, are exempt from the requirements in the CGP:

- Construction approved under a CWA Section 404 permit; or
- Construction of a water-dependent structure or water access areas (e.g., pier, boat ramp, trail).

☐ There is no discharge of storm water to waters of the U.S. through the area between the disturbed portions of the site and any waters of the U.S. located within 50 feet of your site. This includes situations where you have implemented controls measures, such as a berm or other barrier that will prevent such discharges.

☐ No natural buffer exists due to preexisting development disturbances that occurred prior to the initiation of planning for this project. If disturbing portions of preexisting development, provide justification and documentation.

- Where some natural buffer exists, but portions of the area within 50 feet of the surface water are occupied by preexisting development disturbances, the site must still comply with one of the CGP compliance alternatives above.

☒ For a “linear project”, site constraints (e.g., limited right-of-way) make it infeasible for me to meet any of the CGP compliance alternatives. Include documentation for the following:

.

- Limit disturbances within 50 feet of any waters of the U.S. and/or provide supplemental erosion and sediment controls to treat storm water discharges from earth disturbances within 50 feet of the water of the U.S.
- Document in the SWPPP the rationale for why it is infeasible for to implement one of the compliance alternatives, and describe any buffer width retained and supplemental erosion and sediment controls installed.

5.2 Perimeter Controls

Insert a general description of how you will comply with CGP. Install sediment controls along any perimeter areas of the site that are downslope from any exposed soil or other disturbed areas. The perimeter control must be installed upgradient of any natural buffers.

Fiber Wattle

Perimeter Control 1	Approximate Installation Date or Phase _____
Describe the perimeter control to be installed. Indicate specific controls that will be installed and made operational prior to earth disturbance.	
Fiber Wattle installed in accordance with ITD Standard Drawing 212-3.	
Insert maintenance requirements for the perimeter control. At a minimum, CGP requires removal of sediment "before it has accumulated to one-half of the above-ground height of any perimeter control."	

Repeat as needed for individual specific perimeter controls.

5.3 Sediment Track-Out

Insert a general description of how you will comply with CGP.

Track-Out Control 1	Approximate Installation Date or Phase _____
Describe the track-out control to be installed.	
At a minimum, you must provide for maintenance that meets the requirement in CGP.	

Repeat as needed for additional individual track-out controls.

5.4 Stockpiled Sediment or Soil

Insert a general description of how you will comply with CGP.
Stockpiled soils are not anticipated to be applicable to this project. However, should stockpiled soils become necessary they will be implemented in accordance with ITD BMP WM-4: Stockpile Management.

Stockpile Control 1	Approximate Installation Date or Phase _____
Describe the stockpile control to be installed Protection of stockpiles shall be practiced year-round. Stockpiles shall be located a minimum of 50 feet away from concentrated flows of storm water or drainage courses. Wind erosion control practices shall be implemented as appropriate on all stockpiled materials in accordance with EC-14 (Wind Erosion Control). Stockpiles of contaminated solid shall be managed in accordance with WM-8 (Contaminated Soil Management). Bagged materials should be placed on pallets and under cover	
Insert maintenance requirements for the stockpile control. At a minimum, you must comply with following requirement in CGP. Do not hose down or sweep soil or sediment accumulated on pavement or other impervious surfaces into any storm water conveyance (unless connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or surface water.	

Repeat as needed for additional individual stockpile controls.

5.5 Minimize Dust

Insert a general description of how you will comply with CGP
The contractor shall use dust abatement water or other dust knockdown methods as approved by LHTAC to reduce fugitive dust and reduce wind erosion. Water used for dust control and compaction will not be discharged from the site.

Dust Control 1	Approximate Installation Date or Phase _____
Describe the dust control to be installed or implemented	
Insert maintenance requirements for the dust control	

Repeat as needed for additional individual dust controls.

5.6 Minimize the Disturbance of Steep Slopes

Insert a general description of how you will comply with CGP. If infeasible, explain why.

Steep Slope Control 1	Approximate Installation Date or Phase _____
If steep slope disturbance is required, describe the controls that will be implemented to minimize erosion. This could include installation of standard erosion and sediment controls, phasing, using stabilization practices, etc.	
Insert maintenance requirements for any steep slope controls used. Maintenance and Inspection • Conduct inspections as required by the NPDES permit or contract specifications. • Repair or replace split, torn, unraveling, or slumping sediment retention fiber rolls. • Remove sediment before it has accumulated to 50% of the above-ground height of any fiber roll	

Repeat as needed for additional individual steep slope controls.

5.7 Preservation of Topsoil

Insert a general description of how you will comply with CGP. If infeasible, explain why.
Topsoil along roadway edges and ROW will be saved on-site by grading it to a berm along the ROW.

Topsoil Control 1	Approximate Installation Date or Phase _____
Describe the topsoil management practices to be implemented. The top 6 inches of material graded from the roadside will be stockpiled in a berm along the ROW for later redistribution over disturbed surfaces at the end of construction. See ITD BMP EC-2 Preservation of Existing Natural Vegetation	
Insert maintenance requirements for any the topsoil management practices. N/A	

Repeat as needed for additional individual topsoil preservation controls.

5.8 Minimize Soil Compaction

Insert a general description of how you will comply with CGP.

Soil Compaction Control 1	Approximate Installation Date or Phase _____
Describe the soil compaction minimization practices to be utilized where infiltration practices or final vegetation occur	
Insert maintenance requirements for any soil compaction minimization practices.	

Repeat as needed for individual soil compaction controls.

5.9 Storm Drain Inlets

Insert a general description of how you will comply with CGP. N/A

Storm Drain Inlet Control 1	Approximate Installation Date or Phase _____
Describe the storm drain inlet control to be installed	
Insert maintenance requirements for the storm drain inlet control. At a minimum, you must comply with following requirement in CGP: “Clean, or remove and replace, the protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised. Where there is evidence of sediment accumulation adjacent to the inlet protection measure, you must remove the deposited sediment by the end of the same work day in which it is found or by the end of the following work day if removal by the same work day is not feasible.”	

Repeat as needed for individual storm drain inlet controls.

5.10 Constructed Storm water Conveyance Channels

Insert a general description of how you will comply with CGP We will apply controls outlined in ITD BMP PC-1 to reduce or eliminate excessive bank or bottom erosion in the borrow ditches if it occurs.

Conveyance Channel Control 1	Approximate Installation Date or Phase _____
Describe the storm water conveyance channel control design to be in compliance with CGP Roadside ditches, perimeter control as needed.	
Insert maintenance requirements for the storm water conveyance channels Sediment removal as needed.	

Repeat as needed for individual conveyance channel controls.

5.11 Sediment Basins

Insert a general description of how you will comply with CGP. If you have determined that it is infeasible to utilize an outlet structure that discharges from the surface, provide an explanation for why this is the case. N/A

Sediment Basin Control 1	Approximate Installation Date or Phase _____
Describe the sediment basin control to be installed. Sediment basins are engineered structures and must be developed by a Professional Engineer. Include any site specific basin designs in the SWPPP plan sheets. N/A	
Insert maintenance requirements for the sediment basin control. At a minimum, you must comply with following requirement in CGP, at a minimum remove accumulated sediment to maintain at least one-half of the design capacity and conduct all other appropriate maintenance to ensure the basin or impoundment remains in effective operating condition.	

Repeat as needed for individual sediment basin controls.

5.13 Dewatering Practices (Typically determined by the Contractor and approved by ITD)

Insert a general description of how you will comply with CGP N/A

Dewatering Practice 1	Approximate Installation Date or Phase _____
Describe the dewatering practice to be installed. If dewatering is required, a site specific dewatering plan is typically developed. Describe this detailed plan here, or insert into the corresponding SWPPP Appendix. N/A	
Insert discharge and maintenance requirements for each dewatering practice. At a minimum, you must comply with the requirement in CGP	

Repeat as needed for individual dewatering practices.

5.15 Project Stabilization Practices

(See CGP)

Notes:

- Shortened stabilization requirements (7 days instead of 14 days) may apply to the project if you've determined that your receiving water(s) is Impaired or Tier 2 in SWPPP.
- This section should be consistent with the summary of stabilization practices by each construction phase as previously summarized in SWPPP.
- Provide the estimated installation date, or phase of construction the stabilization practice will be implemented. Provide the detailed timing of grading and associated stabilization activities as they occur during construction in the Grading and Stabilization Log found in the corresponding Appendix.

Use this table if you are <u>NOT</u> located in an arid, semi-arid, or drought- stricken area.

Specific Site Stabilization Practice ☐ Vegetative ☐ Non-Vegetative ☐ Temporary ☐ Permanent Installation Phase or Approximate Installation Date _____
Describe the site stabilization practice to be installed and how it will meet the requirements of CGP.
Insert maintenance requirements for the stabilization practice

Repeat as needed for all additional site stabilization practices and/or construction phases.

Use this table if you ARE located in an arid, semi-arid, or drought- stricken area.

Specific Site Stabilization Practice			
☒ Vegetative	☒ Non-Vegetative	☐ Temporary	☒ Permanent
For vegetative stabilization in arid or semi-arid areas, describe the site conditions, including seasonal dry period dates.			
Date Seasonal Dry Period Begins _____ Date Seasonal Dry Period Ends _____ Installation Phase or Approximate Installation Date _____			
Describe the site stabilization practice to be installed. Note how the design will meet the requirements of CGP. Seeding & Riprap lined channels			
Insert maintenance requirements for the stabilization practice.			

Specific Site Stabilization Practice			
☐ Vegetative	☒ Non-Vegetative	☒ Temporary	☐ Permanent
For vegetative stabilization in arid or semi-arid areas, describe the site conditions, including seasonal dry period dates.			
Date Seasonal Dry Period Begins _____ Date Seasonal Dry Period Ends _____ Installation Phase or Approximate Installation Date _____			
Describe the site stabilization practice to be installed. Note how the design will meet the requirements of CGP. Fiber Wattle			
Insert maintenance requirements for the stabilization practice.			

Repeat as needed for all additional site stabilization practices and/or construction phases.

Stabilization Delays Due to Unforeseen Circumstances

Note: You will not be able to include this information in your initial SWPPP.

Use this table only if uncontrollable circumstances have delayed the initiation or completion of a stabilization practice such as those described in CGP.

Site Stabilization Practice Being Delayed			
☐ Vegetative	☐ Non-Vegetative	☐ Temporary	☐ Permanent

Justification

Describe the circumstances that prevent you from meeting the deadlines required in CGP and the schedule you will follow for initiating and completing stabilization.

Repeat as needed for any additional project stabilization delays.

Additional Note:

The Critical Path Method (CPM) schedule on many projects contains additional information on grading, stabilization, and storm water control installation practices and timelines. The CPM schedule should

be inserted in the “Grading and Stabilization Activities Log” section of the SWPPP Appendix, if applicable.

Section 6: Pollution Prevention – Good Housekeeping Standards

All staging areas, material storage/stockpile sites, source sites (excluding commercial sources), disposal/excess material/ waste sites, haul roads, temporary roads, construction entrances and exits must be approved by the Resident Engineer and have BMPs implemented prior to approved use. The contractor shall not encroach into or affect any cultural resources, endangered species or critical habitat, regulated wetlands and waters of the United States, or other environmentally sensitive areas. Attach a record of Environmental Clearance/Approval for any Contractor designated sites, including cultural/historical resources and Endangered Species Act into the corresponding SWPPP Appendix.

6.1 Potential Sources of Pollution

(See CGP)

Description of Construction Site Pollutants

Pollutant-Generating Activity	**Pollutants or Pollutant Constituents** that could be discharged if exposed to stormwater	**Location on Site** or reference SWPPP site map where this is shown
Fuels and/or Lubricants	Petroleum Dilates	
Hydraulic Oils	Mineral Oils	
Asphalts	Petroleum Dilates	
Anti-freeze	Glycol, Heavy Metals	
Sanitary Toilets	Bacteria, Viruses, Parasites	

Add additional rows as needed

6.2 Spill Prevention and Response

(See CGP)

All ITD projects shall follow the Idaho Hazardous Materials/WMD Incident Command and Response Support Plan and ITD Incident Management Plan. In addition, a project specific Spill Plan shall be provided by the Contractor, and should be included here, or added to this SWPPP as an additional appendix**.**

Insert project specific spill plan and response procedures if applicable.

Contractor should provide spill response and cleanup kits on all projects, and make all appropriate staff aware of their locations. The location of these kits should also be marked on the SWPPP maps or plan sheets.

When/where a release of a hazardous materials in an amount equal to or in excess of a reportable quantity occurs during a 24-hour period as established in accordance with the CGP and Codes of Federal Regulation requirements under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302, the finding party must immediately notify the Resident Engineer upon discovery. The Resident Engineer in return will contact the National Response Center (1-800-424-8802) as well as the Idaho Communication Center (1-800-632-8000).

Per *IDEQ's CGP*, the following requirements also apply.

- Any spill of hazardous materials must be immediately reported to the appropriate DEQ regional office per (IDAPA 58.01.02.850.03).
- Spills of petroleum products that exceed 25 gallons or that cause a visible sheen on nearby surface waters should be reported to DEQ within 24-hours.
- Petroleum product spills of less than 25 gallons or spills that do not cause a sheen on nearby surface waters shall only be reported to DEQ if clean-up cannot be accomplished within 24-hours (IDAPA 58.01.02.851.04).

Outside of regular business hours, qualified spills should be reported to the State Communications Center at 1-800-632-8000 or 208-846-7610

6.3 Fueling and Maintaining Equipment or Vehicles

(See CGP)

Insert a general description of how you will comply with the CGP requirement to provide an effective means of preventing and eliminating the discharge of spilled or leaked chemicals, including fuel, from the area where these activities will take place.

Fueling and Maintenance Practice 1 Approximate Installation Date or Phase _____
Describe the pollution prevention practice to be installed. If applicable, include copies of the design specifications.
Insert maintenance requirements for this pollution prevention practice.

6.4 Washing Equipment and Vehicles

(See CGP)

Insert a general description of how you will comply with CGP.

Washing/Cleaning Practice 1 Approximate Installation Date or Phase _____
Describe the pollution prevention practice to be installed. If applicable, include copies of the design specifications.
Insert maintenance requirements for this pollution prevention practice.

6.5 Storage, Handling, and Disposal of Construction Products, Materials, and Wastes

(See CGP)

6.5.1 Building Products - Examples include: asphalt sealants, copper flashing, roofing materials, adhesives, concrete admixtures

Insert a general description of how you will comply with CGP.

Handling/Storage/Disposal 1 Approximate Installation Date or Phase _____
Describe the pollution prevention practices to be installed. If applicable, include copies of the design specifications.
Insert maintenance requirements for this pollution prevention practice.

Repeat as needed for individual pollution prevention practices.

6.5.2 Pesticides, Herbicides, Insecticides, Fertilizers, and Landscape Materials

Insert a general description of how you will comply with CGP.

Handling/Storage/Disposal 1 Approximate Installation Date or Phase _____
Describe the pollution prevention practice to be installed. If applicable, include copies of the design specifications.
Insert maintenance requirements for this pollution prevention practice.

Repeat as needed for individual pollution prevention practices.

6.5.3 Diesel Fuel, Oil, Hydraulic Fluids, Other Petroleum Products, and Other Chemicals

Insert a general description of how you will comply with CGP.

Handling/Storage/Disposal 1	Approximate Installation Date or Phase _____
Describe the pollution prevention practice to be installed. If applicable, include copies of the design specifications.	
Insert maintenance requirements for the pollution prevention practice	

Repeat as needed for individual pollution prevention practices.

6.5.4 Hazardous or Toxic Waste

(Examples include paints, solvents, petroleum-based products, wood preservatives, additives, curing compounds, acids.)

Insert a general description of how you will comply with CGP.

Handling/Storage/Disposal 1	Approximate Installation Date or Phase _____
Describe the pollution prevention practice to be installed. If applicable, include copies of the design specifications.	
Insert maintenance requirements for the pollution prevention practice	

Repeat as needed for individual pollution prevention practices.

6.5.5 Construction and Domestic Waste

(Examples include packaging materials, scrap construction materials, masonry products, timber, pipe and electrical cuttings, plastics, Styrofoam, hardened concrete, and other trash or building materials.)

Insert a general description of how you will comply with CGP.

Handling/Storage/Disposal 1	Approximate Installation Date or Phase _____
Describe the pollution prevention practice to be installed. If applicable, include copies of the design specifications.	
Insert maintenance requirements for the pollution prevention practice.	

Repeat as needed for individual pollution prevention practices.

6.5.6 Sanitary Waste

Insert a general description of how you will comply with CGP.

Sanitary Waste Practice 1	Approximate Installation Date or Phase _____
Describe the pollution prevention practice to be installed. If applicable, include copies of the design specifications.	

Insert maintenance requirements for the pollution prevention practice.

Repeat as needed for individual pollution prevention practices.

6.6 Washing Applicators and Containers used for Paint, Concrete or Other Materials
(See CGP)

Insert a general description of how you will comply with CGP.

Washing/Disposal Practice 1 Approximate Installation Date or Phase _____
Describe the pollution prevention practice to be installed. If applicable, include copies of the design specifications.
Insert maintenance requirements for the pollution prevention practice

Repeat as needed for individual pollution prevention practices.

6.7 Fertilizers
(See CGP)

Insert a general description of how you will comply with CGP.

Pollution Prevention Practice 1 Approximate Installation Date or Phase _____
Describe the pollution prevention practice to be installed. If applicable, include copies of the design specifications.
Insert maintenance requirements for the pollution prevention practice

Repeat as needed for individual pollution prevention practices.

6.8 Additional Pollution Prevention Practices
(Delete if not used)

Insert a general description of the problem this control is designed to address.

Practice 1 Approximate Installation Date or Phase _____
Describe the pollution prevention practice to be installed. If applicable, include copies of the design specifications.
Insert maintenance requirements for the pollution prevention practice

Repeat as needed for individual pollution prevention practices.

Section 7: Inspections, Corrective Actions, SWPPP Modifications, and Violation Reporting

7.1 Inspection Personnel and Procedures

On ITD projects, the ITD environmental inspector and the Contractor's Water Pollution Control Manager are responsible for storm water compliance inspections and SWPPP implementation and recordkeeping. These members of the Storm water Team are listed in SWPPP..

Form ITD 2802, Storm water Compliance Inspection, and the accompanying Instructions and Inspection Procedures, provide detailed information on roles and responsibility, as well as inspection procedures. Include a copy of the most recent version of these ITD documents in the corresponding SWPPP Appendix for reference.

Inspection Schedule

Insert project inspection schedule based on CGP requirements. This may change throughout the lifetime of the project. Document the updated frequency here for each change, including the date of the change, and include the record of each certified SWPPP modification for these changes in the appropriate Appendix.

1. Minimum of once every 7 calendar days during Construction Activities and Pollutant Generating Activities, but more often if required to maintain full compliance with the CGP.
2. Within 24 hours of a storm event of 0.25 inches or greater, even if the storm event is still continuing.
3. Within 24 hours of the end of a storm event where consecutive 24 hour periods produced 0.25 inches or greater.
4. During the SWPPP specified normal Work Days. Modify the SWPPP when significant changes are made to the normal Work Day schedule.
5. If a Storm Event producing 0.5 inches or greater within 24 hours occurs outside the project's normal Work Days, complete and inspection within 24 hours to verify and document project compliance with the CGP.
6. WPCM inspection frequency may be reduced by the Engineer in writing in accordance with the CGP.

Repeat as needed for any additional frequency changes.

Projects Normal Work Schedule/Working Hours

Insert project work schedule in days and hours based on requirement to inspect during *projects normal working hours* in CGP. This may change throughout the lifetime of the project. Document the updated work schedule here for each major change, including the dates of the changes. Also include the record of each major work schedule change as a certified SWPPP modification record in the corresponding SWPPP Appendix.

Normal Work Schedule	Applicable Dates
1.	
2.	
3.	
4.	

Reductions in Inspection Frequency (if applicable)

For Stabilized Areas:

For the reduction in inspections resulting from stabilization, specify the location and completion dates of stabilization steps (see CGP). It is likely that you will not be able to include this in your initial SWPPP. These stabilized areas should match what is being documented in the Grading and Stabilization Activities Log in corresponding SWPPP Appendix.

Location Where Stabilization Steps Have Been Completed	Applicable Dates
1.	
2.	
3.	
4.	

Repeat as needed for any additional stabilized areas.

For Arid, Semi-Arid Areas or Drought-Stricken Areas – N/A ☐

For the reduction in inspection frequencies in arid, semi-arid, or drought-stricken areas, insert beginning and ending dates of the seasonally dry period on your site. It is likely that you will not be able to include this in your initial SWPPP. If you qualify for this inspection frequency reduction (see CGP), document in the inspection frequency table above, and you will need to modify your SWPPP to include this information.

Beginning Date of Seasonally Dry Period _____ Ending Date of Seasonally Dry Period _____

For Frozen Conditions – N/A ☐

For the reduction in inspections due to 3 months (minimum) of continuously frozen conditions, insert beginning and ending dates of the frozen period for your site. It is likely that you will not be able to include this in your initial SWPPP. If you qualify for this inspection frequency reduction (see CGP), document in the inspection frequency table above, and you will need to modify your SWPPP to include this information.

Beginning Date of Frozen Period _____ Ending Date of Frozen Period _____

Repeat as needed for multiple construction season frozen periods.

Rain Gauge Location and Information (See CGP)

Specify location(s) of rain gauge to be used for determining whether a rain event of 0.25 inches or greater has occurred. If using information from a web-based station representative of your project location, provide the information for that station.

7.2 Corrective Actions

Describe the procedures for taking corrective action in compliance with CGP.

Procedures for completing Corrective Actions and associated recordkeeping requirements are described in ITDs 2802 Instructions and Inspection Procedures and in the Construction General Permit contract Special Provision for this project. See corresponding SWPPP Appendices for required documentation, recordkeeping, and signatory records.

7.3 SWPPP Modifications

Describe the procedures for making SWPPP Modifications in compliance with CGP.

Procedures for completing SWPPP Modifications and associated recordkeeping requirements are described in ITDs 2802 Instructions and Inspection Procedures and in the Construction General Permit contract Special Provision for this project. See corresponding Appendices for processes and procedures for making SWPPP Modifications, required documentation, recordkeeping, and signatory records.

7.4 Reportable CGP Violations

CGP includes information describing CGP noncompliance reporting requirements. On ITD projects, the contract documents specify that the Contractor's Water Pollution Control Manager is required to provide verbal notification to the Engineer immediately when a reportable violation occurs, and within 24 hours in writing using the ITD Form 2790. Insert a copy of written Notice of Potential Violation into the corresponding SWPPP Appendix.

7.5 Delegation of Authority

On ITD projects, all Operators who file a Notice of Intent must certify the project SWPPP. CGP includes detailed information regarding signatory requirements. If the person who will be signing inspection reports, corrective action reports, and SWPPP modifications is different than the person who certified the original SWPPP, insert a copy of the completed and signed delegation of authority form into the corresponding SWPPP Appendix.

Section 8: Recordkeeping and Training

8.1 Training Requirements
(See CGP Part 6)

On ITD projects, the ITD/LHTAC Environmental Inspector(s) must have a current IPDSE/NPDES Inspector Qualification based on completion of ITD Inspector Course or the equivalent Idaho Association of General Contractors (AGC) Water Pollution Control Manager Course.

The Contractor's WPCM(s) must have a current Water Pollution Control Manager Qualification based on attendance of an ITD approved, AGC provided WPCM course, or EPA.

Both these training courses meet the staff training requirement of CGP, and the Qualified Person as defined in CGP. Insert certificates documenting course completion into the corresponding SWPPP Appendix.

You are not required to provide or document formal training for subcontractors or other outside service providers, but must ensure that such personnel understand any requirements of the permit that may be affected by the work they are subcontracted to perform. If informal training, or tailgate trainings are completed and you'd like to document their completion, complete the ITD Form 2958 and include a copy in the SWPPP Appendix.

8.2 Construction General Permit

Insert a complete copy of the current Construction General Permit in the corresponding SWPPP Appendix.

8.3 Notice of Intent and IDEQ/EPA Acknowledgment Letters

LTHAC, the Contractor, and any applicable local or 3rd party Operator filing an NOI should include a copy of their complete Notice of Intent, IDEQ Acknowledgment Letters, as well as Notices of Termination (NOTs) in the SWPPP Appendix.

Section 9: SWPPP Certification

(See CGP Part 9, Part 9.11.4)

LTHAC Certification Statement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name (printed)	Title	Signature	Date
Karissa Nelson	LHTAC Environmental Engineer		

Prime Contractor Certification Statement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name (printed)	Title	Signature	Date

Repeat as needed for additional operators at the site (EPA, Local Entity is an operator). Any operator with permit coverage for this project needs to certify the SWPPP.

SWPPP Appendices

Appendix A – Site Maps

See CGP 7.2.4 for required Site Map details. Based on recommendations from IDEQ/EPA Inspectors, in addition to CGP requirements, it is recommended that the Contractor show locations of spill response and cleanup kits on the site maps.

Site map requirements per IPDES 2022 CGP:

4. Site Map. Include a legible map, or series of maps, showing the following features of the site:

A. Boundaries of the property;

B. Locations where construction activities will occur, including:

i. Locations where construction activities will occur (note any phasing), including any demolition activities; (For the contractor to complete)

ii. Approximate slopes before and after major grading activities (note any steep slopes [as defined in Appendix A]);

iii. Locations where sediment, soil, or other construction materials will be stockpiled; (For the contractor to complete)

iv. Any water of the U.S. crossings; (this includes irrigation ditches, since they have return water potential)

v. Designated points where vehicles will exit onto paved roads; (For the contractor to complete)

vi. Locations of structures and other impervious surfaces upon completion of construction; and

vii. Locations of onsite and offsite construction support activities covered by this permit (See Section 1.2.1.C); (For the contractor to complete)

C. Locations of any waters of the U.S. within the site and all waters of the U.S. located within one mile downstream of the site's discharge points. Also identify if any are listed as impaired or are identified as Tier II or ~~Tier III~~ water;

D. Any areas of federally listed critical habitat within the site and upstream and downstream from the storm water discharge point into a stream segment that may be affected by these discharges;

E. Type and extent of pre-construction cover on the site (e.g., vegetative cover, forest, pasture, pavement, structures);

F. Drainage patterns of storm water and authorized non-storm water before and after major grading activities;

G. Storm water and authorized non-storm water discharge locations including:

i. Locations where storm water and/or authorized non-storm water will be discharged to storm drain inlets;[67] and

ii. Locations where storm water or authorized non-storm water will be discharged directly to waters of the U.S. (e.g., not via a storm drain inlet);

H. Locations of all potential pollutant generating activities identified in Section 7.2.3.G; (For the contractor to complete)

I. Locations of storm water controls, including natural buffer areas and any shared controls utilized to comply with this permit; and

~~J. Locations where polymers, flocculants, or other treatment chemicals will be used and stored.~~ (include only if used)

Appendix B – Copy of 2022 Construction General Permit

- Insert a copy of the 2022 CGP request condensed printing for space saving purposes.

Appendix C – Copy of NOIs and IDEQ Acknowledgement Letters from all Operators

- Insert a copy of NOIs
- IDEQ's/EPA acknowledgment letters showing coverage under the CGP

- Insert a copy of any NOTs that are filed as Operators terminate their permit coverage.

Appendix D - ITD Form 2951 – Contractor or Local Entity CGP Signature Authority

Follow the ITD “Form Finder” link below and search by the form number.

http://apps.itd.idaho.gov/apps/formfinder2dmz

Appendix E - ITD Form 2952 – LHTAC Delegation of CGP Signature Authority

2022 Construction General Permit (CGP) LHTAC Delegation of CGP Signature Authority

ITD 2952 (Rev. 03-22; LHTAC)

I hereby designate the person or described position below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the Construction General Permit (CGP), at the subject construction site referenced in this SWPPP Document.

LHTAC Construction Engineering Manager, Resident Engineer
-or- Environmental Engineer

Agency Name			Telephone Number
Local Highway Technical Assistance Council			208.344.0565
Address	City	State	Zip Code
3330 Grace Street	Boise	ID	83703

The designee is authorized to sign any reports, stormwater pollution prevention plans and all other documents required by the permit, **except the Notice of Intent (NOI) and Notice of Termination (NOT)**.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

LHTAC Administrator	Signature	Date Signed
Laila Kral, PE	Laila Kral	03/01/2022

Appendix F – ITD Form 2954 - Subcontractor Certifications/Agreements

Follow the ITD “Form Finder” link below and search by the form number.

http://apps.itd.idaho.gov/apps/formfinder2dmz

Appendix G –ITD Form 2802, Storm water Compliance Inspection & Inspection Instructions and Procedures

Follow the ITD “Form Finder” link below and search by the form number.

http://apps.itd.idaho.gov/apps/formfinder2dmz

Appendix H – Completed ITD 2802, Storm water Compliance Inspection Reports

Note: Place an uncertified copy of each inspection report into this appendix as a placeholder until the DE/DEM certified version is routed back to the SWPPP. The suggested turn-around time to get certified copies back into the SWPPP is 2 weeks or less.

Appendix I - ITD Form 2953 - Corrective Action Reporting Tables

Follow the ITD “Form Finder” link below and search by the form number.

http://apps.itd.idaho.gov/apps/formfinder2dmz

Appendix J - ITD Form 2955 - SWPPP Modification Log

Follow the ITD Form Finder link below and search by the form number.

http://apps.itd.idaho.gov/apps/formfinder2dmz

Appendix K – ITD Form 2956 - Grading and Stabilization Activities Log

Follow the ITD Form Finder link below and search by the form number.

http://apps.itd.idaho.gov/apps/formfinder2dmz

Appendix L – ITD Form 2957 – SWPPP Modification and /Or Corrective Action Report

Follow the ITD Form Finder link below and search by the form number.

http://apps.itd.idaho.gov/apps/formfinder2dmz

Appendix M – SWPPP Training and Qualifications

Include:

- ITD Inspector qualification certificate
- Contractor's Water Pollution Control Manager (WPCM) qualification certificate.

Use ITD Form 2958 – SWPPP Training Log to document any additional project specific training completed.

Follow the ITD Form Finder link below and search by the form number.

http://apps.itd.idaho.gov/apps/formfinder2dmz

Appendix N – Endangered Species Documentation

Insert documentation consistent with SWPPP.

Appendix O – Historic Properties Documentation

Not required for IPDES. Include for EPA projects on tribal lands.

Appendix P – Additional Tribal, State, or Local Programs

Insert documentation consistent with SWPPP.

Appendix Q – Turbidity Monitoring Records

If applicable to this project, insert documentation consistent with SWPPP and the Turbidity Monitoring CGP requirements and contract Special Provision.

Appendix R - ITD Form 2790 - Notice of Potential Violation of CGP or Notice of Prohibited Discharge

Follow the ITD Form Finder link below and search by the form number.

http://apps.itd.idaho.gov/apps/formfinder2dmz

2024 BUY AMERICA INSERT

This document is intended as a Build America Buy America (BABA or BA) contract insert that includes changes to the 2023 Standard Specifications for Highway Construction (SSHC), and the 2020 Quality Assurance Manual (Dated 10/19).

REVISIONS TO THE 2023 SSHC

ON PAGE 11, SUBSECTION 101.04 – DEFINITIONS **02/24**

Replace the definition of "Construction Material" with the following:

Construction Material. A Construction Material is an article, material, or supply that consists of only one of the items listed, except for minor additions: non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cable); glass (including optic glass); lumber (including treated wood, and untreated wood); Fiber optic cable; Optical fiber; Engineered wood or drywall. To the extent one of the items listed above contains as inputs other items listed above, it is nonetheless a Construction Material. For example, fiber optic cable contains as inputs other items listed, such as glass and/or plastics, but fiber optic cable is nonetheless a Construction Material. Items specifically excluded from Construction Materials are products that are primarily iron or steel (defined under Iron and Steel Products); cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives. Coatings do not change the categorization of a Construction Material. Minor additions of articles, materials, supplies, or binding agents to a Construction Material do not change the categorization of Construction Material. For example, wax added to engineered wood should not disqualify the engineered wood from categorization as a Construction Material. However, if before the engineered wood is brought to the work site, it is combined with glass or other items or materials to produce a new product, which is not listed above, the new product would be classified as a Manufactured Product, not a Construction Material.

ON PAGE 14, SUBSECTION 101.04 – DEFINITIONS **02/24**

Add the following in alphabetical order:

Manufactured Product. Any product that is classified as an iron or steel product, or a Construction Material is not a Manufactured Product. Cement and cementitious materials, aggregates such as stone, sand, or gravel, or aggregate binding agents or additives, also cannot be classified as a Manufactured Product. Otherwise, the following definition of Manufactured Product applies: Articles, materials, or supplies that have been: a) Processed into a specific form and shape; or b) Combined with other articles, materials, or supplies to create a product with different properties than the individual articles, materials, or supplies.

ON PAGE 59, 106.01.A.1 – IRON AND STEEL PRODUCTS **02/2024**

Add the following after the first paragraph.

> Iron or steel products means articles, materials, or supplies that consist wholly or predominantly of iron or steel or a combination of both. "Predominantly of iron or steel" means that the cost of the iron and steel content exceeds 50 percent of the total cost of all its components. The cost of iron and steel is the cost of the iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the product and a good faith estimate of the cost of iron or steel components.

ON PAGE 60, 106.01.A.1 – IRON AND STEEL PRODUCTS **02/2024**

Delete the second sentence of the fifth paragraph and replace with the following:

> Cost determination is based on supplier invoice costs.

ON PAGE 60, 106.01.A.2 – CONSTRUCTION MATERIALS **02/2024**

Delete the first paragraph and replace with:

> All Construction Materials must be produced in the United States. Produced in the United States is defined below for each Construction Material.
>
> (1) Non-ferrous metals. All manufacturing processes, from initial smelting or melting through final shaping, coating, and assembly, occurred in the United States.
> (2) Plastic and polymer-based products. 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.
> (3) Glass. All manufacturing processes, from initial batching and melting of raw materials through annealing, cooling, and cutting, occurred in the United States.
> (4) 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.
> (5) Optical fiber. All manufacturing processes, from the initial preform fabrication stage through the completion of the draw, occurred in the United States.
> (6) Lumber. All manufacturing processes, from initial debarking through treatment and planing, occurred in the United States.
> (7) 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.
> (8) 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.

ON PAGE 60, 106.01.A.2 – CONSTRUCTION MATERIALS **04/2024**

Add the following after the second paragraph:

> The Engineer may allow small quantities of foreign or non-compliant Construction Materials, so long as the total value of the foreign or non-compliant Construction Materials does not exceed the lesser of $1,000,000 or 5 percent of the Total Applicable Project Costs for the project or where the Total Amount of Federal Financial Assistance is below $500,000. "Total Applicable Project Costs" are defined as the cost of iron/ steel, Construction Materials and Manufactured Products used in the project that are subject

to a domestic preference requirement, including materials that are within the scope of an existing waiver. "Total Amount of Federal Financial Assistance" includes federal funding provided for preliminary engineering, right of way, and all construction contracts. For projects under a NEPA decision, include all federal funding provided for all projects under that NEPA decision.

The Contractor must maintain and provide in .csv format for each estimate to the Engineer a running total, listed by bid item and manufacturer, of the cost of Construction Materials not meeting the Buy America criteria and a running total of the Total Applicable Project Costs (as defined in the paragraph above). Invoices must be available for audit at any time and must be retained for a period of five years from the date of substantial completion for the project. If the Contractor does not provide these costs for each estimate, the estimate payment will not be made until the costs are supplied, or the Contractor provides a written statement(*) that they are not going to supply these costs. The written statement will include a statement from the Contractor acknowledging that they will not be able to incorporate any non-compliant Construction Materials into the project. The Engineer needs to make sure the running total of the Total Applicable Project Costs and the running total of foreign or non-compliant Construction Materials are received prior to issuing each pay estimate and that the Contractor does not exceed the Buy America threshold for non-compliant Construction Materials or have received the written statement from the Contractor indicating they will not be providing the running total.

* The written statement must include the following sentence:

"As the authorized representative of the Contractor, by providing this written statement that I will not be providing the running total for each estimate of the Total Applicable Project Costs, the Contractor is acknowledging that non-compliant Construction Materials cannot be incorporated into the project."

REVISIONS TO THE 2020 QUALITY ASSURANCE MANUAL (DATED 10/19)

Section 100.00.01 – Quality Control (QC) Producer

Delete the second sentence of the first paragraph and replace with:

Quality control of materials used in construction is the Contractor's responsibility and is performed during the production of the material and/or at the point of delivery.

Section 200 "Outline"

Revise Section 230.01 as follows:

230.01	General Provisions and Buy America.
230.01.01	General Provisions.
230.01.02	Buy America.
230.01.02.01	Iron and Steel Products
230.01.02.02	Construction Materials

Section 230.01 General Provisions

Delete Section 230.01 and replace with the following:

230.01 General Provisions and Buy America

230.01.01 General Provisions

Standard Department certification forms will be used. The standard forms are:

- ITD-849 Geotextile and Geogrid
- ITD-851 Miscellaneous Items
- ITD-875 Non-Structural Concrete
- ITD-914 Steel and Iron, and Buy America
- ITD-915 Construction Materials for Buy America
- ITD-966 PG Asphalt Binder
- ITD-968 Cement / Fly Ash

The standard forms must be completed in their entirety and be signed by the manufacturer's representative who has quality control responsibility for the manufacture or fabrication of the material.

When required by the contract, QC test results must be attached to the specified standard form. Certification does not preclude inspection, sampling, testing, or verification of certified test results of the material received on the project. Project inspectors will review all certification results for specification compliance before accepting the material. If the certified material is found to be outside acceptable specification limits, the material is subject to rejection.

Each shipment of certified material must be visually inspected for obvious defects and shipping/handling damage. Repair, reject, or replace damaged or defective material to the satisfaction of the Engineer. Where feasible, simple measurements of specified properties should be spot-checked at least once per project and recorded to verify certification. Examples would be length, mass per unit length, or thickness of steel items.

Withdraw acceptance of material by certification when sample test or inspection results show the material consistently fails to meet specifications requirements. Reestablishment of the certification acceptance may be achieved through Department pre-testing, pre-inspection, and review of historical certification records and test results of the material before its incorporation into a project. Additionally, the manufacturer's QA program may require revision and reevaluation by the Department.

230.01.02 Buy America

Buy America applies to any contract eligible for Federal Aid Highway funding within the scope of an applicable NEPA finding, determination, or decision regardless of the funding source of such contracts if at least one contract or phase of the project is funded with Federal-Aid highway funds. All permanently incorporated steel and iron materials along with Construction Materials as established in Standard Specification 106.A must be certified that they were manufactured in the United States of America including application of a coating. Certification must be provided before incorporation of the materials into the project. Materials that are only used or rented during the project construction, but not incorporated into the work (temporarily installed), do not require certification.

230.01.02.01 Iron and Steel Products

The ITD-914 form will serve as Buy America Certification and be signed by a person having quality control responsibility for the company that manufactures or fabricates the material. The ITD-914 will be sent with mill tests reports attached, except as noted in the MTRs.

Small quantities of steel and iron may be accepted without Buy American Certification, so long as its total cost for the project does not exceed 0.1% of the contract amount or $2,500, whichever is greater. The total cost of steel and iron includes the cost of the material plus the cost of transportation to the project site, as evidenced by delivery receipt, but does not include labor cost involved in final assembly performed on the project site.

If Department project staff or consultant inspectors discover that foreign iron and/or steel products are incorporated into a federal-aid project that exceed the Buy America minimal use amount for iron or steel (the greater of $2,500 or 0.1% of the contract value), the FHWA Idaho Division must be contacted to resolve this after-the-fact discovery. All information on foreign iron and steel permanently incorporated into a project that exceeds the minimal use amount must be presented to FHWA to determine the appropriate resolution. The Department will not complete a project's Material's Certification without FHWA's resolution when the project is not compliant with Buy America. The Department has no authority to complete such a resolution and cannot resolve Buy America compliance issues by use of non-Federal funds.

230.01.02.02 Construction Materials

A Construction Material is an article, material, or supply that consists of only one of the items listed, except for minor additions: non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cable); glass (including optic glass); lumber (including treated wood, and untreated wood); Fiber optic cable; Optical fiber; Engineered wood or drywall.

To the extent one of the items listed above contains as inputs other items listed above, it is nonetheless a Construction Material. For example, fiber optic cable contains as inputs other items listed, such as glass and/or plastics, but fiber optic cable is nonetheless a Construction Material.

Items specifically excluded from Construction Materials are products that are primarily iron or steel (defined under Iron and Steel Products); cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives.

Coatings do not change the categorization of a Construction Material. Minor additions of articles, materials, supplies, or binding agents to a Construction Material do not change the categorization of Construction Material. For example, wax added to engineered wood should not disqualify the engineered wood from categorization as a Construction Material. However, if before the engineered wood is brought to the work site, it is combined with glass or other items or materials to produce a new product, which is not listed above, the new product would be classified as a Manufactured Product, not a Construction Material.

Any product that is classified as an iron or steel product, or a Construction Material is not a Manufactured Product. Cement and cementitious materials, aggregates such as stone, sand, or gravel, or aggregate binding agents or additives, also cannot be classified as a Manufactured Product. Otherwise, the following definition of Manufactured Product applies: Articles, materials, or supplies that have been: a) Processed into a specific form and shape; or b) Combined with other articles, materials, or supplies to create a product with different properties than the individual articles, materials, or supplies.

For awards obligated on or after August 16, 2023, the Engineer may allow small quantities of foreign Manufactured Products and Construction Materials, so long as the total value of the non-compliant products does not exceed the lesser of $1,000,000 or 5 percent of the total applicable costs for the project or where the total amount of federal financial assistance is below $500,000. "Total applicable project costs" are defined as the cost of Construction Materials and Manufactured Products used in the project that are subject to a domestic preference requirement, including materials that are within the scope of an existing waiver. "Total Amount of Federal Financial Assistance" includes federal funding provided for preliminary engineering, right of way, and all construction contracts. For projects under a NEPA decision, include all federal funding provided for all projects under that NEPA decision.

The Contractor must maintain and provide in .csv format for each estimate to the Engineer a running total, listed by bid item and manufacturer, of the cost of Construction Materials not meeting the Buy America criteria and a running total of the Total Applicable Project Costs (as defined in the paragraph above).). Invoices must be available for audit at any time and must be retained for a period of five years from the date of substantial completion for the project. If the Contractor does not provide these costs for each estimate, the estimate payment will not be made until the costs are supplied, or the Contractor provides a written statement(*) that they are not going to supply these costs. The written statement will include a statement from the Contractor acknowledging that they will not be able to incorporate any non-compliant Construction Materials into the project. The Engineer needs to make sure the running total of the Total Applicable Project Costs and the running total of foreign or non-compliant Construction Materials are received prior to issuing each pay estimate and that the Contractor does not exceed the Buy America threshold for non-compliant Construction Materials or have received the written statement from the Contractor indicating they will not be providing the running total.

* The written statement must include the following sentence:

"As the authorized representative of the Contractor, by providing this written statement that I will not be providing the running total for each estimate of the Total Applicable Project Costs, the Contractor is acknowledging that non-compliant Construction Materials cannot be incorporated into the project."

The ITD-915 form serves as Buy America Certification for Construction Materials and must be signed by a person having quality control responsibility for the company that manufactures the Construction Material.

If Department project staff or consultant inspectors discover that foreign Construction Materials are incorporated into a federal-aid project, the FHWA Idaho Division must be contacted to resolve this after-the-fact discovery. All information on foreign Construction Materials permanently incorporated into a project must be presented to FHWA to determine the appropriate resolution. The Department will not complete a project's Material's Certification without FHWA's resolution when the project is not compliant with Buy America requirements. The Department has no authority to complete such a resolution and cannot resolve Buy America compliance issues by use of non-Federal funds.

Section 230.03 Steel.

Delete the last sentence of the first paragraph and replace with:

Steel will comply with 230.01.02 Buy America.

Section 230.07 Corrugated Metal Pipe and Corrugated Plate Pipe.

Add the following to the end of the second paragraph of the section:

Additionally, a form ITD-915 will be submitted attesting that the aluminum pipe meets applicable Buy America requirements for Construction Material (non-ferrous metals).

Section 230.08 Plastic Pipe.

Add the following to the end of the first paragraph of the section:

Additionally, a form ITD-915 will be submitted attesting that the plastic pipe meets applicable Buy America requirements for Construction Material (plastic and polymer-based products).

Section 230.09 Geosynthetics.

Add the following to the end of the first paragraph of the section:

Additionally, a form ITD-915 will be submitted attesting that the geosynthetic meets applicable Buy America requirements for Construction Material (plastic and polymer-based products).

Section 270.00 Minimum Testing Requirements (Table)

Use the Buy America Summary Table below for BA requirements and BA certifications of materials. Iron or steel products are listed as "Fe". Construction Materials as listed as "CM". If the material is listed as a possible Construction Material (CM), it is up to the manufacturer to either certify the product with the ITD-0915, or submit the product through the Buy America Exemption Application for review by HQ Construction and Materials for a possible exemption. Only products that are not by definition a Construction Material can receive an exemption.

Buy America Summary Table (Section 270)

Section	Item Desc.	Code[1,4,6,7]	Form(s)[2,3,5,9]	Comments
212	Slope Drain	Fe, CM	ITD-914, ITD-915	
405	Pavement Reinforcement Fabric	CM	ITD-915	
503	GFRP	BA N/A		GFRP is a combination of glass and polymers combined in a manufacturing process. See notes 10 and 11.
503	GFRP	BA N/A		
504	Bolts, Nuts, Hardened Washers, DTI	Fe, CM	ITD-914, ITD-915	
504	Two Tube Curb-Mount Railing	Fe, CM	ITD-914, ITD-915	
504	Pedestrian Bicycle Railing	Fe, CM	ITD-914, ITD-915	
504	Combination Pedestrian Bicycle, and Traffic Railing	Fe, CM	ITD-914, ITD-915	
505	Timber Piles	CM	ITD-915	
507	Neoprene Bearing Pads	CM	ITD-915	
507	TFE/PTFE Bridge Bearing Pads	CM	ITD-915	
508	Corrugated Plate Pipe - Entire Section	Fe, CM	ITD-914, ITD-915	
511	Concrete Waterproofing Systems - Types A, B	CM	ITD-915	
511	Concrete Waterproofing Systems - Types C, D	BA N/A		Note, Type C Silanes and siloxane chemicals are not polymers and are not Construction Materials. Type D is an asphalt filled fabric laminate combined in a manufacturing process and is not a Construction Material.
511	Concrete Waterproofing Systems - Types E	CM	ITD-915	
565	Backer Rod	CM	ITD-915	
565	Location Spike	Fe, CM	ITD-914, ITD-915	
566	Neoprene Seals - Compression Seal Expansion Joint	CM	ITD-915	

Buy America Summary Table (Section 270)

Section	Item Desc.	Code[1,4,6,7]	Form(s)[2,3,5,9]	Comments
567	Neoprene Seals - Strip Seal Expansion Joint	CM	ITD-915	
578	Gaskets for Concrete Pipe	CM	ITD-915	
586	Utility Conduit	Fe, CM	ITD-914, ITD-915	
586	Deck Inserts	Fe, CM	ITD-914, ITD-915	
602-608	Corrugated Metal pipe and Pipe arches	Fe, CM	ITD-914[2], ITD-915	
602-608	Structural Plate Pipe, Pipe Arches and Arches	Fe, CM	ITD-914, ITD-915	
602-608	Pipe Underdrains (Metallic Coated corrugated steel, aluminum pipe, corrugated PE drainage tubing PVC Pipe.	Fe, CM	ITD-914, ITD-915	
602-608	Abs or PVC or PE Pipe	CM	ITD-915	
602-608	Metal Aprons	Fe, CM	ITD-914, ITD-915	
602-608	Gaskets for Concrete Pipe	CM	ITD-915	
602-608	Rubber Gaskets for CMP	CM	ITD-915	
602-608	Corrugated Metal Embankment Protectors	Fe, CM	ITD-914, ITD-915	
609	Timber - Minor Structures	CM	ITD-915	
610	Wood Posts	CM	ITD-915	
610	Gates	Fe, CM	ITD-914, ITD-915	
610	Hardware for Barbed or Woven Wire Fence	Fe, CM	ITD-914, ITD-915	
612	Wood Post and Blocks - Guardrail	CM	ITD-915	
612	Non - Wood Post and Block - Guardrail	CM	ITD-915	
612	Aluminum Rail and Fittings - Guardrail	CM	ITD-915	
612	Metal Terminal Section - Guardrail	Fe, CM	ITD-914, ITD-915	

Buy America Summary Table (Section 270)

Section	Item Desc.	Code[1,4,6,7]	Form(s)[2,3,5,9]	Comments
612	Impact Attenuator - Permanent - Guardrail	Fe, CM	ITD-914, ITD-915	
613	Crash Cushions	CM	ITD-915	
616	Signs and Sign Support Extruded Aluminum	CM	ITD-915	
616	Signs and Sign Support Sheet Aluminum	CM	ITD-915	
616	Signs and Sign Support - Steel and Aluminum	Fe, CM	ITD-914, ITD-915	
616	Signs and Sign Support - Hardware for Signs	Fe, CM	ITD-914, ITD-915	
616	Plywood for Type E Signs	CM	ITD-915	
616	Signs and Sign Support - Breakaway Wood Posts	CM	ITD-915	
617	Aluminum Posts Delineators and Mileposts	CM	ITD-915	
617	Aluminum Posts Delineators and Mileposts Plates	CM	ITD-915	
617	Aluminum Posts Delineators and Mileposts Reflector Unit	CM	ITD-915	
617	Aluminum Posts Delineators and Mileposts Reflective Sheeting	BA N/A		Finished product undergoes manufacturing process to combine the sheeting and aluminum into one product so it is not a Construction Material. See notes 10 and 11.
618	Right of Way Marker	Fe, CM	ITD-914, ITD-915	
618	Brass Caps	CM	ITD-915	
618	Reference Marker	Fe, CM	ITD-914, ITD-915	
618	Project Markers	Fe, CM	ITD-914, ITD-915	BA N/A if temporary
618	Reference Marker	Fe, CM	ITD-914, ITD-915	BA N/A if fiberglass is used. See notes 8, 10 and 11.
618	Witness Posts - Wood	CM	ITD-915	

Buy America Summary Table (Section 270)

Section	Item Desc.	Code[1,4,6,7]	Form(s)[2,3,5,9]	Comments
618	Witness Posts - Fiberglass	BA N/A		Fiberglass is a combined material and is a Manufactured Product.
619	Illumination Poles and Bases	Fe, CM	ITD-914, ITD-915	
619	Illumination Components	Fe, CM	ITD-914, ITD-915	
623	Pre-formed expansion Joint Filler Concrete Slope Paving	CM	ITD-915	
625	Pre-formed expansion Joint Filler Joints	CM	ITD-915	
625	Neoprene Compression Seal	CM	ITD-915	
630	Glass Beads	CM	ITD-915	
630	Preformed Thermoplastic	CM	ITD-915	
634	Support Mailbox	Fe, CM	ITD-914, ITD-915	
634	Mailbox	Fe, CM	ITD-914, ITD-915	
640	Geosynthetics all materials	CM	ITD-915	
641	Biaxial Geogrid	CM	ITD-915	
652	Underground Sprinkler System - All Items	CM	ITD-915	
656	Signal Poles and Mast Arms Traffic Signal Installation	Fe, CM	ITD-914, ITD-915	
656	Signal Components Traffic Signal Installation	Fe, CM	ITD-914, ITD-915	
656	Signal Cabinet Electrical Components Traffic Signal Installation	BA N/A		Electrical Components are a combination of materials that are combined thru a manufacturing process so they are not a Construction Material. See note 10 and 11.

Notes:

1. Code Key: Fe = iron & steel, CN = Construction Material, BA N/A = Item determined not to apply to BA.
2. The ITD-914 applies to Iron and steel products only. There is no change to the Buy America certification process for Iron and Steel.
3. This table makes additional requirements to the existing table only; the existing ITD-914 requirements for Iron and Steel are not restated.

Buy America Summary Table (Section 270)

Section	Item Desc.	Code[1,4,6,7]	Form(s)[2,3,5,9]	Comments
4. Buy America requirements apply to all iron and steel items no matter what form of manufacturing or material combinations are used. 5. The ITD-915 applies to Construction Materials only (eight listed items). 6. Besides Fe and CM, no other products/items are considered by the Department to be applicable to these Buy America requirements. 7. Field assembly does not constitute a manufactured process and does not necessarily preclude applicability to Buy America requirements. 8. Wood products, even when treated, are considered Construction Materials. 9. Any justification denying applicability to the Buy America requirements is to be submitted on/with the ITD-915 form. 10. Items consisting of a combination of two or more Construction Materials combined in a manufacturing process are not Construction Materials. 11. Items consisting of one construction material with something else in a manufactured process are not Construction Materials.				

Section 470.01 Exceptions.

In the sixth full paragraph, replace the sentence with:

> Exceptions to the Buy America specification must be presented to FHWA for determination of a resolution, see Section 230.01.02 Buy America.

2023 Quality Assurance Special Provision for State Acceptance (2023 QASP SA) 12/7/2023

ON PAGE13, 15 AND 16, SUBSECTION 101.04 – DEFINITIONS

HMA Paving Quality Control Plan. A quality control plan specific to hot mix asphalt paving.

Quality Assurance. All planned and systematic operations to ensure that the operation, material, and/or end product meets specifications. Quality assurance includes:

1. Approval and oversight of the Contractor's quality control plan.
2. Review of inspector, sampler, tester, and laboratory qualifications.
3. Inspection for conformity with contract requirements.
4. Contractor quality control.
5. Acceptance.
6. Independent assurance.
7. Challenge resolution.

Quality Control Plan. The documentation, approved by the Department, of the program used by the Contractor which specifies the actions, inspection, sampling, and testing necessary to keep production and placement operations within specifications, including provisions to quickly determine when an operation becomes out of control and those actions that the Contractor will take to restore compliance.

ON PAGE 36, SUBSECTION 105.03 – CONFORMITY WITH PLANS AND SPECIFICATIONS

Add after the first sentence:

> For the quality characteristics of the items included in QASP SA Table 106.03-1, and subject to quality level analysis, acceptance will be based on the requirements of the 2023 Quality Assurance Special Provision for State Acceptance (2023 QASP SA).

ON PAGE 61, SUBSECTION 106.03 – SAMPLES, TESTS, AND CITED SPECIFICATIONS

Delete this subsection and replace with the following:

106.03 Samples, Tests, and Cited Specifications.

The Engineer will accept material, based on inspection and test results, before the Contractor incorporates material into the work. The Contractor may, with approval, incorporate material the Engineer cannot routinely sample before delivery, at the Contractor's risk. The Department will pay the Contractor for material incorporated into the work if the material meets the sampling, testing, and certification requirements.

Ensure the sampling and testing required by the contract, including references to WAQTC, ASTM, AASHTO, and Idaho standard test methods are from the current edition at time of bid opening, except as modified by the contract.

For testing performed on the Contractor's behalf for plant mix designs, alkali-silica reactivity expansion, and claim or dispute resolution, a professional engineer, licensed in the state where the testing will be performed, will supervise testing reporting.

Ensure a safe means of sampling and testing. If safe means of sampling and testing is not provided, work will be halted, at no additional cost to the Department. No material will be accepted after unsafe conditions have been identified and the Contractor has been notified of the unsafe conditions, until corrective action has been taken and the resumption of work is approved by the Engineer.

Ensure the individuals sampling and testing material and the testing facilities are qualified for the tests performed.

Provide crushing, screening, and mixing plants with approved sampling equipment capable of operating from the ground or a platform. Ensure the sampling equipment is capable of the following:

1. Moving at a constant rate across the width of the material falling from the discharge belt or chute.
2. Taking a representative sample of the material.
3. Conveying (e.g., slide, chute) the sample to the ground level where the sample can be safely and conveniently collected.

The Contractor is responsible for the quality of construction and materials incorporated into the work. The Contractor will perform all necessary quality control inspection, sampling, and testing and the Department is responsible for acceptance testing and independent assurance (IA) testing. Sampling and testing costs are included in the respective contract pay items. The Contractor is allowed to take the acceptance or IA samples as long as the sample collection is witnessed by the Department. The Contractor may employ an independent laboratory. The laboratory must follow the Contractor's approved quality control plan. Make all project records, including test results and all original source documentation for specified contract quality requirements available for review and allow Department representatives immediate access to the testing facilities during delivery and production hours.

The Contractor may observe the Department's sampling and testing activities. If the Contractor observes a deviation from the specified sampling or testing procedures, then the Contractor must describe the deviation to the Department immediately and document the deviation in writing within 24 hours to preserve their ability to challenge the sample.

A. Material Subject to Statistical-Based Acceptance.

When specified in the contract, the Department will use the quality level analysis as specified in 106.03.B to determine quality-based pay adjustments.

The Contractor and the Department will work cooperatively within their respective quality assurance (QA) responsibilities to produce and document a high quality project, meeting or exceeding the quality requirements of the contract.

1. The Department's Quality Assurance Responsibilities.

   The Department is responsible for determining the acceptability of the work, approving and monitoring of the Contractor's quality control plan (QCP). The Department will perform acceptance sampling, testing, and inspection for any element of the work to ensure Contractor compliance with the QCP and contract requirements. The Department may also perform IA and verification sampling and testing at any time.

   Acceptance sampling and testing is the Department's responsibility, unless alternate procedures are specified. The Department is responsible for performing acceptance testing and for evaluating the quality characteristics as specified in the QASP SA Table 106.03-1.

   The Department will obtain all samples by utilizing stratified random sampling in accordance with Idaho IR 148.

   Rounding will not be permitted at any level of calculating acceptance test results. The final reported value will be rounded to the nearest significant figure as specified in the QASP SA Table 106.03-1. ASTM E 29 does not apply.

   The Department will provide official acceptance test results within 24 hours of receipt of the final sample for the lot. The Department will not provide official acceptance test results before the completion of the lot. Acceptance results and all original source documents/datasheets used during material acceptance testing will be made available for review upon request.

   Unofficial results before final review can be shared with the Contractor, if available. These results must not be used for process quality control.

   The Department will complete acceptance sampling, splitting, and testing as specified in the QASP SA Table 106.03-1 using independent, stratified random samples. Approximately ½ of the sample will be used for acceptance testing and the other ½ retained for challenge testing. The challenge samples must be secured with Department provided serialized security tape. All chain of custody information must be documented on Department provided forms and samples must be stored in a location only accessible by Department representatives.

   a. Lot Description.

      A lot is a specific quantity of material from a single source which is produced or placed by the same controlled process. Acceptance tests will be grouped into lots by the Engineer. Lot size will be determined by the Engineer using the following criteria:

      i. The minimum lot size is 3 tests for each quality characteristic. The minimum testing frequency is specified in the QASP SA Table 106.03-1.

      ii. A lot is based on a work shift's production when the minimum lot size is achieved.

         1. If the work shift is represented by less than 3 tests for any quality

characteristic, the work shift will be combined with the following work shift to form a lot.

2. If the final work shift is represented by less than 3 tests for any quality characteristic, the final work shift will be combined with the previous work shift to form a lot. A Superpave HMA acceptance test strip is considered a lot.

2. The Contractor's Quality Control Responsibilities.

The Contractor is responsible for quality control for all work. The Contractor will not rely on the Department's acceptance testing results for their process quality control.

a. Quality Control Plan (QCP). The Contractor will develop, submit, and implement a QCP that meets the requirements of Idaho IR 158, as approved by the Department, for each of the materials included in QASP SA Table 106.03-1. A QCP for each of the materials, will be submitted to the Department at or before the preconstruction conference. The Department will provide the Contractor with approval or rejection of each QCP within 5 business days after receiving the QCP. Rejection of the QCP will require an additional 5 business days for re-evaluation. The QCP must be approved before that material is incorporated into the work/project. The QCP, as approved by the Department in accordance with Idaho IR 159, is binding upon the Contractor as a contract requirement.

i. QCP Amendments. Amend the QCP as necessary to conform to the current operations and submit the amended QCP for the Engineer's approval in accordance with IR 158. The Engineer will review and provide approval or rejection of the QCP amendment in accordance with Idaho IR 159 before the amendment is implemented.

At a minimum, the QCP will consist of plans, procedures, responsibilities, authority, and an organizational structure that demonstrates that an effective level of quality control will exist resulting in the end product complying with the contract requirements. The Contractor will provide all necessary quality control inspection, sampling, and testing to implement the QCP. The QCP will include an organizational structure and reporting requirements that demonstrate that QC personnel have sufficient independence to allow them to be primarily concerned with quality, as opposed to schedule and budget.

The Department will not sample or test for process control or assist in controlling the Contractor's production operations. The Contractor will provide QC personnel and testing equipment capable of providing a quality product that meets or exceeds the contract requirements. Continued production of non-conforming work for a reduced price as determined by the Department, instead of making adjustments to bring the work into conformance, is not allowed. The QCP will specifically include:

i. Construction items covered by the QCP as specified in the contract.

ii. Sampling location and techniques.

iii. Sampling plan.

iv. Tests and test methods.

v. Testing frequencies.

vi. Testing forms.

vii. Inspection frequencies.

viii. Detailed description of production and placement equipment and methods.

ix. Detailed calibration processes and procedures for hot plants or mixing plants.

x. Documentation procedures, including:

(1) Inspection and test records.

(2) Temperature measurements.

(3) Accuracy, calibration, or recalibration checks performed on production or testing equipment.

The QCP will identify the Contractor's QC personnel, including the company official ultimately responsible for the quality of the work. The Department's QCP approval process may include inspection of testing equipment and a sampling and testing demonstration by the Contractor's QC personnel to assure an acceptable level of performance.

The Contractor will comply with the approved QCP and will take all other steps necessary to assure a high quality project.

Failure by the Contractor to comply with the approved QCP will result in mandatory work suspension until compliance.

The Contractor will maintain and make available, quality control charts (at a minimum, a run chart as the material is being produced) for each quality characteristic to be used in the statistical analysis. Where applicable, the run chart will be plotted with the material's specification upper and lower limits for statistical analysis.

B. Quality Level Analysis.

Quality level analysis will not be performed if the total quantity of material, except the test strip(s), based on planned quantity, is less than the quantity computed for 3 tests at the frequencies specified in QASP SA Table 106.03-1.

1. Statistical Analysis. Unless otherwise specified, quality levels and pay factors will be computed as specified below:

a. Determine the unrounded arithmetic mean $(\bar{X})$.

$$\bar{X} = \frac{\sum x_i}{n}$$

Where:

Σ = Summation.

x_i = Individual test value.

n = Total number test values.

b. Compute the unrounded sample standard deviation (S).

$$S = \sqrt{\frac{\sum (x_i - \bar{X})^2}{n - 1}}$$

c. Compute the unrounded upper quality index (Q_u).

$$Q_u = \frac{USL - \overline{X}}{S}$$

Where:

USL = Upper specification limit.

S = Standard deviation.

d. Compute the unrounded lower quality index (Q_L).

$$Q_L = \frac{\overline{X} - LSL}{S}$$

Where:

LSL = Lower specification limit.

S = Standard deviation.

e. Determine P_U (percent within the upper specification limit, which corresponds to a given Q_U).

$$P_U = 100 - (100 \times \int_0^A \text{beta}(X; \frac{n}{2} - 1)\, dX)$$

Where:

P_U = Unrounded percent within upper limits.

$A = \text{Maximum}\left[0, 0.5 - Q_U \times \frac{n^{0.5}}{2(n-1)}\right]$ $X = \text{Maximum}\left[0, 0.5 - Q_U \times \frac{n^{0.5}}{2(n-1)}\right]$

$\text{beta}(X; \frac{n}{2} - 1)$ = Beta distribution density with $\alpha = \beta = \frac{n}{2} - 1$ where α and β are parameters of the beta distribution.

If a USL is not specified, P_U will be 100.

f. Determine P_L (percent within lower specification limit, which corresponds to a given Q_L).

$$P_L = 100 - (100 \times \int_0^A \text{beta}(X; \frac{n}{2} - 1)\, dX)$$

Where:

P_L = Unrounded percent within lower limits.

$A = \text{Maximum}\left[0, 0.5 - Q_L \times \frac{n^{0.5}}{2(n-1)}\right]$

$X = \text{Maximum}\left[0, 0.5 - Q_L \times \frac{n^{0.5}}{2(n-1)}\right]$

$\text{beta}(X; \frac{n}{2} - 1)$ = Beta distribution density with $\alpha = \beta = \frac{n}{2} - 1$ where α and β are parameters of the beta distribution.

If a LSL is not specified or the specification is zero, P_L will be 100.

g. Determine the unrounded percent within limits (PWL) (i.e., the total percent within the specification limits).

$$PWL = (P_U + P_L) - 100$$

h. Repeat steps 106.03.B.1.c through 106.03.B.1.g to calculate the PWL for each quality characteristic.

2. Acceptance Criteria. The Engineer will accept a lot containing material that does not meet specifications if the PWL is at least 40 for each of the quality characteristics. The Engineer must reject a lot containing non-specification material, which does not obtain at least a PWL of 40 for each quality characteristic. Remove rejected material, including those portions of the work in which that material was incorporated, at no additional cost to the Department. The Contractor may reuse the removed material if adjustments are made so the material meets the specifications.

   If the PWL of a lot falls below 60 for any quality characteristic, stop production and/or delivery. A corrective action plan must be submitted to the Engineer and approved. Production and/or delivery may resume after the Contractor takes effective and acceptable actions to improve the production quality as outlined in the approved corrective action plan. If resuming production involves a significant change to the production process, as determined by the Engineer, stop the current lot and begin a new lot.

   The Contractor may elect to remove defective material and replace it with new material on an entire lot basis, at no additional cost to the Department. The Department and the Contractor must re-sample, retest, and re-evaluate the new lot for acceptance.

   The Engineer may isolate and reject obviously defective material without regard to testing procedures. The Contractor may isolate and reject obviously defective material during delivery and production before acceptance testing.

3. Materials.

   a. 301, 303, and 635 Materials. The upper and lower specification limits (USL and LSL) for gradations will be set based on the applicable requirements of 703 except as specified below:

      (1) Test results will not be included in the quality level analysis for fracture, sand equivalent, cleanness value, 100 percent passing, or for any sieves where the upper specification limit is 100 percent passing and the lower specification limit is 95 percent passing or greater.

      The Engineer will use the lowest PWL computed for any 1 sieve as the basis of acceptance for that lot. The average PWL will be used for payment.

   b. 404 Material. When the lower specification limit is 0 percent and the upper specification limit is less than 3 percent, the upper specification limit will be 3 percent for statistical analysis. A 2 percent tolerance will be given for the percentage retained on the maximum sized sieve provided that 100 percent of the material passes the next larger sieve size. Only #4 and #8 sieves will be used for quality level analysis.

   c. 405 Superpave Material. The upper and lower specification limits for Superpave quality characteristics will be set by the limits established in 405.

(1) For SP 2 aggregates, the lowest PWL for any 1 sieve will be used for acceptance and pay factor calculations.

ON PAGE 62, SUBSECTION 106.07 – TEST RESULT CHALLENGE RESOLUTION

Delete this subsection and replace with the following:

106.07 Test Result Challenge Resolution.

The Contractor and the Department may enter into a challenge resolution when the quality of a lot is believed to be misrepresented.

The test result challenge process as specified in 106.07 will be exhausted in its entirety before other dispute or claims processes are initiated as specified in 105.16, 105.17, 105.18, and 105.19. The intent of challenge resolution is to resolve testing issues early, efficiently, and as close to the project level as possible. The Contractor will waive their right to challenge test results if they fail to comply with the requirements set forth in this subsection.

A. Initiation of a Challenge.

To request a challenge of acceptance test results, provide written notice, including all quality characteristics and copies of original quality control source documentation, within 3 business days after receipt of the acceptance test results. Failure to comply with these requirements in this subsection will bar either party from any further administrative, equitable, or legal remedy.

1. The Contractor will waive their right to challenge if either of the following conditions occur:
    i. The Engineer does not receive a written notice as specified within the time requirements (i.e., 3 business days).
    ii. The Contractor does not obtain the required number of the Contractor's quality control tests reported on forms established in the QCP at the frequency specified in QASP SA Table 106.3-1.
2. The Department will review the written notice and quality control documentation.

B. Challenge Resolution Process.

1. The Department and the Contractor will identify differences in procedures and equipment.
2. The Department and the Contractor will agree to a work plan for initiating resolution by a challenge laboratory as specified in 106.07.C. or 106.07.D.
3. The Contractor can witness challenge testing.

C. Challenge of Material <u>Not</u> Subject to Statistical-Based Acceptance.

The challenge lab is the Department Central Materials Laboratory or a Department District Materials Laboratory not associated with the District in which the acceptance testing is being performed. Splits of the Department's acceptance samples for the entire lot will be used for challenge testing. The challenge samples will be tested for all quality characteristics used in the quality level analysis by the challenge laboratory. The challenge laboratory results are final and the Engineer will use the challenge laboratory's test results for all quality characteristics for acceptance.

1. If the Department's acceptance test results indicate reject level material, and:

i. The challenge laboratory test results indicate acceptable material, then the Department will bear the cost of challenge laboratory testing.

ii. The challenge laboratory test results indicate reject level material, then the costs of challenge laboratory testing will be deducted from any monies due or that may come due the Contractor under the contract at the rate of $500.00 per sample.

For challenging of density properties, the Department's acceptance cores will be retained for retesting. The Contractor may request to observe challenge testing.

D. Challenge Laboratory Resolution of Material Subject to Statistical-Based Acceptance.

The challenge laboratory is the Department Central Materials Laboratory. The Central Materials Laboratory may elect to choose another challenge laboratory as needed to accommodate testing timelines. Upon challenge notification, the Department will arrange for testing of all challenged acceptance samples of the lot in question. Splits of the Department's acceptance samples will be used for challenge testing. The challenge samples for the entire lot will be tested for all quality characteristics used in the quality level analysis by the challenge laboratory. The challenge laboratory test results are final and the Engineer will use the challenge laboratory test results of all quality characteristics for acceptance for the entire lot.

The Contractor may use challenge resolution for density when the density pay factor is less than 1.00. The entire lot will be retested for density and used in the quality level analysis. A challenge resolution test will be performed by obtaining cores in new, stratified random sample locations equal to the same number of original acceptance tests. Sample locations will be identified by the Department using Idaho IR 148. Sampling of cores will be performed by the Contractor and must be witnessed by the Engineer. Traffic control and sampling will be performed by the Contractor. Challenge resolution may be performed regardless of the sampling location being exposed to traffic. The challenge test results are final and the Engineer will use the challenge test results for acceptance of the entire lot.

1. If the new composite pay factor results in a lower or equal composite pay factor for the lot in question, then the costs of challenge testing, in addition to the cost of any work related to traffic control performed for retesting at unit bid prices for the costs incurred, will be deducted from any monies due or that may come due the Contractor under the Contract at the rate shown in Table 106.07-1 per sample in the challenged lot.
2. If the new composite pay factor results in a higher composite pay factor for the lot in question, then the Department will bear the costs associated with the challenge testing, and the cost of any work related to traffic control performed for retesting at unit bid prices for the costs incurred.

Table 106.07-1 – Challenge Laboratory Testing Rates

Material	Rate Per Sample
301 Granular Subbase	$200
303 Aggregate Base	$250
404 Cover Coat Material	$300
635 Anti-Skid Material in Stockpile	$300
405 SP 2 Mix Quality Characteristics	$600
405 SP 2 Roadway Quality Characteristics	$400
405 SP 3 Mix Quality Characteristics	$600

Material	Rate Per Sample
405 SP 3 Roadway Quality Characteristics	$400
405 SP 5 Mix Quality Characteristics	$600
405 SP 5 Roadway Quality Characteristics	$400

ON PAGE 91, SUBSECTION 108.04 – PRECONSTRUCTION AND PREOPERATIONAL CONFERENCES

Delete #4 and replace with the following: :

4. A quality control plan as specified in 106.03.A.2.

ON PAGE 115, NEW SUBSECTION 109.09 – PAY FACTOR EQUATIONS

Insert with the following new subsection:

109.09 Pay Factor Equations.

The Engineer will determine a pay factor for each quality characteristic in an individual lot not rejected and replaced, except as otherwise specified, for use in the basis of payment calculations.

With the exception of 405 pay items or reject quality level material, if any quality characteristic used in calculating the pay factor for the lot falls below 60 PWL, all quality characteristics will be paid corresponding to the lowest, unrounded PWL.

For 405 pay items, with the exception of reject quality level material, if any two quality characteristic used in calculating the pay factor for the lot fall below 60 PWL, all quality characteristics will be paid corresponding to the average two lowest, unrounded PWL.

A. 405 Mainline Density.

For mainline density, calculate the pay factor for each lot using the following formula:

$$\mathrm{PF}_{MLD} = \frac{55 + 0.5\times \left(PWL_{92} - \frac{(\mathrm{PWL}_{92} - 90) + |PWL_{92} - 90|}{2}\right)}{100} + \frac{((PWL_{92} - 90)) + |(PWL_{92} - 90)|}{1000} + \frac{(PWL_{93} - 90) + |PWL_{93} - 90|}{1000} + \frac{(PWL_{94} - 90) + |PWL_{94} - 90|}{2000}$$

Where:

PWL_{92} is the percent of material between 92.0 to 100.0% compaction.

PWL_{93} is the percent of material between 93.0 to 100.0% compaction.

PWL_{94} is the percent of material between 94.0 to 100.0% compaction.

B. All Other Quality Characteristics.

For all other quality characteristics calculate the unrounded pay factors for each lot using the following equation:

$$PF = \frac{55+0.5\times(PWL)}{100}$$

ON PAGE 184, SUBSECTION 301.05 – BASIS OF PAYMENT

Add the following:

A. Granular Subbase Pay Factor. All acceptable material will be paid at contract unit price.

When RAP material is included in acceptable subbase, the natural material will be tested as specified in 301 and the blended material will be paid at contract unit price.

ON PAGE 188, SUBSECTION 303.05 – BASIS OF PAYMENT

Delete this subsection and replace with the following:

Calculation of Incentive/Disincentive. The incentive/disincentive dollar amount to be paid or deducted for all ____aggregate type _____for base accepted by the Department will be computed using the following formula:

$$PA_{303} = (PF_{303} - 1) \times Q_i \times P$$

Where:

PA_{303} = Pay adjustment for all _____aggregate type _____for base in dollars.

PF_{303} = Per 106.B.3 and 109.09.

Q_i = Quantity represented by individual lot (n).

P = Contract unit price.

The incentive/disincentive dollar amount to be paid or deducted for all _____aggregate type _____for base in stockpile accepted by the Department will be computed using the following formula:

$$PA_{STKPL\,303} = (PF_{STKPL\,303} - 1) \times Q_i \times P$$

Where:

$PA_{STKPL303}$ = Pay adjustment for all _____aggregate type _____for base in stockpile in dollars.

$PF_{STKPL303}$ = Per 106.B.3 and 109.09.

Q_i = Quantity represented by individual lot (n).

P = Contract unit price.

Note: The incentive may be a negative amount (i.e., a deduction from the total amount bid for the item).

ON PAGE 208, SUBSECTION 404.05 – BASIS OF PAYMENT

Add the following:

If the aggregate pay factor is less than 0.75, the material may be allowed to be left in place with a price adjustment if the finished product is found to be capable of performing its intended purpose. The price adjustment will be 50 percent of the contract unit bid price multiplied by the total quantity of material with a pay factor less than 0.75.

For surface treatment aggregate, the Engineer will use the lowest pay factor computed for any 1 sieve as the pay factor for that lot.

Calculation of Incentive/Disincentive. The incentive/disincentive dollar amount to be paid or deducted for

all cover coat material class _____accepted by the Department, excluding material in stockpile and material with a pay factor less than 0.75 allowed to remain in place with a price adjustment, will be computed using the following formula:

$PA_{404} = (PF_{404} - 1) \times Q_i \times P$

Where:

PA_{404} = Pay adjustment for all cover coat material class _____in dollars.

PF_{404} = Per 106.B.3 and 109.09.

Q_i = Quantity represented by individual lot (n).

P = Contract unit price.

The incentive/disincentive dollar amount to be paid or deducted for all cover coat material class ____in stockpile accepted by the Department will be computed using the following formula:

$PA_{STKPL404} = (PF_{STKPL404} - 1) \times Q_i \times P$

Where:

$PA_{STKPL404}$ = Pay adjustment for all cover coat material class ____in stockpile in dollars.

$PF_{STKPL404}$ = Per 106.B.3 and 109.09.

Q_i = Quantity represented by individual lot (n).

P = Contract unit price.

Note: The incentive may be a negative amount (i.e., a deduction from the total amount bid for the item).

ON PAGE 556, SUBSECTION 635.05 – BASIS OF PAYMENT

Add the following:

For anti-skid material, the Engineer will use the lowest pay factor computed for any 1 sieve as the pay factor for that lot.

Calculation of Incentive/Disincentive. The incentive/disincentive dollar amount to be paid or deducted for all anti-skid material accepted by the Department, excluding anti-skid defined as small quantity, will be computed for each lot using the following formula:

$$PA_{635} = (PF_{635} - 1) \times Q_i \times P$$

Where:

PA_{635} = Pay adjustment in dollars.

PF_{635} = Per 106.B.3 and 109.09.

Q_i = Quantity represented by individual lot (n).

P = Contract unit price.

Note: The incentive may be a negative amount (i.e., a deduction from the total amount bid for the item).

QASP SA Table 106.03-1 – Material Subject to Statistical Based Acceptance

Material	Quality Characteristic	Test Method	Quality Characteristic Reported to	Quality Control Plan by the Contractor	Acceptance by the Department	
				Minimum Testing Frequency [a]	Minimum Testing Frequency [a]	Point of Sampling
301 Granular Subbase [f]	Gradation – 703.11	FOP for AASHTO T 27	0.01%	1 test per 5,000 Tons 1 test per 5,000 Tons	1 test per 5,000 Tons	From windrow or roadway
	Sand Equivalent	FOP for AASHTO T 176 (Alt. Method #2), Mechanical	See Note 2.	1 test per 5,000 Tons 1 test per 5,000 Tons	1 test per 5,000 Tons (pass/fail, no statistical analysis)	From windrow or roadway
303 Aggregate Base [f]	Gradation – 703.04	FOP for AASHTO T 27 with FOP for AASHTO T 11 (use wash method for all gradation measurements)	0.01%	1 test per 1,000 Tons 1 test per 1,000 Tons	1 test per 1,000 Tons	From windrow or roadway
	Sand Equivalent	FOP for AASHTO T 176 (Alt. Method #2), Mechanical	See Note 2.	1 test per 1,000 Tons	1 test per 1,000 Tons (pass/fail, no statistical analysis)	From windrow or roadway
	Fracture Count	FOP for AASHTO T 335, Method 1	See Note 2.	1 test per 1,000 Tons	1 test per 1,000 Tons (pass/fail, no statistical analysis)	From windrow or roadway
404 Cover Coat Material [f]	Gradation – 703.06	FOP for AASHTO T 27 with FOP for AASHTO T 11 (use wash method for all gradation measurements)	0.01%	1 test per 400 Tons 1 test per 400 Tons	1 test per 400 Tons	At point of loading to the roadway
	Cleanness Value	Idaho IT 72	See Note 2.	1 test per 400 Tons 1 test per 400 Tons	1 test per 400 Tons (pass/fail, no statistical analysis)	At point of loading to the roadway
	Fracture Count	FOP for AASHTO T 335, Method 1	See Note 2.	1 test per 400 Tons 1 test per 400 Tons	1 test per 400 Tons (pass/fail, no statistical analysis)	At point of loading to the roadway

Continued –QASP SA Table 106.03-1 – Material Subject to Statistical Based Acceptance						
Material	Quality Characteristic	Test Method	Quality Characteristic Reported to	Quality Control Plan by the Contractor	Acceptance by the Department	
				Minimum Testing Frequency [a]	Minimum Testing Frequency [a]	Point of Sampling
405 Superpave Class SP2 [f] [g]	Asphalt Content, P_b [e]	FOP for AASHTO T 168[c] and FOP for AASHTO R 47 and FOP for AASHTO T 308 and FOP for AASHTO T 329	0.01%	1 test minimum per 750 Tons	1 test per 750 Tons	FOP for AASHTO R 97 [c]
	Gradation[e	FOP for AASHTO T 168[c] and FOP for AASHTO R 47 and FOP for AASHTO T 30 (use wash method for all gradation measurements)	0.01%	1 test minimum per 750 Tons	1 test per 750 Tons	FOP for AASHTO R 97 [c]
	Fracture Count	FOP for AASHTO T 335, Method 1	See Note 2.	By the Contractor as needed to control the operation. 1 test minimum per 1,500 Ton	N/A	N/A
	Sand Equivalent	FOP for AASHTO T 176 (Alt. Method #2), Mechanical	See Note 2.	By the Contractor as needed to control the operation. 1 test minimum per 1,500 Tons	N/A	N/A
	Mainline Density, MLD [d]	FOP for AASHTO T 355 [b] or FOP for AASHTO T 343	0.01%	1 test minimum per 375 Tons	1 test per 375 Tons [b]	FOP for AASHTO R 97 [c]
	Recycled Asphalt Pavement	FOP for AASHTO T 308 and FOP for AASHTO T 30	See Note 2.	1 test minimum per 1,500 Tons	N/A	N/A

Continued –QASP SA Table 106.03-1 – Material Subject to Statistical Based Acceptance						
Material	Quality Characteristic	Test Method	Quality Characteristic Reported to	Quality Control Plan by the Contractor	Acceptance by the Department	
				Minimum Testing Frequency [a]	Minimum Testing Frequency [a]	Point of Sampling
405 Superpave HMA Class SP 3, and SP 5 [f] [g]	Asphalt Content, P_b [e]	FOP for AASHTO T 168[c] and FOP for AASHTO R 47 and FOP for AASHTO T 308 and FOP for AASHTO T 329	0.01%	1 test minimum per 750 Tons	1 test minimum per 750 Tons	FOP for AASHTO R 97 [c]
	Gradation [e]	FOP for AASHTO T 30 (use wash method for all gradation measurements)	0.01%	1 test minimum per 750 Tons	1 test minimum per 750 Ton	FOP for AASHTO R 97 [c]
	Maximum Specific Gravity, G_{mm} [e]	FOP for AASHTO T 168[c] and FOP for AASHTO R 47 and FOP for AASHTO T 209 (Bowl Method)	0.001	1 test minimum per 750 Tons	1 test minimum per 750 Ton	FOP for AASHTO R 97 [c]
	Bulk Specific Gravity of Compacted Mix, G_{mb} [e]	FOP for AASHTO T 168[c] and FOP for AASHTO R 47 and FOP for AASHTO T 312 and FOP for AASHTO T 166 (Method A)	0.001	1 test minimum per 750 Tons	1 test minimum per 750 Tons	FOP for AASHTO R 97 [c]
	Effective Specific Gravity of Combined Aggregate, G_{se} [e]	WAQTC TM 13	0.001	1 test minimum per 750 Tons	1 test minimum per 750 Tons	FOP for AASHTO R 97 [c]
	Air Voids @ N_{design}, P_a [e]	WAQTC TM 13	0.01%	1 test minimum per 750 Tons	1 test minimum per 750 Tons	FOP for AASHTO R 97 [c]
	VMA @ N_{design} [e]	WAQTC TM 13	0.01%	1 test minimum per 750 Tons	1 test minimum per 750 Tons	FOP for AASHTO R 97 [c]
	Dust Proportion, DP [e]	WAQTC TM 13	0.001	1 test minimum per 750 Tons	1 test minimum per 750 Tons	FOP for AASHTO R 97 [c]
	Mainline Density [d] [e]	FOP for AASHTO T 355 [b] or FOP for AASHTO T 343 For cores: FOP for AASHTO R 67; FOP for AASHTO T 166 Method A or FOP for AASHTO T 331	0.01%	1 test minimum per 375 Tons	1 test per 375 Tons [b]	Roadway [c]
	Recycled Asphalt Pavement	FOP for AASHTO T 308 and FOP for AASHTO T 30	See Note 2.	1 test minimum per 1,500 Tons	N/A	N/A
635 Anti-Skid Material in Stockpile [f]	Gradation – 703.10	FOP for AASHTO T 27 with FOP for AASHTO T 11 (use wash method for all gradation measurements)	0.01%	1 test per 1,000 Tons By the Contractor as needed to control the operation	1 test per 1,000 Tons	From crusher or if previously crushed, final stockpile location.

Note: 1. Refer to the QA Manual minimum test requirements for minimum testing not included in QASP SA Table 106.03-1.

[a] If the total quantity of material is less than the minimum testing frequency for 1 test from QASP SA Table 106.03-1, acceptance will be as specified in the QA Manual Section 270.04.

[b] When a test strip is not required, density acceptance is based on cores as specified in 405.L.

[c] Sampling from the plant is not permitted unless the planned quantity is less than 750 tons or during the acceptance test strip.

[d] The Department will use nuclear gauges. The Contractor may use nuclear or non-nuclear (i.e., electronic) gauges.

[e] Calculated value based on unrounded results.

[f] This material requires an approved quality control plan.

[g] If the total quantity of material is between 750 and 2,250 tons, the entire quantity of material will be considered a single lot and will be accepted as specified in 405.03.I.

2. This quality characteristic is not subject to statistical based acceptance. Refer to the QA Manual Table 275.01.1 for calculating and reporting requirements.

2024 Special Provision for 405 Superpave Hot Mix Asphalt (for use with 2023 Spec Book) 11/29/2023

ON PAGES 209-234, SECTION 405 – SUPERPAVE® HOT MIX ASPHALT

Delete this section, in its entirety, and replace with the following:

405.01 Description. Construct 1 or more courses of Superpave hot mix asphalt (HMA) plant mix, including leveling courses if applicable, on a prepared surface. References in this section also apply to warm mix asphalt (WMA).

405.02 Materials. Provide materials as specified in:

Aggregate 703

Asphalt 702

Anti-Stripping Additive 702

Hydrated Lime 720.06

Recycled Asphalt Pavement (RAP) 720.07

Test materials in accordance with the following applicable standard methods:

Particle Size Distribution of Aggregate ..... FOP for AASHTO T 27

With Materials Finer than 75um (No. 200) Sieve in Mineral Aggregate by Washing ..... FOP for AASHTO T 11 Method A or B

Mechanical Analysis of Extracted Aggregate ..... FOP for AASHTO T 30

Preparing and Determining the Density of Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyratory Compactor ..... FOP for AASHTO T 312

Superpave Volumetric Design for Hot Mix Asphalt (HMA) ..... AASHTO R 35

Determining the Percentage of Fracture in Coarse Aggregate ..... FOP for AASHTO T 335 Method 1

Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures ..... AASHTO T 269

Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures ..... FOP for AASHTO T 209 Bowl Method

Bulk Specific Gravity of Compacted Bituminous Mixtures Using Saturated Surface Dry Specimens ..... FOP for AASHTO T 166 Method A

Pavement Straightedge Procedures ..... Idaho IR 87

In-Place Density of Asphalt Mixtures by Nuclear Methods ..... FOP for AASHTO T 355 Backscatter mode

Sampling Asphalt Mixtures after Compaction (Obtaining Cores) ..... FOP for AASHTO R 67

Determining Volume of Liquids in Horizontal or Vertical Storage Tanks ..... Idaho IT 120

Acceptance Test Strip for Hot Mix Asphalt (HMA) Pavement ..... Idaho IR 125

Sampling of Aggregate…… …… ……FOP for AASHTO R 90

Standard Practice for Operating Inertial Profilers and
Evaluating Pavement Profiles .....AASHTO R 57

Determining the Asphalt Binder Content
of Hot Mix Asphalt (HMA) by the Ignition Method ..... FOP for AASHTO T 308

Sampling Asphalt Mixtures.....AASHTO R 97
(See QA Manual Section 270 for sampling method)

Reducing Samples of Hot Mix Asphalt to Testing Size .....FOP for AASHTO R 47

Moisture Content of Hot Mix Asphalt (HMA) by Oven Method..... FOP for AASHTO T 329

Plastic Fines in Graded Aggregate and Soils By Use of the
Sand Equivalent Test ..... FOP for AASHTO T 176
Alternate Method #2, Mechanical, Pre-wet

Standard Method of Test for Compressive Strength of Hot Mix Asphalt.....AASHTO T 167

Standard Test Method for Effect of Water on Compressive Strength
of Compacted Bituminous Mixtures (Immersion-Compression) ..... ASTM D1075
(Replace ASTM D1074 and ASTM D2726 with AASHTO T 167 and AASHTO T 166)

Resistance of Compacted Asphalt Mixtures to Moisture-Induced Damage .....AASHTO T 283

Uncompacted Void Content of Fine Aggregate, Method A .....AASHTO T 304

Mixture Conditioning of Hot-Mix Asphalt (HMA) .....AASHTO R 30

Sampling Asphalt Materials..... FOP for AASHTO R 66

Determining Rutting Susceptibility of Asphalt Pavement
Mixture Using the Asphalt Pavement Analyzer (APA).....AASHTO T 340

Superpave Volumetric Mix Design ..... AASHTO M 323

Evaluation of the Superpave Gyratory Compactor (SGC)

Internal angle of Gyration Using Simulated Loading .....AASHTO T 344

Standard Test Method for Flat Particles, Elongated Particles,
or Flat and Elongated Particles in Coarse Aggregate .....Idaho FOP for ASTM D4791
(ratio of length to thickness equal to or greater than 5:1)

Bulk Specific Gravity and Density of Compacted Asphalt Mixtures
Using Automatic Vacuum Sealing Method.....AASHTO T 331

Standard Practice for Rapid Drying of Compacted
Asphalt Specimens Using Vacuum Drying Apparatus .....AASHTO R 79

Standard Test Method for Maximum Specific Gravity and Density of
Bituminous Paving Mixtures Using Automatic Vacuum Sealing Method ..... ASTM D6857

Specific Gravity and Absorption of Aggregate
Using Automatic Vacuum Sealing Method.....Idaho IT 144

Quantitative Extraction of Bitumen from Bituminous Paving Mixtures .....AASHTO T 164

Quantitative Extraction and Recovery of Asphalt Binder from
Asphalt Mixtures .....AASHTO T 319

Lime for Asphalt Mixtures.....AASHTO T 303

Determination of Recycled Asphalt Pavement (RAP)
Aggregate Dry Bulk Specific Gravity (G_{sb}) .....Idaho IT 146

Standard Test Method for Automated Extraction of Asphalt Binder
From Asphalt Mixtures (Asphalt Analyzer™) ..... ASTM D8159

Standard Method of Test for Determination of Cracking
Tolerance Index of Asphalt Mixture Using the Indirect
Tensile Cracking Test at Intermediate Temperature ..... ASTM D8225

Hamburg Wheel-Track Testing of Compacted Hot Mix Asphalt (HMA) .....AASHTO T 324

Stratified Random Sampling..... Idaho IR 148

Superpave Mix Design ..... Idaho IR 150

Superpave Mix Design Evaluation..... Idaho IR 151

HMA Quality Control Plan Development and Implementation ..... Idaho IR 152

Split Sample Comparison..... Idaho IR 153

Nuclear Density Gauge Correlation..... Idaho IR 154

Procedures for Checking Asphalt Drum Mix Plant Calibrations ..... Idaho IR 155

Method for Determining Rolling
G_{mm}.....Idaho IR 156

NCAT Correction Factor..... Idaho IR 157

Evaluation and Approval of HMA Plants..... Idaho IR 160

Provide Superpave HMA composed of a combination of aggregate, approved additives, mineral filler (if required), RAP (if used), WMA additives or process (if used), and performance graded (PG) asphalt binder material. Provide a job mix formula (JMF) reported on ITD-0774 and a Superpave HMA pavement as specified and meeting the requirements in this section, 703, and 720.

Table 405.02-1 – Superpave Mixture Requirements

Mixture Type	SP 2 (50 gyrations)	SP 3 (75 gyrations)	SP 5 (100 gyrations)
Design ESALs [(a)] (millions)	< 1	1 < 10	≥ 10
Gyratory Compaction Gyrations for N_{ini} Gyrations for N_{des} Gyrations for N_{max}	 6 50 75	 7 75 115	 8 100 160
Relative Density, % G_{mm} @ N_{ini}	≤ 90.5	≤ 89.0	≤ 89.0
Relative Density, % G_{mm} @ N_{des}	96.0	96.0	96.0
Relative Density, % G_{mm} @ N_{max}	≤ 98.0	≤ 98.0	≤ 98.0

Air Voids, % P_a	4.0	4.0	4.0
Dust Proportion Range [b]	0.6 – 1.4	0.6 – 1.4	0.6 – 1.4
Voids Filled with Asphalt (VFA) Range, % 1½" 1" ¾" ½" ⅜" #4	 64 – 80 65 – 78 65 – 78 65 – 78 65 – 78 67 – 79	 64 – 75 65 – 75 65 – 75 65 – 75 73 – 76 67 – 77	 64 – 75 65 – 75 65 – 75 65 – 75 73 – 76 67 – 77
Rut Depth, mm [c]	≤ 10.0 mm	≤ 10.0 mm	≤ 10.0 mm
Stripping, passes [d]	12,500	15,000	15,000
Cracking Test, IDEAL-CT_{Index} [e]	80 (index value)	80 (index value)	80 (index value)

[a] The anticipated project traffic level expected on the design lane over a 20 year period. Regardless of the actual design life of the roadway, determine the design ESALs for 20 years.

[b] For No. 4 nominal maximum size mixtures, the dust proportion is 1.0 to 2.0 for SP 2 mixes and 1.5 to 2.0 for SP 3 and SP 5 mixes. For coarse graded ⅜, ½, and ¾ inch nominal maximum size mixtures, the dust proportion is 0.6 – 1.5. (Fine and coarse graded mixtures are defined in 703.05).

[c] Maximum depth after specified number of stripping passes. The Hamburg must have passing test results in the mix design.

[d] Minimum number of passes with no stripping inflection point. The Hamburg must have passing test results in the mix design.

[e] The Ideal-CT value and the associated data generated will be included in the mix design submittal; the data will only be used for information.

Approved SP 3 mixes may be substituted for SP 2 mixes. Use the binder content corresponding to 3.5 percent air voids. Adjust the SP 3 mix binder content by selecting the binder content that achieves 3.5 percent air voids at 75 gyrations from the binder content versus air voids graph of the approved mix design and target this binder content in the C-JMF. The SP 3 mix will be tested during production and accepted as an SP 2 mix (i.e., measuring binder content and gradation) when a substitution is made and the SP 2 VFA value will be used.

Use a QPL anti-stripping additive, if needed. Determine the amount of liquid anti-stripping additive or lime required by performing AASHTO T 324 during the mix design development.

1) Warm Mix Asphalt (WMA). WMA is defined as HMA that is produced at a target discharge temperature of 275 °F or less using QPL WMA additives or processes. WMA is allowed for use. QPL WMA additives or processes may be used to facilitate mixing and compaction of HMA produced at target discharge temperatures above 275 °F; however, such mixtures will not be defined as WMA.

   Use additives or processes from the QPL. Follow the supplier's or the manufacturer's written instructions for additives and processes when producing WMA mixtures.

   Use equipment and WMA technologies capable of producing an asphalt mixture that meet specifications and is workable at the minimum placement and compaction temperature desired, regardless of storage or haul distance considerations.

Produce Superpave WMA by 1 or a combination of several QPL-approved technologies including chemical, foaming, and organic processes.

The Department and the Contractor will prepare Superpave WMA field samples, as recommended by the manufacturer's representative, for WMA mixture testing.

2) Recycled Asphalt Pavement (RAP). The Department will allow RAP in the Superpave HMA. Provide RAP as specified in 720.07. Produce the mixture as specified in 405. Select the mass of RAP, the type of RAP, and the extent of RAP processing necessary to meet specifications. The Department will not change specifications or the contract unit price if RAP is used in the mixture.

If RAP material is to be used from the project, obtain a representative sample of material for the mix design.

The mass of RAP used in Superpave HMA is the mass of asphalt binder, in percent that the RAP contributes to the total mass of binder in the mixture.

Use the following equation to determine the percent of RAP

by weight of mix: X% = c (a/b)

Where:

a = optimum asphalt content, percent in mixture to produce 4.0% air voids.

b = percent asphalt content in the RAP (from chemical extraction and/or FOP for AASHTO T 308 burn with asphalt binder correction factor).

c = percent of RAP binder by weight of the total binder

desired in the mix. X = desired RAP percent by total weight

of mix.

The following is an example of the calculation:

Total RAP binder desired equals 17% of total binder in the mixture. If RAP will contribute 5.1% asphalt content and the optimum asphalt content is 5.8%, then:

X% = 17% * (5.8/5.1) = 19.3% RAP percent by total weight of mix.

3. Recycled Asphalt Shingles (RAS). RAS is not allowed in any Superpave HMA.
4. Re-refined Engine Oil Bottoms (REOB). REOB is not allowed in any Superpave HMA.
5. Crumb Rubber Modifier (CRM). CRM is not allowed in any Superpave HMA.

405.03 Construction Requirements.

A. Specific Gravity of Aggregates and RAP. The Department will determine the bulk dry specific gravity of aggregate, G_{sb}, apparent specific gravity of aggregate, G_{sa}, and water absorption (by percent weight of dry aggregate) of the coarse and fine aggregate for each stockpile used in the mixture using AASHTO T 85 and Idaho IT 144. The Department will evaluate the RAP G_{sb}, if used, by determining the RAP G_{se} in accordance with Idaho IT-146. The Department will determine the specific gravity of aggregates and RAP at a minimum of once a calendar year for each stockpile.

1. Sampling Requirements. The date, time, and location of sampling will be agreed to by the Engineer and the Contractor. The Contractor will sample the aggregate stockpiles and RAP stockpiles to be used in the mix design in accordance with FOP for AASHTO R 90 and reduce in accordance with FOP for AASHTO 76. Obtain samples from at least 6 distinct locations within each stockpile. When project millings are used, obtain samples of the project millings to be used in the mix design from the sampling location specified in the approved HMA quality control plan. Sample, combine, and reduce the material for each stockpile to the Department's required material submittal size in the Engineer's presence. Immediately give possession of the samples to the Engineer.
2. Submittal Requirements. Provide blend sheets for the mixture proportions and submit the following:
    a. Aggregate Stockpile. For each aggregate stockpile, submit:
        i. 100 pound minimum sample in clean 5-gallon plastic buckets with airtight lids.
            (1) Each bucket must weigh no more than 50 pounds.
        ii. A summary of all QC test data used to develop average stockpile gradation.
        iii. A summary of all QC test data of G_{sb}, G_{sa}, and water absorption (by percent weight of dry aggregate) of the coarse and fine aggregate produced during stockpile production.
        iv. Source number.
    b. RAP Stockpile. For each RAP stockpile, submit:
        i. 100 pound minimum sample in clean 5-gallon plastic buckets with airtight lids.
            (1) Each bucket must weigh no more than 50 pounds.
        ii. All QC test data used to develop average stockpile gradation.
        iii. Report the asphalt binder/aggregate correction factor for asphalt binder and gradation for each RAP stockpile as specified in 720.
3. Testing Timeframe. The Department will not begin testing until the complete submittal has been received. The Engineer will provide the Contractor with an aggregate test report (i.e., ITD-802 form) within 7 business days after receiving the complete submittal package. G_{sb} testing will be performed by either the Headquarters Lab or a District Lab. A Contractor's representative may be present during the G_{sb} testing, if requested. Retesting, at the Contractor's request, will require an additional 15 business days for re-evaluation. Additional materials and additional information may be required from the Contractor. The Contractor may request a retest only if the QC data submitted supports retesting.

The Contractor will use the established G_{sb} in the mix design calculation, the mix design report, and for production paving testing.

The Engineer will use the established G_{sb} and G_{sa} during the mix design submittal evaluation, acceptance test strip testing, production acceptance testing, and challenge testing.

If the G_{sb} changes during production more than 0.030, as determined by the Engineer, the Engineer will notify the Contractor. The Engineer will establish a new G_{sb} and re-evaluate the mix design as

specified in 405.03.B. All subsequent mix produced after the Contractor has been notified of the new G_{sb} will use the newly established G_{sb}. If at any time testing indicates that G_{sa} is greater than or equal to G_{se} and/or G_{se} is greater than or equal to G_{sb} (i.e., $G_{sa} \geq G_{se}$ and/or $G_{se} \geq G_{sb}$) is not true, production will be halted and a new G_{sb} will be established in accordance with this section.

Following bid award, and before HMA mix design submittal, small areas within the project site may be milled to collect RAP for pre-mix design testing. Perform this work according to a 405.03.C. HMA quality control plan, approved by the Engineer, including the plan and methods to sample and process RAP. At a minimum, for pre-milling the HMA quality control plan will include:

1. An approved traffic control plan that will minimize disturbance to traveling public.
2. Identification of no more than 6 RAP sampling locations within the project site. Each location must be less than 100 feet long with a maximum of 1 lane wide, unless otherwise approved.
3. The milling depth of each location must not be deeper than that shown in the plans for each location.
4. Patching plan.
5. Patch maintenance plan.
6. Detailed narrative of processing of milling and sampling locations to ensure representative samples are obtained.

After processing, sample for G_{sb} and asphalt content testing in accordance with the FOP for AASHTO R 90 and
405.03.A.

B. Mix Design. Develop a Superpave mix design in accordance with Idaho IR 150 to determine the appropriate combination of aggregate, approved additives, mineral filler (if required), RAP (if used), WMA additives or process (if used), and performance graded (PG) asphalt binder material meeting the requirements in 405, 703, and 720. The grade of asphalt is specified on the plans. Mix designs will be designed with a minimum of three virgin stockpiles. The Contractor may also "bump" this PG binder with the following restrictions: the selected PG binder may be one grade lower than the low PG grade temperature. A binder may be selected one grade higher than the upper PG grade temperature if it meets the intermediate testing ($G^*(\sin \delta)$) of the specified binder grade. Binder adjustments/"bumps" must meet the contract requirements at no additional cost to the Department. (Examples: A specified PG 58-28 may be bumped to PG 58-34. A specified PG 58-28 binder may be bumped to PG 64-28 if it meets the $G^*(\sin \delta)$ requirements of the specified binder. A specified PG 58-28 binder may be bumped to PG 64-34 if it meets the requirements of the specified binder.)

1. Approved Mix Design. A mix design must be approved before use using the following process:
   a. Mix Design Submittal. Submit the mix design and all supporting documentation in accordance with Idaho IR 150 a minimum of 5 business days before paving is scheduled to begin. Email to mixdesigns@ITD.idaho.gov and submit to the Engineer. Only 1 mix design per email notification will be accepted.
   b. Mix Design Submittal Evaluation. The Engineer in conjunction with the District Materials Engineer, the Construction and Materials section, and the Central Materials Laboratory will evaluate the mix design in accordance with Idaho IR 151. The

Engineer will provide the Contractor with written approval or rejection of the mix design within 5 business days after receiving the full submittal package.

i. Mix Design Submittal Approval. Once the mix design submittal is approved by the Department, and the FOP AASHTO T-308 correction factor samples have been submitted as per 405.03.B.3 the Contractor may proceed with acceptance test strip using the JMF from the approved mix design submittal. The mix design will be approved for use for up to 2 calendar years from the date of test strip acceptance.

ii. Mix Design Submittal Rejection. Rejection of the mix design will require:
   (1) The mix designer will amend the mix design to address the items noted in the notification of rejection. The Contractor will resubmit the mix design as specified in 405.B.2. The Department will re-evaluate the mix design for approval or rejection as specified in 405.B.3.
   (2) Develop and submit a new mix design as specified in 405.B.

2. Approved Mix Design Expiration. An approved mix design, associated JMF, and any associated C-JMF will be considered expired when one of the following situations occur (but not limited to):

   a. More than 2 calendar year has elapsed from the time of test strip acceptance for the mix design.

   b. Changes in stockpile gradation.

   c. Changes in aggregate specific gravity or absorption.

   d. Changes in RAP specific gravity.

   e. Changes in aggregate, RAP, or binder sources.

   f. Aggregate does not meet physical requirements specified in 703.

   g. Changes in additives, including a change in the dosage rates.

   h. Repeated non-conformance as defined in 405.03.M.1.

3. The Contractor will use FOP AASHTO T-308 to prepare Minimum of 18 hand mixed JMF correction factor samples and four "blank" samples for a Plant Mix design that will be used for one year. The contractor must allow the Engineer to witness samples being prepared and mixed. Each sample will be a virgin aggregate and virgin oil sample constructed to the same NCAT blank proportion. A prebatch meeting will be held 48 hours before starting to mix the samples. In addition to FOP AASHTO T-308 the Engineer will require the following:

   a. Virgin aggregate will be graded per each individual sieve through the minus #200 or 95% retained or greater whichever comes first,

   b. Batch two individual virgin aggregate sample specimens. Perform FOP AASHTO T11 and FOP AASHTO T27 on the samples and determine the difference between target and actual values. Determine what masses need to be adjusted to get back to the target on each sieve size. Batch two more individual sample specimens using the adjusted masses, repeat until washed gradation matches JMF.

c. RAP will not be added to the sample.

d. T-308 samples will target JMF blended gradation values and oil values.

e. Establish a correction Factor for each JMF. This procedure must be performed for every ignition furnace on a project and for each JMF before any acceptance or verification testing is started.

A new correction factor is required if the source or grade of the asphalt cement changes, if a different ignition furnace is used, or for a new JMF. A new correction factor shall be determined for each JMF and each oven prior to its first use every calendar year.

Prepare 23 correction factor samples at the JMF without asphalt cement and with the appropriate proportions of mineral filler, fibers or other additive included in the JMF. (For JMFs with RAP, batch the virgin aggregate to the JMF targets. The Recycled Asphalt Materials will not be used for batching correction Factor samples.)

- Batch each sample separately and according to the JMF target values with the following tolerances

Batching Tolerances "Virgin Aggregate and Add Asphalt Cement"

Sieve Size	**Allowable Difference**
Larger than (No. 8)	±3.0%
Size (No. 8)	±2.0%
Larger than (No. 200) and smaller than (No. 8)	±1.0%
Size (No. 200) and smaller	±0.5%
Asphalt Cement	±0.10%

- The "blank" sample shall have the same gradation, but no asphalt cement shall be added. This "blank" samples will be used to establish correction factors for the aggregate gradations. The "blank" samples is not burned. The engineer will select the four samples after all samples have been built to the same gradation and before any asphalt has been added. Provide sample sizes meeting the requirements of AASHTO T 308.
- Mix and discard one of the remaining 19 samples. The purpose of this sample is to "butter" the mixing bowl.
- For the remaining 18 (or more) samples, tare the mixing bowl and weigh the mixing bowl again after the mixture is removed from the bowl. The empty bowl must be within ±1 gram of the previous tare weight. The weights of the bowl before and after will be done within 10°F of each other. The Engineer will randomly select four samples for test strip lab, four samples for production testing lab, four samples for contractor, four samples for dispute testing, and two sample for HQ lab for info only testing.
- Individually identify each calibration sample and supply documentation showing the actual weights of aggregate, asphalt cement, mineral filler, fibers or any other additive for each sample and resultant actual calculated asphalt cement content for each sample. Also provide documentation for each sample verifying that the empty bowl weight after mixing is within ±1 gram of the empty bowl weight prior to mixing.

The gradation correction factor for each sieve size is the difference between the result

from the "blank" sample and the average of the two incinerated correction samples to the nearest 0.1%.

If the correction factor for any single sieve size exceeds the allowable difference for that sieve established in the following table, contact the Engineer. The Engineer will apply the gradation correction factors for all sieves.

Gradation Difference Tolerances

Sieve	Allowable Difference
Sizes larger than (No. 8)	±5.0%
Size (No. 8)	±4.0%
Sizes larger than (No. 200) and smaller than (No. 8)	±2.0%
Size (No. 200) and smaller	±1.0%

Ignition oven specimen verification. The Department will perform FOP AASHTO T11 and FOP AASHTO T27 on the "blank" samples and compare the results to the JMF. If the gradation varies by more than the allowable difference in table Batching Tolerances "Virgin Aggregate and Add Asphalt Cement" the AASHTO T308 correction factor samples will be discarded and new AASHTO T308 correction factor samples will be made.

- The Department may sample aggregate being used to make the AASHTO T308 during the specimen batching process. The sample will be delivered to either the Headquarters Lab or a District Lab for verification Gsa testing. The verification Gsa test results will be compared to the Gsa test results determined prior to Mix Design approval. For coarse materials tested using AASHTO T 85, the difference in values must not vary by more than 0.035 and the fine Gsa aggregate tested using IT 144 must not vary by more than 0.015. If the differences in Gsa values for both course and fine aggregates are not within tolerance, FOP AASHTO T 308 correction factor samples will be discarded and new AASHTO T308 samples will be made using aggregates that can be proven to have come from the aggregate source described in the mix design documents. The Gsa differences will be recorded on Source Verification Form, ITD 4666.

  Conduct all NCAT AASHTO T 308 ignition furnace correction factor determination and AASHTO T 308 asphalt content ignition furnace testing at 426 ± 5°C (800 ± 9°F). Manually record the furnace temperature (set point) before the initiation of the test if the furnace does not record automatically.

  The JMF correction factor samples will be collected by the Engineer a minimum of 5 business days before test strip.

C. HMA Quality Control Plan. Develop and submit for approval a HMA quality control plan that complies with the requirements of Idaho IR 152, Idaho IR 155, Idaho IR 160, and 106.03.A.2. The Contractor HMA quality control plan must be approved by the Engineer in accordance with 106.03.A.2, Idaho IR 152, Idaho IR 159, Idaho IR 160, and Idaho IR 155 before the material is incorporated into the work/project.

D. Weather Limitations for Permanent Paving. Do not place Superpave HMA on a wet or frozen surface or when weather or surface conditions will otherwise prevent the proper handling or finishing of the Superpave HMA material. Place Superpave HMA as specified in the temperature limitations in Table 405.03-2.

Table 405.03-2 – Air and Surface Temperature Limitations

Compacted Thickness of Individual Courses	Top Course	Leveling and Courses Below the Top Course
Less than 0.10 foot	60 °F	50 °F
0.10 to 0.18 foot	50 °F	40 °F
Greater than 0.18 foot	40 °F	40 °F

Provide a paved surface for travel if the work extends into the winter. Do not start construction on the pavement surface, unless the progress schedule realistically shows the pavement can be replaced or completed within the temperature limitations listed above.

E. Mixing Plants. Use an approved mixing plant that complies with Idaho IR 160 and in accordance with the approved HMA Quality Control Plan. Meet the requirements of Idaho IR 155, with the exception that the Contractor may calibrate the asphalt plant according to current National Asphalt Pavement Association (NAPA) manuals and documented best practices or in accordance to the manufacturer's recommendations. The Contractor will provide the calibration documentation (e.g., manufacturer's recommendation) to the Engineer.

F. Hauling Equipment. Provide hauling equipment in accordance with the approved HMA Quality Control Plan.

G. Paver. Provide a paver that complies with the approved HMA Quality Control Plan.

H. Pre-Paving Meeting. Immediately before paving, the Contractor, the asphalt supplier, the Engineer, and the Department personnel involved in the paving operation will hold a pre-operational paving meeting to discuss how to achieve the highest quality surface. The Engineer will prepare minutes of the pre-operational paving meeting and distribute them to the attendees. Any requests to revise the minutes must be made to the Engineer within 7 business days of receipt. These minutes will constitute the final record of the pre-operational paving meeting.

I. Acceptance Test Strip (Lot 1). Note: If a C-JMF has been accepted, this section does not apply because a test strip has already been accepted. Construct an acceptance test strip of 200 to 750 tons in accordance with Idaho IR 125 using the approved JMF (including offsite test strips). The Department does not require acceptance test strips on small quantity pavement less than 750 tons, nonstructural pavement, or temporary pavement.

The Engineer will base acceptance on the requirements in Table 405.03-4. Do not continue production paving until properties of the acceptance test strip are accepted and a C-JMF has been established as specified in 405.03.K.

1. Test Strip Location. The first day of production paving will be considered the acceptance test strip. The Contractor may elect to perform an offsite mix verification of the JMF. Do not use Department-owned or controlled sources for offsite testing.
2. Testing Timeframe. The Department will require 5 full business days from the time of receipt of Superpave HMA mix samples, core samples, and cold feed samples to perform acceptance testing. Time will begin when all the required samples and associated paperwork needed to perform the specified testing are in the Engineer's possession.

3. Acceptance Testing Lab. Acceptance testing for the acceptance test strip will be performed by either the Headquarters Lab or a District Lab. The Contractor will give 48 hour notice to the Engineer prior to test strip.

4. Test Strip Tolerance. The Engineer will apply the tolerances to the acceptance test strip test properties as specified in Table 405.03-4 to establish the upper specification limit (USL) and lower specification limit (LSL) for quality level analysis.

Table 405.03-4 – Acceptance Test Strip Tolerance

Quality Characteristic	Test Strip Mix Tolerance
VMA, %	703.05 minimum value-0.20
Laboratory Air Voids, %	4.0 ± 1.5
Asphalt Binder Content, %	JMF ± 0.40
Dust Proportion (DP)	Table 405.02-1 range ± 0.10
VFA, %	Table 405.02-1 range ± 5
No. 4 and larger sieves, %	JMF value ± 6.0 [a]
No. 8 to No. 30 sieves, %	JMF value ± 5.0 [a]
No. 50 to No. 100 sieves, %	JMF value ± 4.0 [a]
No. 200 and smaller sieves, %	JMF value ± 2.0 [a]
G_{mm}	JMF value at P_b ± 0.012 [d]
G_{se}	JMF value ± 0.012 [d]
Mainline Density, % Compaction	92.0 – 100.0
Rut Depth, mm [b]	10.0 mm maximum [d]
Stripping, passes [c]	12,500/15,000 [d]
Cracking Test, IDEAL-CT_{Index}	80 (index value) [d]

[a] The upper and lower specification limits are never allowed to be outside the control points specified in 703.05.

[b] Maximum depth after 12,500/15,000 passes. For information only.

[c] Minimum number of passes with no stripping inflection point.

[d] For information only.

If the acceptance test strip is considered acceptable, the Contractor may proceed to production paving once a C-JMF is established as specified in 405.03.K.

The Engineer will reject an unacceptable test section for SP 3 and SP 5 mixtures and require removal. The Department will not pay for the removal or the applicable contract pay item quantities. An unacceptable test section for an SP 2 mixture will be subject to rejection. If the Engineer determines the failed SP 2 test section may remain in place, the Contractor may leave the test section in place with a 50 percent reduction in price or remove the failed material and replace it with acceptable

material and receive full payment. Remove the failed SP 2 test section if rejected. The Department will not pay for removal or for the applicable contract pay item quantities.

If the Contractor is unable to meet the requirements after 3 test strips, the Engineer will require a new mix design to meet specifications. Place a new acceptance test strip at no additional cost to the Department.

If the Contractor's testing determines the test strip fails and the Contractor chooses to proceed with another test strip before receiving the Engineer's results, the Engineer will not complete testing of the test strip in question and the failed test strip will count as a failed test strip.

Statistical Acceptance and payment for the Test Strip. Use the statistical method outlined in 106.03.B. for evaluating acceptance and payment for the test strip. For material with a percent within limits (PWL) 40 and greater, use a 1.0 pay factor. If any quality characteristic, except Gmm or Gse, has a PWL less than 40, the asphalt mix will be rejected.

J. Production Laboratory Comparison Process. The Contractor, the lab performing test strip testing, and the lab performing acceptance testing will perform a split sample comparison testing during test strip, or before, split sample can either be one of the test strip samples or a separate sample. Previously used designs will perform split sample comparison on, or before the first day of production paving. The split sample comparison will be performed using Idaho IR 153.

1. The Contractor or the Engineer may request split sample comparison testing at any time during the project

K. C-JMF. Once a JMF is confirmed at acceptance test strip, the Contractor will establish an initial C-JMF.

1. Adjusting the C-JMF. C-JMF adjustments are allowed that will result in improved mix quality characteristics. If a lot is currently in progress, the adjustment will go into effect at the beginning of the next lot.
    a. Adjustments within Table 405.03-5. Adjustments listed in Table 405.03-5 can be made to the JMF. Provide a detailed description of how these adjustments will be made and what quality characteristics will be affected. The Engineer will be notified within 24 hours of adjustments and descriptions.

Table 405.03-5 – C-JMF Adjustment Limit Table

Parameter	Adjustment
No. 4 (4.75 mm) and greater	± 3% from JMF
No. 8 (2.36 mm)	± 2% from JMF
No. 100 to No. 30 (0.600 mm)	± 2% from JMF
No. 200 (0.075 mm)	± 0.3% from JMF
Asphalt Content	± 0.2% from JMF
G_{mm}	± 0.010 from C-JMF [(c)]
G_{se}	± 0.010 from C-JMF [(c)]
Individual Cold Feed Percentage for Aggregate	± 10.0% from JMF [(a) (d)]

Cold Feed Percentage for RAP	- 10.0% from JMF [b] [d]

[a] The cold feed percentage of any aggregate may be adjusted up to 10 percentage points from the amount listed on the JMF, however no aggregate listed on the JMF will be eliminated.

[b] The cold feed percentage for RAP may be reduced up to 10 percentage points from the amount listed on the JMF and must not exceed the percentage of RAP approved in the JMF or for the specific application under any circumstances.

[c] Based on the initial C-JMF.

[d] Individual cold feed percentages for aggregate and RAP greater than 5.0% for a single stock pile of the same product must have a new correction factor established in accordance with IR 157.

b. Adjustments outside of Table 405.03-5. Adjustments outside the limits listed in Table 405.03-5 can be requested, but these adjustments are considered significant adjustments and will require the Contractor to document any differences in the asphalt plant settings necessary to achieve the designed asphalt plant output as documented by acceptance test results. Thus, additional supporting documentation and justification must be submitted and how these adjustments will affect on the quality characteristics of the asphalt mix. Adjustments and descriptions must be submitted for the Engineer's prior approval and the Engineer will have 1 business day after the date the request was submitted.

Use the C-JMF to establish target values and control limits when producing control charts during production paving.

L. Tack Coat. Apply an asphalt tack coat as specified in 401 to the following surfaces:

1. Existing plant mix surfaces and to the surface of each course constructed, except the final course.
2. Surfaces of curbing, gutters, manholes, portland cement pavement, and other structures. Paint or spray a thin, uniform tack coat of asphalt before placing pavement against the surfaces.
3. Contact surfaces of transverse joints and cold longitudinal joints just before additional mixture is placed against previously laid material.

M. Production Paving. Before production milling, obtain approval for Superpave HMA mix design(s). Milling, coring, or sampling for preliminary sample collection will be allowed for mix design development in accordance with the QCP.

The Contractor may request to continue production paving in accordance with the C-JMF after the acceptance test strip (Lot 1) is approved. Superpave HMA paving acceptance during production is based on the requirements in Table 405.03-6. The production paving lot (Lot 2) following the accepted test strip will be based on Table 405.03-4 except the gradation requirements. The Contractor will produce and place mix in accordance with the approved QCP.

If aggregate or asphalt binder sources change from the approved mix design, develop a new mix design as specified in 405.03.B. at no additional cost to the Department. If the G_{sb} changes during production more than 0.030, the Engineer may establish a new G_{sb} and re-evaluate the mix design.

1. Conformance to the C-JMF. The Contractor will produce mix that meets the requirements of Table 405.03-6. The Contractor may elect to remove defective material and replace it with new

material on a lot basis, at no additional cost to the Department to ensure conformance to the C-JMF.

a. Isolated Non-Conformance. If the Contractor is unable to meet the requirements on a single lot, the Engineer will require the Contractor to stop production and/or delivery until a corrective action plan can be developed and implemented to remedy the non-conformance. Submit the corrective action plan to the Engineer before resuming work.

b. Repeated Non-Conformance. If the Contractor is unable to meet the requirements on 2 consecutive lots, the C-JMF, mix design, and associated JMF will be considered expired as defined in 405.03.B.2. The Engineer will require a new mix design to meet the specifications in 405.03.B. at no additional cost to the Department.

If aggregate or asphalt binder sources change from the approved mix design, develop a new mix design to meet the specifications in 405.03.B. at no additional cost to the Department.

2. Production Limits**.** The properties listed in Table 405.03-6 will be used for purpose of quality analysis calculations, acceptance, and payment. The Engineer will apply the tolerances to the properties as specified in Table 405.03-6 to establish the upper specification limit (USL) and lower specification limit (LSL) for quality level analysis.

3. Production Acceptance Criteria. The Engineer will perform quality level analysis and determine acceptance as specified in 106.03.B using the quality characteristics specified in Table 405.03-6. ITD will submit test results to contractors as soon as possible.

Table 405.03-6 – Production Paving Quality Limits

Mix Quality Characteristic	**Limits**
SP 2 Mixture	
No. 4 sieve and larger sieves, %	C-JMF value ± 5.0 [a]
No. 8 to No. 30 sieves, %	C-JMF value ± 4.0 [a]
No. 50 to No. 100 sieves, %	C-JMF value ± 3.0 [a]
No. 200 sieve and smaller sieves, %	C-JMF value ± 1.5 [a]
Asphalt Binder Content, %	C-JMF value ± 0.3
SP 3 and SP 5 Mixtures	
Laboratory Air Voids, % N_{design}	SP 3: 2.5 – 5.0% SP 5: 2.8 – 5.0%
VMA, % N_{design}	703.05 minimum value
Dust Proportion	Table 405.02-1Range
G_{se} [f]	C-JMF value ± 0.012 [g]
G_{mm} [e, f]	C-JMFvalue@ P_b± 0.012 [g]
Rut Depth, mm	10.0 maximum [b, c]
Stripping, passes	12,500/15,000 [b, d]
Cracking Test, IDEAL-CT_{Index}	80 (index value)[b]
Roadway Quality Characteristic	**Limits**
Mainline Density, % Compaction	92.0 –100.0

[a] The upper and lower specification limits are never allowed to be outside the control points specified in 703.05.
[b] Hamburg and Ideal-CT are for information only at this time.
[c] Maximum depth after 15,000 passes.
[d] Minimum number of passes with no stripping inflection point.
[e] G_{mm} tests must be performed only after a 2-hour oven cure time in accordance to the mix design requirements to limit test result variability.
[f] G_{mm} and G_{se} values are indicators of consistency of the asphalt mix and are tracked using PWL. G_{mm} and G_{se} will be monitored for information only and, if the PWL is less than 40, the Engineer and the Contractor will review the data and take appropriate action (e.g., review plant settings, review test results). There will be no deduction for a low PWL based on G_{mm} or G_{se}.
[g] Based on the initial C-JMF.

N. Spreading and Finishing. Place the mixture on an approved surface. Use pavers to distribute the mixture over the entire width or over a partial width as practical. Do not extend partial width paving beyond one day's production. Minimum lift thickness will be no less than 3.5 times nominal maximum aggregate size (NMAS) of the mix design.

Use pavement marking tape to temporarily mark roadway centerline on pavements being used by traffic as specified in 626.03.

Unless otherwise specified, equip the paver with a shoe on the outside to provide slopes as follows:

The Engineer will allow an 18-inch-wide shoe for depths 0.2 foot or less on initial pavement placement. The shoe must be 24 inches wide for depths greater than 0.2 foot. The shoe must be 24 inches wide on pavement overlays.

Meet-lines must be within 1 foot of lane lines or within 1 foot of center of lanes. Meet-lines are not allowed within a wheel path. Ensure transverse and longitudinal joints are smooth and match the adjacent surfaces.

O. Compaction. Compact the pavement to a density between 92.0 percent and 100.0 percent of maximum theoretical density for SP 2, SP 3, and SP 5 asphalt mixes. Determine G_{mm} using Idaho IR156.

Following acceptance test strip approval or C-JMF approval, pavement density testing for acceptance will be performed by the Department using a nuclear density gauge with the readings corrected by cores in accordance with AASHTO T 355. The G_{mm} for determining the percent compaction will be determined using a rolling, consecutive 2-lot average (i.e., the most recent 2 completed lots) of the Department's acceptance test results. For the first lot of production paving, the test strip's G_{mm} corresponding to the C-JMF is used for determining the percent compaction. The Contractor is responsible for quality control testing.

Density Gauge Correlation. When nuclear density gauges are used for acceptance, the Engineer will correlate the gauges in accordance with Idaho IR 154. A new gauge correlation will be established for each mix design, each paving lift, each paving lift thickness, and each underlying material (e.g., ¾" base, CRABs, 0.25' underlying lift of HMA).

Repair holes left in the pavement by the coring operation with non-shrink grout at no additional cost to the Department. Do not begin coring until repair methods and materials have been approved.

P. Joints. Do not roll over the unprotected end of freshly laid mixture. Form transverse joints by

cutting back on the previous run to expose a vertical edge the full depth of the course.

Slope the cold transverse construction joints open to public traffic at 20H:1V. Remove the sloped surface (ramp) without damage to the base just before paving is resumed. Test the new joint for smoothness as specified in 405.03.S.

Construct end transitions between overlays and the adjoining pavement by milling a wedge out of the adjoining pavement, starting at the surface and continuing into the adjoining pavement on a 200H:1V slope or flatter until a vertical edge equal to 0.15 foot or the depth of overlay is reached. Transitions to ramps and crossroads are transverse joints. The milled wedge is a transverse joint when the adjoining pavement is concrete. Mill the wedge from the pavement to be overlaid, with the vertical edge against the concrete, when the adjoining pavement is concrete. Taper transitions between overlays and approaches to form a smooth transition while maintaining drainage.

Provide a positive bond, density, and a finish surface to the new mixture at longitudinal joints that is equal to the mixture against which it is placed. The Engineer may take density tests at longitudinal joints to ensure the integrity of material in the joint area.

Locate the longitudinal joint in the top course at the centerline of the traveled way if the roadway is two lanes wide or at the lane lines if the roadway is more than 2 lanes wide. On the lower courses, stagger the longitudinal joint and offset it 6 inches to 1 foot from the centerline of the traveled way if the roadway is 2 lanes wide or from the lane lines if the roadway is more than 2 lanes wide. Match the pavement surface across a longitudinal joint with the transverse slope shown on typical sections.

Test joints, except crowns, for smoothness in accordance with Idaho IR 87. Use an approved 10-foot straightedge. Complete the test and necessary corrections before the material temperature drops below 175 °F.

Place longitudinal joints straight and true. Use approved methods to bring back to straight and true unacceptable deviations. Make adjustments as needed to achieve the specified results.

Obtain approval for Superpave HMA mix design(s) before the start of milling operations.

Q. Miscellaneous Pavement. Place miscellaneous Superpave HMA pavement in irregular areas (e.g., raised or depressed medians, gores, tapers, radii (excluding approach radii), tapered paving for guardrail terminal widening). Include areas that taper from 0 to 8 feet maximum width and gore areas from roadway shoulders to termini in this work. Do not include pavement widening for installation of guardrail in this work.

R. Small Quantities. Small quantities will be accepted in accordance with the QA Manual. When an acceptance test strip is not required as per 405.03.I, the Department will base acceptance for pavement density on the density of cores taken from the finished pavement. Obtain 5 randomly located core samples in accordance with the FOP for AASHTO R 67 from the compacted Superpave HMA in the Engineer's presence. The Engineer will determine the random core locations. Immediately submit the cores for testing. The Department will determine the density of the cores the FOP for AASHTO T 166 Method A or AASHTO T 331. In addition, obtain 3 randomly located mix samples during HMA placement, in the Engineer's presence, and immediately submit samples for testing. Obtain the samples in accordance with the AASHTO R 97 (see the QASP Table 106.03-1 Note 1.c.). The Engineer will randomly locate the mix samples and the Department will test the mix samples to determine the G_{mm} value in accordance with the FOP for AASHTO T 209 or ASTM D6857. The Department will use the average of the 3 G_{mm} values to compute in-place density of the cores taken for

density acceptance. If paving will be performed in different construction seasons (e.g., bridge approaches), obtain 5 additional cores from the compacted Superpave HMA and 3 additional mix samples for density acceptance when paving resumes. The Contractor is responsible for quality control testing.

S. Leveling Course. Construct the leveling course of Superpave HMA, with a compacted thickness greater than 0.2 foot, in multiple courses.

Place the leveling course on the existing surface in quantities as approved. Use pavers and/or motor graders and a sufficient number of pneumatic tire rollers to adequately place and compact the leveling course to the required cross-section and grade. Use a steel-wheel roller for final rolling if the leveling course is to be used as a wearing course or if a seal coat is to be applied.

When blade laid leveling course is specified, place Superpave HMA in wheel ruts and other surface irregularities. Blade Superpave HMA into the low areas using a motor grader. Normally, 2 passes are required to fill depressions. Follow each pass of the motor grader with a pneumatic tired roller to provide compaction. Position the blade of the motor grader so light contact with the existing pavement surface is maintained. The Contractor may dispose of excess coarse aggregate resulting from placing the blade laid leveling course along the edge of the roadway.

When machine laid leveling course is specified, place Superpave HMA on the roadway with a paver to restore crown, super elevation, or rideability. Operate the screed close to the existing pavement surface. The Engineer will accept minor surface tears from this operation. Use pneumatic and vibratory rolling for compaction.

T. Surface Smoothness. Place pavement complying with Schedule II unless otherwise specified.

For Schedule III only, perform pre-paving, quality control, and acceptance surface smoothness testing, analyze the results of this testing, and submit the results. Submit pre-paving results. Before paving, submit a plan showing how Schedule III smoothness will be achieved.

Perform acceptance testing on the final lift and submit the results before corrective action. Complete acceptance testing within 1 week of paving completion.

Perform quality control testing in international roughness index (IRI). Request to use quality control testing for acceptance before the start of paving.

Submit quality control results by the next business day following placement.

If the quality control testing results show surface smoothness is not within the acceptable specification limits, suspend paving operations until it can be shown the steps taken to modify operations will result in acceptable smoothness.

Acceptance surface smoothness testing must be verified by the Engineer. The profile run must be witnessed by the Engineer and a preliminary copy of the report submitted immediately after the end of the run. The Engineer will not accept the testing, unless witnessed. Submit the profile data in a format suitable for evaluation using ProVAL or other industry standard software. In addition, each week or as requested by the Engineer, submit to the Engineer an electronic, editable Microsoft Excel spread sheet containing the data produced from the acceptance smoothness testing. Do not perform corrective action until approved.

The Engineer may elect to perform additional testing for verification. If the results vary from the Contractor's IRI results by more than 10 percent, the Engineer will use the Department's IRI results for acceptance.

Measure the finished pavement as follows:

1. Test the surface with a 10-foot straightedge at locations determined by the Engineer. Identify the locations that vary more than ¼ inch from the lower edge when the straightedge is laid on finished pavement in a direction parallel with centerline or perpendicular to centerline. Remove the high points that cause the surface to exceed the ¼ inch tolerance by grinding with equipment specified in Corrective Action below.
2. Profile the surface 3 feet from and parallel to each edge of each traffic lane. The Engineer will use the average of the results for each 0.1 mile section to calculate incentive payments and determine sections requiring corrective action.

   Use Class 1 or Class 2 profilers as defined in ASTM E950. Operate profilers in accordance with the manufacturer's instructions and AASHTO R 57. Set the profiler as follows:

   1. High pass or pre-filter: off or at least 200 feet.
   2. Bump detection: on
   3. Dip detection: on
   4. Resolution: 0.01 inch
   5. Low pass filter: off
   6. Other filters: off

   Operate the profiler according to the manufacturer's recommended speed. Calibrate the profiler at the beginning of the work and as needed thereafter.

   The Department requires the pavement to comply with the following surface smoothness schedule requirements:

   a. Where longitudinal grade is 6.5 percent or less, pavement on tangent alignment and pavement on horizontal curves having centerline radius of curve 1,000 feet or more must meet the surface smoothness requirements for the smoothness schedule specified. The Engineer will add consecutive 0.1 mile sections of roadway tested together to obtain the mile section. There will be no overlapping of the 0.1 mile or 1 mile sections to change cumulative test results.

      (1) Smoothness Schedule using IRI:

         (a) Schedule I Projects: Target IRI values range from 60.0 to 70.0 inches per mile per0.1 mile. Corrective action required above 95.0 inches per mile per 0.1 mile.

         (b) Schedule II Projects: Target IRI values range from 71.0 to 80.0 inches per mile per

      0.1 mile. Corrective action required above 95.0 inches per mile per 0.1 mile.

   (c) Schedule III Projects: Target IRI value range defined as one of the following:

      i. For sections with a pre-paving IRI less than 160.0 inches per mile per 0.1mile the final index must not exceed 80.0 inches per mile per 0.1 mile.

ii. For sections with a pre-paving IRI of 160.0 inches per mile per 0.1 mile or greater, use the smoother of either:

1. A 50 percent improvement of the pre-paving index.

2. A maximum final index of 100.0 inches per mile per 0.1 mile. Corrective action is required above the target IRI.

b. The Engineer will exclude acceptance test strips, pavement on horizontal curves having a centerline radius of curve of less than 1,000 feet and pavement within the super elevation transition of such curves, or pavement with a longitudinal grade greater than 6.5 percent from incentive/disincentive payments. Meet the corrective action requirements for the smoothness schedule specified.

c. Profile the pavement to provide continuous, uninterrupted profile data. The Department will not apply profile smoothness tolerances and incentive/disincentive payments to the following:

(1) Pavement within 50 feet of a transverse joint that separates the pavement from a structure deck, an approach slab, or an existing pavement not constructed under the contract.

(2) Pavement for approaches and structure decks.

(3) Roadways with a speed limit less than 40 mph.

(4) Interstate ramps.

Smoothness acceptance for these areas will be as specified with straightedge requirements.

Surface Smoothness Corrective Action:

Use power-driven grinding equipment that is specifically designed to smooth portland cement concrete pavement with diamond blades. Use a machine with an effective wheelbase at least 12 feet and a cutting width of at least 3 feet. Restrict the machine forward speed to 5 feet per minute while milling. Provide grinding equipment of a shape and dimension that does not encroach on traffic movement.

Grind parallel to centerline. Extend adjacent grinder passes, within ground area, to produce a neat rectangular area having a uniform surface appearance. Make smoothly feathered transitions at transverse boundaries between ground and unground areas. Apply a fog coat to the ground pavement surface as specified in 408 after grinding has been completed.

Grind individual high points in excess of 0.3 inch within 25 feet or less, as determined by the California Profilograph simulation, until such high points do not exceed 0.3 inch.

After individual high point grinding has been completed, perform additional grinding in sections requiring corrective action to reduce the IRI to a maximum of 80.0 inches per mile per 0.1 mile section along lines parallel with the pavement edge.

Individual low points are areas in excess of 0.3 inch within 25 feet or less, as determined by the California Profilograph simulation. Low points will be subject to rejection and replacement at no cost to the Department. Under these circumstances, the Engineer's decision whether to accept

the completed pavement or to require corrections is final.

Check the pavement for smoothness after grinding as specified in this subsection and make additional corrections necessary to achieve smoothness. Submit a report and graph showing compliance of the final surface to the smoothness requirements. The Department will not pay for the cost of grinding, milling or related work (e.g., fog coat), disposal of milled material, traffic control, flagging, profiling, surface repair of ground or milled areas, or temporary striping.

Surface Smoothness Deductions, Incentives, and Disincentives:

1. Straight-Edge Evaluation.

   If correction of the roadway as specified will not produce satisfactory smoothness results or it reduces pavement thicknesses and serviceability, the Engineer may accept the completed pavement and will deduct from monies due or may become due to the Contractor the sum of $500.00 for each individual high point exceeding ¼ inch tolerance or $3,000.00 for each 0.1 mile section. $500.00 per individual low point exceeding
   ¼ inch tolerance will be deducted from monies due or may become due to the Contractor. Low points exceeding ½ inch will be subject to rejection and replacement at no cost to the Department. Under these circumstances, the Engineer's decision whether to accept the completed pavement or to require corrections is final.

2. Profilograph Evaluation.

   For each evaluation section, the Contractor is entitled to a payment adjustment excluding acceptance test strips and Schedule III surface smoothness work. An evaluation section is defined as a 0.1 mile per traffic lane or fraction as applicable. The Department will not pay an incentive for pavement on the roadway shoulders, center turn lanes, turn bays, crossovers, tapers, or other miscellaneous pavement. The Department will pay incentive as specified in Table 405.03-7.

   The Department will base incentive payments on initial profiles before corrective work on the top course of paving.

Table 405.05-1 – IRI
Initial Index inches per mile per 0.1 mile section

Payment $ per 0.1 mi	Schedule I	Schedule II
$500.00	40.4 or less	45.4 or less
$300.00	40.5 to 50.4	45.5 to 60.4
$100.00	50.5 to 60.4	60.5 to 70.4
$0.00	60.5 to 70.4	70.5 to 80.4
-$100.00	70.5 to 75.4	80.5 to 85.4
-$300.00	75.5 to 85.4	85.5 to 95.4
-$500.00	85.5 to 95.4	—
-$500.00 and corrective action	95.5 or greater	95.5 or greater
-$500.00 and corrective action	Individual high points [(a)]	Individual high points [(a)]
-$500.00 and corrective action	Individual low points [(a)]	Individual low points [(a)]

[a] In addition to the incentive/disincentive payment applied to the 0.1 mile section, the Engineer will deduct from monies due or may become due to the Contractor the sum of $500.00 for each individual high point or low point up to a maximum of $3,000.00 for each 0.1 mile section.

The Department will make only 1 incentive payment per evaluation section. An evaluation section runs consecutively from the point paving begins to the point paving is interrupted (e.g., at bridges, the end of lane paving areas specifically excluded by the specifications). The Department will prorate partial sections based on their percentage of a full section.

The Department will base incentive payments on initial profiles before corrective work on the top course of paving.

405.04 Method of Measurement. The Engineer will measure acceptably completed work as follows:

1. Pavements, leveling courses, and asphalts by the ton. The Engineer will not permit batch weights as a method of measurement. The Superpave HMA quantity will be the weight used in the accepted pavement and will include the weight of the aggregate, asphalt, and additives in the mixture.
2. Anti-stripping additive by the percentage of additive per ton of asphalt.
3. Miscellaneous pavement by the square yard. Final measurement will be based on plan quantities, unless changed by the Engineer. Miscellaneous pavement measurement is in addition to the measurement of asphalt and Superpave HMA material.
4. Approaches per each regardless of width or length. Separate mailbox turnouts will be measured as an approach. Mailbox turnouts adjacent to an approach will be considered as part of the approach and no separate measurement will be made. Approach measurements are in addition to the measurement of asphalt and Superpave HMA material.
5. Wedge milling for the transition section by the square yard.
6. Tack coat will be paid for as specified in 401.

405.05 Basis of Payment.

1. Superpave SP3 and SP5.

Composite mix pay factor will be computed for each lot using the following equation:

$$CPF_{405Mix} = (0.4 \times PF_{AIRVOIDS}) + (0.4 \times PF_{VMA}) + (0.2 \times PF_{DP})$$

Where:

CPF_{405Mix} = Composite pay factor for mix quality characteristics.

$PF_{AIRVOIDS}$ = Pay factor for air voids.

PF_{VMA} = Pay factor for VMA.

PF_{DP} = Pay factor for dust proportion.

Calculation of Composite Incentive/Disincentive. The composite incentive/disincentive dollar amount to be paid or deducted for Superpave plant mix pavement accepted by the

Department, excluding plant mix pavement for test strips, small quantity, approaches, and miscellaneous paving not placed with mainline paving, will be computed for each lot using the formula:

$PA_{405} = (CPF_{405Mix} + PF_{MLD} - 2) \times Q_i \times P$

Where:

PA_{405} = Pay adjustment for material and main line density in dollars for the lot.

CPF_{405Mix} = Composite pay factor for material characteristics for the lot.

PF_{MLD} = Pay factor for main line density for the lot.

Q_i = Quantity represented by individual lot.

P = Contract unit price.

Note: The incentive may be a negative amount (i.e., a deduction from the total amount bid for the item).

A pay factor of 1.00 will be used for all acceptable Superpave plant mix pavement incorporated into the onsite acceptance test strip for volumetrics.

Density pay factor for the Superpave plant mix leveling course will be 1.00.

2. Pay factors for approaches and miscellaneous paving not placed with mainline paving will be 1.00.Superpave SP2.

Composite pay factors will be computed for each lot using the following equations:

$CPF_{405} = (0.3 \times PF_{AC}) + (0.3 \times PF_{AGG}) + (0.4 \times PF_{MLD})$

Where:

CPF_{405} = Composite pay factor for mix quality characteristics. PF_{AC} = Pay factor for asphalt content.

PF_{AGG} = Pay factor for plant mix aggregate. PF_{MLD} = Pay factor for main line density.

Calculation of Composite Incentive/Disincentive. The composite incentive/disincentive dollar amount to be paid or deducted for Superpave plant mix pavement accepted by the Department, excluding plant mix pavement for test strips, small quantity, approaches, and miscellaneous paving not placed with mainline paving, will be computed for each lot using the formula:

$PA_{405} = (CPF_{405} - 1) \times Q_i \times P$

Where:

PA_{405} = Pay adjustment for material and main line density in dollars for the lot. CPF_{405} = Composite pay factor for material

characteristics for the lot.

Q_i = Quantity represented by

individual lot. P = Contract

unit price.

Note: The incentive may be a negative amount (i.e., a deduction from the total amount bid for the item).

Density pay factor for the Superpave plant mix leveling course will be 1.00.

Pay factors for approaches and miscellaneous paving not placed with mainline paving will be 1.00.

A pay factor of 1.00 will be used for calculating a pay factor for all acceptable Superpave plant mix pavement incorporated into an onsite acceptance test strip for volumetrics.

The Department will pay for accepted quantities as follows:

Pay Item	**Pay Unit**
Superpave HMA Pavement Class SP	Ton
Superpave HMA Pavement, including asphalt and additives Class SP	Ton
Leveling Course Class SP	Ton
Leveling Course, including asphalt and additives, Class SP	Ton
___Asphalt Binder for Superpave HMA Pavement	Ton
___Percent Anti-stripping Additive for Superpave HMA Pavement	TOA
Miscellaneous Pavement	SY
Approaches	Each
Wedge Milling	SY

The cost to produce the required aggregate in each stockpile to accommodate blends is incidental and included in the contract unit price for the Superpave HMA contract pay item.

When Superpave HMA includes RAP, in any proportion, the Department will not include the asphalt binder contributed by the RAP in the quantity for asphalt and additives when asphalt and additives are paid for separately.

3. Pre-milling, Coring, or Sampling for RAP.

All work and maintenance associated with the pre-mix design RAP sampling is incidental.

ON PAGES 631-634, SECTION 703.05 – AGGREGATE FOR SUPERPAVE HMA PAVEMENT
Delete this section, in its entirety, and replace with the following:

703.05 Aggregate for Superpave HMA Pavement. Provide aggregate for mixes, except SP 2, in at least 3 separate stockpiles. Use aggregate consisting of crushed stone or crushed gravel. Combine with other required aggregate fractions and fillers in the proper proportion so the resulting mixture meets the gradation required.

Screen the aggregate used for Superpave HMA so 10 percent or less of the naturally occurring minus ½ inch material remains in the material used to produce the stockpile(s). Crush the plus ½ inch material to produce the required gradation. This requirement does not apply to SP 2 mixes or mixtures designated as nonstructural or temporary mixtures.

Size, grade, and combine the fractions for the mixture in proportions so the resulting blend conforms to the grading requirements as defined in Table 703.05-2a and Table 703.05-2b.

Use aggregate that meets the requirements in Table 703.05-1.

Table 703.05-1 – Superpave Mixture Requirements

Mix Type	SP 2	SP 3	SP 5
Design ESALs [a] (millions)	< 1	1 < 10	≥ 10
Idaho Degradation, maximum loss, %	5.0	5.0	5.0
Ethylene Glycol, minimum retained, %	90	90	90
R-Value	80 or more minimum	80 or more minimum	80 or more minimum
LA Wear, Maximum % loss	35	30	30
Sodium Sulfate Soundness [b] Maximum loss after 5 cycles, %	12	12	12
Fractured Face, Coarse Aggregate [c] % Minimum	65/-	75/60	98/98
Uncompacted Void Content of Fine Aggregate, % Minimum	40	40	45
Sand Equivalent, Minimum	35	40	45
Flat and Elongated [d], % Maximum	10	10	10

[a] The anticipated project traffic level expected on the design lane over a 20 year period. Regardless of the actual design life of the roadway, determine the design ESALs for 20 years.
[b] Perform sodium sulfate soundness testing when directed.

(c) 75/60 denotes that 75 percent of the coarse aggregate has 1 fractured face and 60 percent has 2 or more fractured faces.
(d) This criterion does not apply to No. 4 nominal maximum size mixtures.

Table 703.05-2a – Nominal Maximum Aggregate Size-Control Points (Percent Passing) and VMA Requirements PCS Control Points for Mixture Nominal Maximum Aggregate Size (b)

Sieve Size	1 1/2 in		1 in		3/4 in	
	Restricted Zone	Control Points	Restricted Zone	Control Points	Restricted Zone	Control Points
2 in	—	—	—	—	—	—
1 1/2 in	—	90 to 100	—	100	—	—
1 in	—	90 max	—	90 to 100(a)	—	100
3/4 in	—	—	—	90 max	—	90 to 100(a)
1/2 in	—	40 to 70(a)	—	—	—	90 max
3/8 in	—	—	—	42 to 70(a)	—	52 to 80(a)
No. 4	34.7	—	39.5	—	—	—
No. 8	23.3	15 to 41(a)	26.8	19 to 45(a)	34.6	23 to 49(a)
No. 16	15.5	—	18.1	—	23.1	—
No. 30	11.7	—	13.6	—	16.7	—
No. 50	10	—	11.4	—	13.7	—
No. 100	—	—	—	—	—	—
No. 200	—	0.0 to 6.0(a)	—	1.0 to 7.0(a)	—	2.0 to 8.0(a)
VMA	11.5		12.5		13.5	
Primary Control Sieve	3/8 in		No. 4		No. 4	
PCS Control Point (% passing)	47		40		47	

Table 703.05-2b – Nominal Maximum Aggregate Size-Control Points (Percent Passing) and VMA Requirements PCS Control Points for Mixture Nominal Maximum Aggregate Size [b]

Sieve Size	1/2 in		3/8 in		#4	
	Restricted Zone	Control Points	Restricted Zone	Control Points	Restricted Zone	Control Points
2 in	—	—	—	—	—	—
1 1/2 in	—	—	—	—	—	—
1 in	—	—	—	—	—	—
3/4 in	—	100	—	—	—	—
1/2 in	—	90 to 100[a]	—	100	—	100
3/8 in	—	90 max	—	90 to 100[a]	—	95 to 100[a]
No. 4	—	—	—	90 max	—	90 to 100
No. 8	39.1	28 to 58[a]	47.2	32 to 67[a]	—	—
No. 16	25.6	—	31.6	—	—	30 to 55[a]
No. 30	19.1	—	23.5	—	—	—
No. 50	15.5	—	18.7	—	—	—
No. 100	—	—	—	—	—	—
No. 200	—	2.0 to 10.0[a]	—	2.0 to 10.0[a]	—	6.0 to 13.0[a]
VMA	14.5		15.5		16.5	
Primary Control Sieve	No. 8		No. 8		No. 16	
PCS Control Point (% passing)	39		47		42	

(a) Denotes the sieves that will be used for mix design control points and quality analysis sieves for a Class SP 2 mix.

(b) The combined aggregate gradation will be classified as coarse-graded when it passes below the primary control sieve (PCS) control point as defined in Table 703.05-2a and Table 703.05-2b. Other gradations will be classified as fine graded. This classification is based on the Contractor's job mix formula and not individual gradation tests. Coarse graded mixtures will not pass through the restricted zone.

ON PAGES 711-713, SECTION 720.07 – RECYCLED ASPHALT PAVEMENT (RAP)

Delete this section, in its entirety, and replace with the following:

720.07 Recycled Asphalt Pavement (RAP). Prepare and maintain a RAP processing and stockpiling quality control plan and make these records available to the Department.

1. RAP Categories. Provide RAP that complies with one of the following categories:
   A. Category 1. The Department defines this material as being from a Department project or is traceable to another public agency sponsored project. The Engineer will accept Category 1 RAP for use provided the Contractor submits a letter stating the RAP is from a specific pavement, including the route and mile post. Do not add material from other sources during stockpiling and submit certification of this from the producer on a stockpile-by-stockpile basis.

      Category 1 RAP may consist of asphalt material removed from interstates, United States Highways, or State Highways.

   B. Category 2. The Department defines this material as not being from Department projects or is not traceable to a Department project. Produce uniform RAP stockpiles when Category 2 material originates from different sources. The Engineer will accept Category 2 RAP for use as Category 1 RAP if the Contractor performs tests as specified in 720.07.3 and submits test results and materials that show the RAP meets the specifications and is verifiable by the Department.

      Do not use Category 2 RAP that does not meet these requirements as Category 1 RAP.

Category 2 RAP is:

1) Production Returns. Asphalt material generated from plant waste (e.g., start-up/shut down material).

2) Random RAP. Crushed and screened asphalt material removed from private paving projects, plant overruns, rejected loads, or combination.

2 RAP Processing. The Contractor may use processed RAP as follows:

a) Processed RAP. RAP that is processed by crushing and screening to produce a uniform gradation from coarse to a fine and a uniform binder content in the RAP before use in a recycled mix. Provide processed RAP with 100 percent passing the ⅝ inch sieve on entry into the mixing plant.

The Contractor may recycle processed RAP in Superpave HMA at the percentages shown below:

1) Category 1 RAP is limited to 17 percent by binder replacement.

2) Category 2 RAP is allowed up to 10 percent by binder replacement when used in the top lift and is limited to 17 percent maximum by binder replacement when used in a lower lift.

Processed RAP stockpiles may contain RAP from sources as indicated by the category and may be replenished with RAP from sources of that same category.

3 RAP Testing and Test Frequency. Perform the following tests at the specified testing frequencies for each category and provide the data to the Department as soon as test results are available:

a. Category 1. Establish an extraction correlation. Determine the asphalt binder content and aggregate gradation in accordance with the FOP for AASHTO T 308 and AASHTO T 30 at the minimum frequency of 1 test per 500 tons for the first 2,000 tons and 1 test per 1,000 tons thereafter. Then perform at least 6 tests for stockpiles less than 4,000 tons.

Perform chemical binder extractions in accordance with AASHTO T 319 to reclaim the binder from the RAP when blending charts are used. Determine the PG binder grading of the recycled binder as specified in 702 at the frequency of 1 test per 5,000 tons with at least 1 test per stockpile.

b. Category 2. Asphalt binder content, aggregate gradation, and binder grade testing requirements are the same as Category 1. In addition, test the aggregate recovered from the RAP by the extraction process AASHTO T 308 or AASHTO T 164 or AASHTO T 319 to determine the aggregate quality. Test RAP aggregate quality as follows:

1) AASHTO T 96 and Idaho IT 15 tested on extracted aggregate as specified at a frequency of 1 test per stockpile.

2) AASHTO T 335, AASHTO T 304, and ASTM D4791 at the minimum frequency of 1 test per 500 tons for the first 2,000 tons and 1 test per 1,000 tons thereafter. Perform at least 6 tests for stockpiles less than 4,000 tons.

Meet the applicable aggregate quality requirements in Table 703.05-1 and 703 for the combination of virgin and RAP aggregate.

Use the RAP as Category 2 RAP, unprocessed, if it was not tested.

Asphalt Binder/Aggregate Correction Factor. Perform at least 6 AASHTO T 164 or AASHTO T 319

chemical extraction tests and AASHTO T 30 gradation tests and 6 AASHTO T 308 burn tests and AASHTO T 30 gradation tests to establish a correction factor for asphalt binder and aggregate gradation. Prepare 6 identical pairs of samples and test 1 sample of each pair in accordance with AASHTO T 164 or AASHTO T 319 and test the other sample in accordance with AASHTO T 308.

Bulk Specific Gravity of the RAP Aggregate. Test RAP material for G_{sb} according to Idaho IT 146 at the rate of 1 test per 500 tons for the first 2,000 tons and 1 test per 1,000 tons thereafter. Perform a minimum of 10 tests per stockpile. Provide the test results on a spreadsheet with the specific gravity of aggregates and RAP submittal as specified in 405.03.A.

For testing after stockpiling, submit a sample plan and test the RAP pile, either in-situ or by re-stockpiling, for approval. Meet the minimum frequency required and detail the procedure used to obtain representative samples throughout the stockpile for testing.

4 RAP Stockpiles and Record Keeping. Place RAP stockpiles on a base with adequate drainage and construct in layers to minimize RAP segregation and ensure a workable face. Construct separate stockpiles for each source of RAP based on the category of RAP, the quality of aggregate, type and quantity of asphalt binder, and size of processed material. Identify RAP stockpiles on a map of the stockpile areas and place signs in or near each stockpile.

Maintain a record system at the plant site for RAP stockpiles that includes, at a minimum, the following:

a. Stockpile identification and a sketch of stockpile areas at the plant site.

b. RAP category (project, state route, plant waste, rejected loads).

c. Origin or dates milled and approximate number of tons in the stockpile.

d. Chemical extraction and AASHTO T 308 burn test results.

Make the RAP stockpile records available at the plant site. The Engineer will reject, by visual inspection, stockpiles that are not kept clean and free of foreign materials. The Engineer will reject RAP containing contaminants (e.g., earth, brick, sand, concrete, pavement fabric, joint sealants). The Contractor may reprocess the rejected RAP stockpile to meet requirements or remove the stockpile from use.

To the end of sub-section 270.04 of the QA Manual (2019 and later versions) insert the following:

270.04.01 Acceptance of Small Quantities – Asphalt Mix

General. Contractor will sample loose mix and cores in the presence of the State. The State will complete acceptance testing.

1. **Plan Quantity Less than 750 tons**

   For bridge approaches see 270.05.01 *Non-standard Acceptance of Materials - Asphalt Mix*. For other applications use this subsection. Contractor may use a commercial (non-Superpave) mix design. Aggregate shall come from an ITD-approved source. The mix design will be submitted for information only.

   Establish paving location compared to travel path:

   i. Within travel path - cores and Gmm are required. Numbers of samples will be established in ITD 862 Sample Schedule. Compaction must be 92.0% or greater. Failing work will be removed and replaced.

ii. Outside travel path accept by RE Letter of Inspection. The inspector will use ITD form 891 for density observation and will include equipment used and compaction temperatures. Gauge readings are not required.

2. **Plan Quantities between 750 - 2,250 tons and a *continuous operation*, use MTR Table 270 (405-6)**

3. **Plan Quantities between 750-2,250 tons per year and specific applications use 270.05.01 Non-standard Acceptance of Materials - Miscellaneous Asphalt Mix**

To the end of sub-section 270.05 of the QA Manual (2019 and later versions) insert the following:

270.05.01 Non-standard Acceptance of Materials – Asphalt Mix.

These acceptance criteria are established for plan quantities between 750 – 2,250 tons per year or locations such as bridge approaches, cross-overs, patching within travel lanes, gore areas and shoulders. These criteria may apply to projects with intermittent paving schedules spanning multiple months or seasons.

Acceptance Criteria:

- A Department-approved Superpave mix design is required before paving begins. A test strip will not be required.
- Tack Coat must be applied. Target guidelines for a 1:1 dilution are listed below, with the understanding this work may not be conducive to quantifying application rates:
    - 0.18 gallon per square yard on milled surfaces
    - 0.12 gallon per square yard on existing plant mix surfaces and
    - 0.08 gallon per square yard on newly paved surfaces.
- Acceptance requires 1 random core and 1 loose mix sample (Gmm only) per:
    - Bridge lane-approach (minimum of 1 per bridge quadrant per lift). Contractor has the option for state to use composite cores for acceptance (minimum of 1 per bridge quadrant). A composite core is a single core with multiple lifts included in the core. Gmm is determined using the weighted average (based on thickness) of the Gmm for each lift represented by the core. Composite cores will not be split into component lifts for evaluation.
    - Patch with any dimension exceeding 12.0 ft.
    - Day of paving (not applicable for bridge approaches)
    - One (1) random sample per 750 tons placed when the daily total exceeds 750 tons.

Compaction must be 92.0% or greater. Failing work will be removed and replaced.

Idaho Standard Practice for

Acceptance Test Strip for Asphalt Mixtures

IDAHO Designation: IR-125-23

1. SCOPE

1.1. This Standard Practice is used to evaluate hot mix asphalt (HMA) and warm mix asphalt (WMA) produced through a hot plant for conformance to the mix design and JMF and for acceptance. This IR includes responsibilities of the Engineer, the Central Materials Laboratory, and the Contractor.

1.2. *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the user's responsibility of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations before use.*

2. REFERENCE DOCUMENTS

2.1 *AASHTO Standards*

- FOP for T 27, Particle Size Distribution of Aggregate
- FOP for T 11 Method A or B, Materials Finer than 75um (No. 200) Sieve in Mineral Aggregate by Washing
- FOP for T 30, Mechanical Analysis of Extracted Aggregate
- FOP for T 312, Preparing and Determining the Density of Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyratory Compactor
- R 35, Superpave Volumetric Design for Hot Mix Asphalt (HMA)
- FOP for T 335, Method 1, Determining the Percentage of Fracture in Coarse Aggregate
- T 269, Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures
- FOP for AASHTO T 209, Bowl Method, Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
- FOP for AASHTO R 67, Sampling Asphalt Mixtures after Compaction (Obtaining Cores)
- R 57, Standard Practice for Operating Inertial Profilers and Evaluating Pavement Profiles
- FOP for T 308, Determining the Asphalt Binder Content of Hot Mix Asphalt (HMA) by the Ignition Method
- R 97, Sampling Asphalt Mixtures
- FOP for R 47, Reducing Samples of Hot Mix Asphalt to Testing Size
- FOP for T 329, Moisture Content of Hot Mix Asphalt (HMA) by Oven Method
- FOP for T 176, Alternate Method #2 Mechanical Pre-Wet, Plastic Fines in Graded Aggregate and Soils By Use of the Sand Equivalent Test
- T 304, Method A, Uncompacted Void Content of Fine Aggregate

- FOP for R 66, Sampling Asphalt Materials
- M 323, Superpave Volumetric Mix Design
- T 344, Evaluation of the Superpave Gyratory Compactor (SGC) Internal angle of Gyration Using Simulated Loading
- T 331, Bulk Specific Gravity and Density of Compacted Asphalt Mixtures Using Automatic Vacuum Sealing Method
- R 79, Standard Practice for Rapid Drying of Compacted Asphalt Specimens Using Vacuum Drying Apparatus
- T 164, Quantitative Extraction of Bitumen from Bituminous Paving Mixtures
- T 319, Quantitative Extraction and Recovery of Asphalt Binder from Asphalt Mixtures
- FOP for T 166, Method A, Bulk Specific Gravity of Compacted Bituminous Mixtures Using Saturated Surface Dry Specimens
- FOP for T 355, In-Place Density of Asphalt Mixtures by Nuclear Methods
- T 324, Hamburg Wheel-Track Testing of Compacted Hot Mix Asphalt (HMA)

2.2 *ASTM Standards*

- D 1075, Standard Test Method for Effect of Water on Compressive Strength of Compacted Bituminous Mixtures (Immersion-Compression)
- D 4791, Standard Test Method for Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate
- D 6857, Standard Test Method for Maximum Specific Gravity and Density of Bituminous Paving Mixtures Using Automatic Vacuum Sealing Method
- 8159, Standard Test Method for Automated Extraction of Asphalt Binder From Asphalt Mixtures (Asphalt Analyzer™)
- 8225, Standard Method of Test for Determination of Cracking Tolerance Index of Asphalt Mixture Using the Indirect Tensile Cracking Test at Intermediate Temperature

2.3 *Idaho Standards*

- Idaho IR 87, Pavement Straightedge Procedures
- IT 120, Determining Volume of Liquids in Horizontal or Vertical Storage Tanks
- IR 125, Acceptance Test Strip for Hot Mix Asphalt (HMA) Pavement
- IT 144, Specific Gravity and Absorption of Aggregate Using Automatic Vacuum Sealing Method
- IT 146, Determination of Recycled Asphalt Pavement (RAP) Aggregate Dry Bulk Specific Gravity (G_{sb})
- IR 148, Stratified Random Sampling
- IR 150, Superpave Mix Design
- IR 151, Superpave Mix Design Evaluation
- IR 152, HMA Quality Control Plan Development and Implementation
- IR 153, Split Sample Comparison
- IR 154, Nuclear Density Gauge Correlation
- IR 155, Procedures for Checking Asphalt Drum Mix Plant Calibrations

- IR 156, Method for Determining Rolling G_{mm}
- IR 157, Determining Ignition Furnace Correction Factor
- IR 158, Quality Control Plan (QCP) Development and Implementation
- IR 159, Quality Control Plan (QCP) Review Process
- IR 160, Development, Evaluation, and Approval of HMA Plant Quality Control Plans

2.4 Standard Specifications, Subsection 106.03

2.5 Standard Specifications, Section 405

2.6 Quality Assurance Manual, Section 220

3. GENERAL TEST STRIP REQUIREMENTS

3.1. The Contractor will notify the Engineer of the date, time, and location of the acceptance test strip before or during the pre-pave meeting. The Engineer will immediately notify the Central Materials Laboratory.

3.2. The Engineer must witness all sampling of material to be used for acceptance. Any acceptance sample obtained that is not witnessed by the Engineer will be rejected.

3.3. The Contractor is responsible for material sampling. The Contractor will have a qualified technician available for the duration of the test strip. The Contractor will immediately give the samples to the Engineer.

4. IDENTIFYING THE TYPE OF ACCEPTANCE TEST STRIP

4.1. There are 2 types of test strips, an onsite test strip and an off-site test strip (i.e., off-site mix verification). The onsite test strip is performed at the start of production paving operations and encompasses the first lot of production paving. The off-site test strip is performed before beginning production paving.

Note: For the density correlation, reference IR-154. Density correlation is not a test strip.

4.2. Determine if the Contractor will perform an onsite test strip or off-site test strip to verify the JMF.

4.3. For an onsite test strip, the test strip will be the first day of production with the following exception:

4.3.1. If the total estimated quantity of material for the bid item is between 750 and 2,250 tons, the entire quantity of material will be considered the test strip, use the modified sampling schedule found in Annex 1 – On-Site Test Strip Procedure for Smaller Production Runs.

4.4. For an off-site test strip (i.e., offsite mix verification), the test strip sampling will be performed while the Contractor is targeting the JMF.

5. DETERMINING THE TEST STRIP SAMPLING SCHEDULE

5.1. Before the test strip, determine, in conjunction with the Contractor, the anticipated quantity of material that will be produced for the test strip.

Note: *It is recommended to do this via email or other written communication to ensure adequate documentation for the project records.*

5.2. Calculate the testing frequency by dividing the anticipated quantity of material that will be produced for the test strip by the required number of samples needed.

5.3. Using the value calculated in 5.2, perform Idaho IR 148 to determine the sampling schedule to obtain the required number of stratified, random samples.

5.4. Repeat step 5.2 and step 5.3 for each material to be sampled. See Example of Determining the Test Strip Sampling Schedule.

6. MATERIAL SAMPLING REQUIREMENTS

6.1. Before obtaining the first sample, confirm at the hot plant that the approved JMF is being targeted in the hot plant control system and that the most current hot plant calibrations have been verified in accordance with Idaho IR 155.

6.2. The Contractor will sample the required materials as shown in Table 6.1 at the intervals given in the test strip sampling schedule.

6.2.1. Each sample must be clearly labeled and secured in the Engineer's possession immediately after the sample is taken. If a sample consists of multiple containers, label each container in such a way that the samples and the increments are readily distinguishable (i.e., if there are 2 boxes of material for Sample 1: label one box "Box 1 of 2", and the other box "Box 2 of 2").

6.2.2. Each sample must be accompanied by the appropriate sample tracking form with all sampling information included and signed by the WAQTC sampling technician.

6.3. Continue to monitor that the proper mix is being produced throughout the test strip.

6.4. Immediately after completion of the test strip, obtain the hot plant printouts showing production totals for each mix constituent and the most current calibration records (e.g., take a snap shot or provide a written note on the plant printout of where the test strip begins/ends and the next lot begins).

6.5. The testing timeframe begins once the Engineer has received all test strip samples, sample tracking forms, and hot plant printouts and calibration records. The Engineer will submit samples, and original sample tracking forms to the acceptance lab for testing.

Table 6.1-Sampling Requirements

Material	Sampling Procedure	Number of Samples	Minimum Sample Size	Sample Container
Mix	AASHTO R 97	6	200 lbs	Cardboard box [(a)]
Aggregate	AASHTO R 90	2	50 lbs	5-gallon bucket [(b)]
RAP	AASHTO R 97	2	50 lbs	5-gallon bucket [(b)]
Binder	FOP for AASHTO R 66	1	Three 1-quart containers	Screw top can [(a)]
Field Compacted Mix	FOP for AASHTO R 67	10 [(d)]	One 6-inch diameter core	Suitable protective container [(c)]

[(a)] See Quality Assurance Manual Table 220.01.1.
[(b)] Clean 5-gallon bucket with a snap-on lid.
[(c)] See FOP for AASHTO R 67 for guidance on packaging and transporting samples.

[d] No cores required for offsite test strips.
[e] The 200 lbs sample needs to be thoroughly blended in the presence of the engineer and reduced per AASHTO R 47. 100 lbs of each sample will be sent to the lab performing acceptance testing of the test strip. 50 lbs of each sample is sent to the production acceptance lab and 50 lbs of each sample is sent to the Contractor QC lab. The production acceptance and QC portion of the sample does not need to be shipped to the test strip acceptance lab prior to distribution to the labs performing split sample testing.

7. SAMPLING AND TESTING FIELD COMPACTED MIX

7.1. For on-site test strips, field compacted mix acceptance will be based on the results of cores sampled in accordance with AASHTO R 67. Sample locations cannot be closer than 1.0 foot from a cold joint.

7.1.1. When nuclear density gauge results are to be used for acceptance for lots after the completion of the acceptance test strip, correlate the nuclear density gauge(s) in accordance with Idaho IR 154.

7.2. For off-site test strips, there is no field compacted mix acceptance performed during test strip.

7.2.1. When nuclear density gauge results are to be used for acceptance for lots after the completion of the acceptance test strip, correlate the nuclear density gauge(s) in accordance with IR 154.

8. TEST STRIP DOCUMENTATION

8.1. Maintain in ProjectWise the following records, *at a minimum,* for the test strip sampling:

8.1.1. Sampling schedule.

8.1.2. The carbon copy of the appropriate sample tracking form for each sample obtained.

8.1.3. A daily work report (DWR) or daily diary documenting the day's events.

8.1.4. A copy of the hot plant calibration records and a hot plant printout showing recorded data every 15 minutes.

8.2. Ensure the documentation listed under 8.1 is available in ProjectWise within 2 business days after the completion of the test strip.

9. ACCEPTANCE LAB RECEIVING PROCEDURE

9.1. Upon receiving the samples and associated sample tracking forms, ensure that all required documentation is included.

9.2. Document condition of samples, and date and time received.

9.3. Notify the Engineer of receipt and provide a time of estimated completion and review of all testing.

9.4. *With the mix samples:*

9.4.1. Select 1 sample for Idaho IT 157.

9.4.2. Select 3 samples for volumetric testing shown in Table 10.1.

9.4.3. Select 2 samples for performance testing shown in Table 10.2.

9.4.4. Test the mix samples in accordance with Section 10.

9.5. *With the aggregate samples:*

9.5.1. Test the aggregate samples in accordance with Section 11.

9.6. *With the RAP samples:*

9.6.1. Test the RAP samples in accordance with Section 12.

9.7. *With the binder sample:*

9.7.1. Test the binder sample in accordance with Section 13.

9.8. *With the field compacted mix samples:*

9.8.1. Test the field compacted mix samples in accordance with Section 14.

10. ACCEPTANCE LAB MIX TESTING REQUIREMENTS

10.1. With the 1 sample selected in Section 9.4.1, perform Idaho IT 157.

10.2. With each of the 3 samples selected in Section 9.4.2 retain 1 box of each sample for dispute resolution testing. With the remaining box from each sample, reduce in accordance with FOP for AASHTO R 47 and perform the volumetric testing shown in Table 10.1.

10.2.1. Report results on the most current ITD-773 form and include copies of all original source documents.

Table 10.1 – Test Strip Mix Volumetric Testing Requirements.

Test Method	Increments Per Sample
FOP for AASHTO T 308	1
FOP for AASHTO T 30	1
FOP for AASHTO T 312	2
FOP for AASHTO T 166 Method A	2
FOP for AASHTO T 209	2
FOP for AASHTO T 329	1

10.3. With the 2 samples selected in Section 9.4.3 retain 1 sample for dispute resolution testing.

10.3.1. With the remaining sample, blend and reduce in accordance with FOP for AASHTO R 47 to within (plus or minus) 15.0 grams of the desired sample size. Fine tune by hand to the desired sample size and perform the performance testing shown in Table 10.2.

10.3.2. Report results on the most current ITD-773 form and include copies of all original source documents.

Table 10.2 – Test Strip Mix Performance Testing Requirements.

Test Method	Increments [(a)] Per Sample
AASHTO T 324	4
ASTM D 8225	3

[(a)] An increment is considered a single SGC puck.

11. ACCEPTANCE LAB AGGREGATE TESTING REQUIREMENTS

11.1. With one of the 2 samples selected in Section 9.5.1, reduce in accordance with FOP for AASHTO R 76 and perform the testing shown in Table 11.1.

11.1.1. Retain remaining 1 sample for testing, test remaining 1 sample if the first sample fails.

11.1.2. Report results on the most current Department forms, include copies of all original source documents.

Table 11.1 – Test Strip Aggregate Testing Requirements.

Test Method	Increments Per Sample
FOP for AASHTO T 335	1
FOP for AASHTO T 255	1
AASHTO T 304 Method A	1
FOP for ASTM D 4791	2
FOP for AASHTO T 176 (Alternate Method 2, Mechanical)	2
AASHTO T 85[(a)]	3
Idaho IT 144[(a)]	3

[(a)] Department may elect to perform to confirm G_{sb}.

12. ACCEPTANCE LAB RAP TESTING REQUIREMENTS

12.1. With 1 of the samples selected in Section 9.6.1, reduce in accordance with FOP for AASHTO R 76 and perform the testing shown in Table 12.1.

12.1.1. Report results on the most current Department forms include copies of all original source documents.

Table 12.1 – Test Strip RAP Testing Requirements.

Test Method	Increments Per Sample
FOP for AASHTO T 255 (Controlled Heat Source)	1
Idaho IT 146 [(a)]	1
ASTM D8159 [(a)]	1
AASHTO T 30 [(a)]	1
AASHTO T 308 [(a)]	1

[(a)] The Department may confirm the RAP G_{sb}.

13. ACCEPTANCE LAB BINDER TESTING REQUIREMENTS

13.1. With the one sample selected in Section 9.7.1, select 2 quarts for Department acceptance testing and 1 quart for challenge resolution. Perform the testing shown in Table 13.1.

13.1.1. Report results on the most current Department forms, include copies of all original source documents.

Table 13.1 – Test Strip Binder Testing Requirements.

Test Method	Increments Per Sample
Idaho IT 99	1
AASHTO M 320[(a)]	1
ASTM D 8159[(a)]	1

[(a)] See QA Manual Sections 230.10. Meet the requirements of Standard Specifications Sections 702.01 and 702.06.

14. ACCEPTANCE LAB FIELD COMPACTED MIX TESTING REQUIREMENTS

14.1. With the each of the 10 samples selected in Section 9.8.1, separate two or more pavement courses, lifts, or layers per FOP for AASHTO R 67. Perform the testing shown in Table 14.1.

14.1.1. Report results on the most current Department forms, include copies of all original source documents.

Table 14.1 – Field Compacted Mix Testing Requirements.

Test Method	Increments Per Sample
FOP for AASHTO T 166 Method A or AASHTO T 331[(a)]	1

[(a)] Use the average G_{mm} from testing performed in Section 10 to compute the in-place density of the cores.

15. ACCEPTANCE LAB TEST STRIP RESULTS REPORTING PROCEDURE

15.1. Report the results of each test performed on the most current Department forms, include copies of all original source documents and sample tracking forms in the report.

15.1.1. Each original source document will be signed by the testing technician.

15.2. The lab manager or the lab manager's qualified designated agent will fully review the report and all supporting documents for completeness.

15.3. Submit a complete electronic copy of the report to the Engineer for distribution with ample time to allow the Engineer time to review and determination of test strip acceptance.

16. EVALUATING ACCEPTANCE TEST STRIP RESULTS

16.1. The Engineer, upon receipt of the results from 15.3, will determine acceptance of the test strip as follows:

16.1.1. Use the Department approved method (e.g., Department provided spreadsheet or web portal) to perform the quality level analysis and determine acceptance as specified in 106.03.B and 405.03.I.

16.2. *Review of hot plant calibration records:*

16.2.1. Verify that the calibration records meet Idaho IR 155. If they do not match the most recent plant calibration record that was witnessed, perform a calibration verification in accordance with Idaho IR 155.

16.3. *Review of hot plant printout:*

16.3.1. Use the ITD-774 form to verify that the hot plant printout indicates the individual cold feed percentage for aggregate, cold feed percentage for RAP, asphalt content for the RAP, and virgin binder meet the requirements of 405.03.I.

17. ACCEPTANCE OF THE TEST STRIP

17.1. The test strip is considered acceptable when it meets Section 16.

18. EXAMPLE OF DETERMINING THE TEST STRIP SAMPLING SCHEDULE

Example: During the pre-paving meeting, the Contractor informs the Engineer that they will be performing an onsite test strip on April 19th. They anticipate paving 2,130 tons.

The Engineer will use this information to develop a test strip sampling schedule as follows:

For plant mix:

- The plant mix sampling frequency is calculated by dividing 2,130 by 6.
- Sampling frequency for plant mix is 1 sample per 355 tons.
- Use a 355 ton sample frequency and 6 samples, perform Idaho IR 148 to determine the sampling schedule to obtain 6 stratified random, samples of plant mix.
- Obtain plant mix samples in accordance with AASHTO R 97 per the sampling schedule.

For cold feed aggregate:

- Before sampling asphalt mix, obtain 1 cold feed aggregate sample by Conveyor Belt Method A or Method B of FOP for AASHTO R 90. Conveyor Belt Method B is the preferred method if automatic sampling devices are available.
- After sampling asphalt mix, obtain 1 cold feed aggregate sample by Conveyor Belt Method A or Method B of FOP for AASHTO R 90. Conveyor Belt Method B is the preferred method if automatic sampling devices are available.

For RAP (if used):

- Before sampling asphalt mix, obtain 1 RAP sample by FOP for AASHTO R 90. Conveyor Belt Method B is the preferred method if automatic sampling devices are available.
- After sampling asphalt mix, obtain 1 RAP sample by FOP for AASHTO R 90. Conveyor Belt Method B is the preferred method if automatic sampling devices are available.

For binder:

- Use a 2,130 ton sample frequency and 1 sample, perform Idaho IR 148 to determine the sampling schedule to 1 stratified, random samples of binder.
- Obtain 1 binder sample (consisting of 3, 1-quart cans) in accordance with FOP for AASHTO R 66 per the sampling schedule.

For field compacted mix:

- The field compacted mix sampling frequency is calculated by dividing 2,130 by 10.
- Sampling frequency for plant mix is 1 sample per 213 tons.
- Use a 213 ton sample frequency and 10 samples, perform Idaho IR 148 to determine the sampling schedule to obtain 10 stratified random, samples of field compacted mix.
- Obtain field compacted mix samples in accordance with AASHTO R 67 per the sampling

Idaho Standard Practice for

Superpave Volumetric Mix Design

IDAHO Designation: IR-150-21

1. SCOPE

1.1. This practice describes the requirements for developing a Superpave mix design.

1.2. *This standard practice may involve hazardous materials, operations, and equipment. This standard practice does not purport to address all of the safety concerns, if any, associated with its use. It is the user's responsibility of this procedure to establish appropriate safety and health practices and determine the applicability of regulatory limitations before use.*

2. BACKGROUND

2.1. Developing a mix design is a function of quality control (QC). A mix design is developed to find a combination of aggregates, recycled materials, asphalt, and additives to produce a roadway that meets the Department's specifications.

2.2. The end result of a successful mix design is a recommended mixture of aggregate and asphalt binder. This recommended mixture, which also includes aggregate gradation and asphalt binder type, is the job mix formula (JMF).

2.3. A JMF is a recipe for the plant to make. The mix design is the development of that recipe. A mistake in the design process can disrupt a project's schedule dramatically and have a big impact to the overall quality of the finished roadway. The development of the JMF is a QC process. It is the Contractor's responsibility to ensure that their mix design and resulting JMF will result in a mix that meets the contract requirements as determined by the Department's testing.

> **Note:** A JMF is only as good as the information that was used to develop it. A good mix design can help limit issues in production.

2.4. The mix design evaluation is for the Department to use to validate that the recipe was properly developed and the resulting JMF appears that the mix produced will meet the contract requirements.

3. REFERENCE DOCUMENTS

3.1. AASHTO Standards

- M 323, Superpave Volumetric Mix Design
- R 30, Mixture Conditioning of Hot-Mix Asphalt (HMA)
- R 35, Superpave Volumetric Design for Asphalt Mixtures
- R 76, Reducing Samples of Aggregate to Testing Size
- R 90, Sampling Aggregate Products
- T 11, Materials Finer Than 75-pm (No. 200) Sieve in Mineral Aggregates by Washing
- T 27, Sieve Analysis of Fine and Coarse Aggregates

- T 84, Specific Gravity and Absorption of Fine Aggregate
- T 85, Specific Gravity and Absorption of Coarse Aggregate
- T 166, Bulk Specific Gravity (G_{mb}) of Compacted Asphalt Mixtures Using Saturated Surface-Dry Specimens
- T 209, Theoretical Maximum Specific Gravity (G_{mm}) and Density of Hot Mix Asphalt (HMA)
- T 312, Preparing and Determining the Density of Asphalt Mixture Specimens by Means of the Superpave Gyratory Compactor
- T 324, Hamburg Wheel-Track Testing of Compacted Hot Mix Asphalt (HMA)
- T 331, Bulk Specific Gravity (G_{mb}) and Density of Compacted Asphalt Mixtures Using Automatic Vacuum Sealing Method

3.2. Idaho Standards:

- IT 144, Specific Gravity and Absorption of Fine Aggregate Using Automatic Vacuum Sealing Method
- IT-146, Determination of Recycled Asphalt Pavement (RAP) Aggregate Dry Specific Gravity G_{sb}
- Standard Specifications for Highway Construction

3.3. WAQTC/Idaho FOPs

- R 76, Reducing Samples of Aggregate to Testing Size
- R 90, Sampling Aggregate Products
- T 11, Materials Finer Than 75-pm (No. 200) Sieve in Mineral Aggregates by Washing
- T 27, Sieve Analysis of Fine and Coarse Aggregates
- T 166, Bulk Specific Gravity (G_{mb}) of Compacted Asphalt Mixtures Using Saturated Surface-Dry Specimens
- T 209, Theoretical Maximum Specific Gravity (G_{mm}) and Density of Hot Mix Asphalt (HMA)
- T 312, Preparing and Determining the Density of Asphalt Mixture Specimens by Means of the Superpave Gyratory Compactor
- WAQTC TM 13, Volumetric Properties of Hot Mix Asphalt
- WAQTC TM 14, Laboratory Prepared Asphalt Mixture Specimens

3.4. ASTM Standards

- D8159, Automated Extraction of Asphalt Binder From Asphalt Mixtures (Asphalt Analyzer)
- D8255, Determination of cracking Tolerance Index of Asphalt Mixture Using the Indirect Tensile cracking Test at Intermediate Temperature

3.5. *Other Standards*

- Asphalt Institute MS-2, Asphalt Mix Design Methods, 7th Edition

4. SPECIFIC GRAVITY OF AGGREGATE AND RAP

4.1. Use the bulk dry specific gravity of aggregate (G_{sb}) established by the Department for each stockpile when developing the mix design and performing calculations.

5. MIX DESIGN REQUIREMENTS

5.1. Develop a Superpave mix design in accordance with AASHTO R 35 that will result in a plant-produced mixture that meets the contract requirements.

5.2. The mix design must be developed by an individual that is qualified by the Department as a Superpave mix design technician (SPMDT).

5.2.1. The specific tests required during the mix design process must be performed by an individual qualified by the Department for the specific test method.

5.3. The mix design must be reviewed, approved, signed, and sealed by an Idaho-licensed professional engineer responsible for the mix design.

5.4. Use a Department-qualified Superpave mix design laboratory for developing the design.

6. MIX DESIGN REPORT REQUIREMENTS

6.1. Provide a single job mix formula (JMF) reported on an ITD-774 form.

6.2. Attach all supporting documentation and data used in developing the JMF.

6.2.1. Include signature(s) and WAQTC/PE license number(s) for testers and reviewers on each sheet.

Note: The design will be reviewed by the Department in accordance with Idaho IR 151. Ensure that the report has all information required to complete the review. Incomplete or missing information will result in rejection of the mix design.

7. MIX DESIGN SUBMITTAL

7.1. Submit the mix design and all supporting documentation via email to mixdesigns@itd.idaho.gov and the Engineer.

7.2. Each mix design submitted for approval must be accompanied by a Microsoft® Excel® electronic version of the ITD-774 form specific to the mix design.

7.3. Only 1 mix design per email notification will be accepted. Submit the mix design for evaluation a minimum of 5 business days before paving is scheduled to begin.

7.4. Upon submittal, the Department will give the mix design a unique identifier number. This will be the mix design number. Keep this number for your records.

8. AMENDING THE MIX DESIGN

8.1. If the mix design is required to be amended per 405.03.B.1.b.i.1, amend the mix design the following process:

8.1.1. Each page of the mix design that is revised or added is required to include the project key lead number, bid item number, date of revision, and means of identifying the revision. The amendment is required to be signed and dated by the Contractor's representative who is responsible for developing the mix design and subsequently signed and dated when approved by the Engineer.

8.2. Amending the mix design or JMF is not allowed once the mix design has been approved by the Department.

9. APPROVED MIX DESIGNS

9.1. The Department will maintain a list of approved mix designs listed by Department generated mix design number. Mix designs are not approved for use unless they are listed.

Idaho Standard Practice for

Superpave Mix Design Evaluation

IDAHO Designation: IR-151-21

1. SCOPE

1.1. This practice describes the procedures for evaluating a Superpave mix design, mix design requirements, and the time required to perform the evaluation.

1.2. *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the user's responsibility of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations before use.*

2. BACKGROUND

2.1. When reviewing a mix design, it is important to keep in mind the following:

2.2. A mix design is solely a function of quality control (QC). A mix design is developed to find a combination of aggregates, recycled materials, asphalt, and additives to use to produce a roadway that meets the Department's specifications.

2.3. The end result of a successful mix design is a recommended mixture of aggregate and asphalt binder. This recommended mixture, which also includes aggregate gradation and asphalt binder type is the job mix formula (JMF).

2.4. A JMF is a recipe for the plant to make. The mix design is the development of that recipe. A mistake in the design process can disrupt a project's schedule dramatically and have a big impact to the overall quality of the finished roadway. However, developing the JMF is a QC process. It is the Contractor's responsibility to ensure that their mix design and resulting JMF will result in mix that meets the contract requirements.

Note: A JMF is only as good as the information that was used to develop it. A good mix design can help limit issues in production.

2.5. The mix design evaluation is for the Department to use to validate that the recipe was properly developed and the resulting JMF appears that the mix produced will meet the contract requirements.

3. REFERENCE DOCUMENTS

3.1. *Idaho Procedures:*

- IT-150, Superpave Volumetric Mix Design
- Standard Specifications for Highway Construction

4. SUBMITTAL OF MIX DESIGN

4.1. The Contractor must submit the asphalt mix design in accordance with Idaho IR 150.

5. RECEIPT OF MIX DESIGN SUBMITTAL

5.1. Upon receipt of the mix design submittal, the mix design will be given a unique identifier number.

6. REVIEW OF MIX DESIGN SUBMITTAL

6.1. The Department will review all Superpave mix designs proposed for use before use. The Department recognizes the risk associated with each paving application varies. Therefore, the extent of each mix design review will be in accordance with these potential risks.

6.2. The mix design will be reviewed by the Engineer, the Central Materials Laboratory, and the State Construction and Materials Engineer.

6.3. The reviewers may contact the mix designer or the professional engineer responsible for the mix design during the review process for further information or clarifications.

6.4. All mix designs will be reviewed for the following:

6.4.1. Accuracy.

6.4.2. Completeness.

6.4.3. Reasonableness. Examples of items that will be check for reasonableness include, but are not limited to, ensuring that calculations were done correctly and that the volumetric data follows the expected trends (i.e., binder absorption not being dependent on asphalt content).

6.4.4. Compliance with specifications.

6.4.5. Compliance with Idaho IR 150.

6.5. When amendments are made to the mix design submittal, the current review will be ended and the amended mix design will be considered a new submittal.

6.5.1. Amendments must meet the requirements of Idaho IR 150.

7. REVIEW OF PREVIOUSLY USED MIX DESIGNS

7.1. A mix design reviewed and accepted for a previous or current project may be submitted in writing for use on a new project. Acceptance of the mix design will be based on meeting the following requirements in addition to the requirements of Section 3:

7.1.1. The proposed mix design is of the type required for the new project.

7.1.2. The mix produced on previous projects utilizing the proposed mix design was of good quality (e.g., the combined average PWL on all the previous project(s) was ≥ 90 PWL for all mix quality characteristics).

7.1.3. The mix design is not classified as expired in accordance with 405.03.B.2 of the Standard Specifications.

8. MIX DESIGN REVIEW TIMEFRAME

8.1. The Department will review the mix design within 5 business days after receiving the full submittal package.

9. APPROVAL OF MIX DESIGN

9.1. The Department will maintain a list of approved mix designs. Upon approval, the mix design will be placed on this list.

10. REJECTION OF MIX DESIGN

10.1. The Department will notify the Contractor upon rejection of a mix design via email.

10.1.1. The Department will provide details as to why the mix design was rejected.

10.2. Notification of the rejection will be sent to the email address given on the ITD-774 form.

Idaho Standard Practice for

ASPHALT MIXTURES QUALITY CONTROL PLAN (QCP) DEVELOPMENT AND IMPLEMENTATION

IDAHO Designation: IR-152-21

1. PURPOSE

1.1. The purpose is to establish minimum requirements for the Contractor's quality control system and quality control plan (QCP) for asphalt mixtures. It is intended that these requirements be used as a procedural guide in detailing the inspection, sampling, and testing deemed necessary to maintain compliance with the Department's specifications. The Department and the Contractor must hold a pre-pave meeting and document the decisions and agreements made. An example of a pre-pave meeting agenda is provided in the Appendix. Conducting a thorough pre-pave meeting increases partnership as well as it can only increase the likelihood of success of each party.

2. SCOPE

2.1. This procedure is applicable to the production and construction of asphalt mixtures.

3. REFERENCE DOCUMENTS

3.1. Idaho Standards

- IR 158, Quality Control Plan Development.
- IR 160, Evaluation and Approval of HMA Plants and Equipment.
- IR 155, Procedures for Checking Asphalt Drum Mix Plants

4. GENERAL REQUREMENTS

4.1. As stated in the Standard Specifications for Highway Construction, a QCP must be developed by the Contractor/producer and submitted in writing to the Engineer at the preconstruction conference. Acceptance of the QCP by the Engineer will be contingent upon its concurrence with the Standard Specifications and this standard method. For this reason, the QCP will clearly describe the methods by which the quality control program will be conducted. For example, the items to be controlled, tests to be performed, testing frequencies, sampling locations, and techniques will be included with each item listed separately. Also include a table stating what actions will occur when test results indicate specification limits are approached or exceeded. See Table 1 at end of this guide for an example. Also, a detailed plan of action regarding disposition of non-specification material will be included. Such a plan will provide for immediate notification of all parties involved in the Quality Assurance process in the event nonconforming situations are detected. Example 1. HMA Quality Control Plan may be used as an example.

4.2. Inspection and testing records must be maintained, kept current, and made available for review by Department personnel throughout the life of the contract. All other documentation (e.g., date of inspections, tests performed, temperature measurements, and accuracy, calibration or re-calibration checks performed on production of testing equipment) will be recorded.

4.3. The Contractor will maintain standard equipment and qualified personnel in accordance with the contract and specification requirements for the item(s) being produced.

5. QUALITY CONTROL PLAN

5.1. Operation quality control plans will be submitted for each contract/project to the Engineer for review and approval. Include a Plant Quality Control Plan that meets the requirements of Idaho IR 160. Distribution of the approved quality control plans will be made by the Engineer.

5.2. Example 1. HMA Quality Control Plan is provided only as an acceptable template that contains the required information is attached.

6. ADDENDA TO THE QUALITY CONTROL PLAN

6.1. Addenda are defined as an addition or deletion to the QCP. Each page of the QCP that is revised is required to include the project key lead number, date of revision, and means of identifying the revision. The addenda are required to be signed and dated by the Contractor's representative who is responsible for insuring that all items of work will comply with Department Specifications and subsequently signed and dated when approved by the Engineer.

Table 1: Example of QC Actions to Implement When Approaching or Exceeding Specification Limits

Test Description	Test Method	QC Action Limits		Situation		Action
		Single Test	4-Point Moving Avg. or Daily Avg.	Single Test	4-Point Moving Avg. or Daily Avg.	
Binder Content, P_b	FOP for AASHTO T 168 and FOP for AASHTO R 47 and FOP for AASHTO T 308 and FOP for AASHTO T 329	± 0.6	± 0.3	Approaching Limit	Approaching Limit	Discuss with hot mix plant, operator, and may suspend construction process
Aggregate Gradation	FOP for AASHTO T 30 (wash method used for all gradation measurements)	NA	C-JMF	4 percent on +#4 2 percent on -#4	Approaching Limit	Increase frequency of tests and prepare for process modification
Air Voids @ N_{design}, P_a	WAQTC TM 13	± 1.0%	NA	2 tests over ± 1%	NA	Initiate C-JMF Modifications
VMA @ N_{design}	WAQTC TM 13	≤ 1% min	≥ min	3 tests over ± 1%	Approaching Limit	Discuss with the Engineer & Process Modification
Dust Proportion, DP	WAQTC TM 13	NA	≥ min ≤ max	Approaching Limit	Approaching Limit	Modify C-JMF
G_{mm}	FOP for AASHTO T 168 and FOP for AASHTO R 47 and FOP for AASHTO T 209 (Bowl Method)	C-JMF	C-JMF	Approaching Limit	Approaching Limit	Modify C-JMF or Redesign
G_{se}	WAQTC TM 13	C-JMF	C-JMF	Approaching Limit	Approaching Limit	Modify C-JMF or Redesign
Rut Depth, mm	AASHTO T 324	≥ min	NA	Approaching Limit	NA	Discuss with the Engineer & initiate investigation, modification, or redesign
Stripping, passes	AASHTO T 324	≥ min	NA	Approaching Limit	NA	Discuss with the Engineer & initiate investigation, modification, or redesign
Cracking, FI	AASHTO TP 124	≥ min	NA	Approaching Limit	NA	Discuss with the Engineer & initiate investigation, modification, or redesign
Mainline Density	Idaho IR 156, and FOP for AASHTO T 355 or FOP for AASHTO T 343	NA	≥ min	Approaching < 92%	≤ 100% Pay	Notify the Engineer

Note: When 2 consecutive test results fail or if any of the 4-point moving average values fail, production will be suspended and the situation discussed with the Engineer. The process will be corrected before production resumes.

EXAMPLE 1

HMA Quality Control Plan – General Overview (Details provided in PrePave Meeting/Project Specific)

NOTE: This is provided only as an acceptable template; other options/formats are acceptable

Date:
To: (RESIDENT ENGINEER)
From: (CONTRACTOR(s) NAME)
Subject: HMA Quality Control Plan

1. Project Information

1.1. We are submitting our HMA Quality Control Plan, developed in accordance with Idaho IR 152, Idaho IR, 158, and Idaho IR 160 for:

Project Number:_____
Lead Key Number:_____
Date Submitted:_____

1.2. (NAME) is responsible for ensuring that all items of work will comply with the contract and Department specifications.

2. Hot Plant

2.1. General Information:

Make:_____

Type:_____

Address of Plant:_____

2.2. The hot plant operation is under the direction of (NAME) who can be contacted at (ADDRESS, EMAIL, AND TELEPHONE).

2.3. Current calibration and verification status of plant and history of plant inspection program attached in Exhibit A.

2.4. The Hot Plant Quality Control Plan, developed in accordance with Idaho IR 160 and approved on (DATE) by (NAME OF PERSON(s)) is attached in Exhibit B.

3. Mix Designs

3.1. Mix designs will be the responsibility of (NAME OF PERSON(s)), WAQTC number (NUMBER(s)).

3.2. The HMA design(s) to be used are attached in Exhibit C.

3.3. Before production, (NAME), (WAQTC NUMBER), will submit our HMA mix design for each type of mix in accordance with the contract and specifications by (DATE). Only allowable and approved materials will be incorporated in the mix.

4. Delivery and Placement

4.1. The field operation is under the direction of (NAME) who can be contacted at (ADDRESS, EMAIL, AND TELEPHONE).

4.2. (LIST OF EQUIPMENT TYPE, MAKE).

4.3. (DETAILED DESCRIPTION OF THE PRODUCTION AND PLACEMENT PROCESS).

5. Quality Control Sampling and Testing,

5.1. The laboratory performing quality control testing is (LAB QUALIFICATION NUMBER), located at (LOCATION).

5.2. The quality control program is under the direction of (NAME OF PERSON), who can be contacted at (ADDRESS, EMAIL, AND TELEPHONE).

5.3. During the placement operations of the HMA pavement we will perform at a minimum quality control tests per attached schedule. Sampling and testing is the responsibility of (NAME(s), WAQTC number (NUMBER(s)).

5.4. Sampling and testing is the responsibility of (NAME OF PERSON(s)), WAQTC number (NUMBER(s)).

5.5. During the production operations of the HMA (NAMES) will perform, at a minimum, quality control tests in accordance with the attached schedule. Also attached are the proposed method to select locations and/or times for sampling. See Exhibit D.

5.6. All testing will be completed by (NAME(s)), (WAQTC NUMBER(s)), within (HOURS) hours of sampling and all original documentation of results will be completed on the attached original documentation forms. See Exhibit E.

5.7. Testing reports and original source documents will be reviewed and checked by (NAME(s)), (WAQTC NUMBER(s)), within (HOURS) hours of testing being completed. All reporting will be completed on the attached forms. See Exhibit F.

EXAMPLE 1 (CONTINUED)
HMA Quality Control Plan

6. Records.

6.1. Testing reports and all backup documentation will be located at (LOCATION) for review by the Department between the hours of (TIME) and (TIME) during the life of the contract/project.

6.2. Testing reports and all backup documentation will be located at (LOCATION) for review by the Department between the hours of (TIME) and (TIME) for (YEARS) after the completion of the project.

7. Notifications.

7.1. Any material found to be noncomplying will be addressed by (NAME) who will notify the Engineer immediately.

7.2. (NAME) will notify appropriate Department personnel at least 48 hours before any work is to begin.

8. Nonconforming Material.

8.1. (STATE THE PROCESS FOR DISPOSITION OF NONCONFORMING MATERIAL)

8.2. See the Exhibit G for what actions will occur when test results indicate specification limits are approached or exceeded.

Attachments:

Exhibit A – Current calibration and verification status of plant and history of plant inspection program

Exhibit B – Hot Plant Quality Control Plan

Exhibit C – HMA Mix Design

Exhibit D – Minimum QC Testing Schedule, Sampling and Testing Methods, and Location(s)

Exhibit E – Original Test Documentation Form Template(s)

Exhibit F – Test Reporting Form Template(s)

Exhibit G – Table of QC actions when approaching or exceeding specification limits

Idaho Standard Practice for

Split Sample Comparison

IDAHO Designation: IR-153-21

1. SCOPE

1.1. This Standard Practice is used to compare 2 or more sets of test results in order to measure the testing variability of different parties (e.g., Department vs. Contractor).

2. BACKGROUND

2.1. There are 4 primary components or sources of inherent variability in individual test results for material samples. These components of inherent variability are:

- Sampling Variability
- Testing Variability
- Material Variability
- Construction Variability

2.1.1. **Sampling variability** is caused by variation that is inherent in the sampling methods or procedures used to obtain a material sample. Even when the person obtaining a sample carefully follows standard sampling methods or procedures, some amount of sampling variability will occur.

2.1.2. **Testing variability** is the result of variation inherent in performing a test method and variation inherent in the test equipment. Even when the person performing a test carefully follows standard testing methods and even when the test equipment is properly calibrated, some amount of testing variability will occur.

2.1.3. **Material variability** is essentially due to the inherent variation that naturally exists in a given material. It is quite unrealistic to expect perfect homogeneity in any raw or processed source of construction materials (e.g., soils, aggregate, HMA, PCC, steel, paint). The inherent variation for most construction materials, on a relative basis, is usually small.

2.1.4. **Construction variability** is the result of variation that is inherent in production methods and construction operations. The largest amount of construction variability is generally attributed to the production and placement process.

2.1.5. Additional construction variability (i.e., beyond the expected or accepted range) can be introduced through inconsistent production methods and construction operations. This is why good, consistent quality control, both at the source/plant and in the field, is essential in minimizing the amount of construction variability as a component of overall inherent variability.

2.1.6. Additional sampling variability and testing variability (i.e., beyond the expected or accepted range) can be introduced through deviations from standard sampling method and test procedures by the person(s) performing the sampling and testing, or as a result of test equipment that is not properly calibrated or properly functioning. Sampling and testing variability, combined, have been stated as comprising up to 50 percent of the total overall variation in test results. Specification

limits were developed to take standard sampling and testing variability into account. However, it is important not to compound or add to the expected range of inherent variability due to sloppy practices. Consistent and careful adherence to proper sampling and testing procedures can minimize these two components of overall inherent variability.

3. REFERENCE DOCUMENTS

2.1 *AASHTO Standards*

- FOP for R 90, Sampling of Aggregates
- R 76, Reducing Samples of Aggregates to Testing Size
- T 255, Total Evaporable Moisture Content of Aggregate by Drying
- FOP for T 27, Particle Size Distribution of Aggregate
- FOP for T 11, With Materials Finer than 75um (No. 200) Sieve in Mineral Aggregate by Washing
- T 335, Determining the Percentage of Fracture in Coarse Aggregate
- T 176, Plastic Fines in Graded Aggregates and Soils by Use of the Sand Equivalent Test
- R 97, Sampling Asphalt Mixtures
- R 47, Reducing Samples of Hot Mix Asphalt (HMA) to Testing Size
- T 329, Moisture Content of Hot Mix Asphalt (HMA) by Oven Method
- T 308, Determining the Asphalt Binder Content of Hot Mix Asphalt (HMA) by the Ignition Method
- T30, Mechanical Analysis of Extracted Aggregate
- T 209, Theoretical Maximum Specific Gravity and Density of Hot Mix Asphalt Paving Mixtures
- T 167, Standard Method of Test for Compressive Strength of Hot Mix Asphalt
- T 166, Bulk Specific Gravity of Compacted Hot Mix Asphalt using Saturated Surface-Dry Specimens
- R 30, Mixture Conditioning of Hot-Mix Asphalt (HMA)
- FOP for R 66, Sampling Asphalt Materials
- T 164, Quantitative Extraction of Bitumen from Bituminous Paving Mixtures
- T 319, Quantitative Extraction and Recovery of Asphalt Binder from Asphalt Mixtures
- T 303, Lime for Asphalt Mixtures
- T 312, Asphalt Mixture Specimens by Means of the Superpave Gyratory Compactor
- T 324, Hamburg Wheel-Track Testing of Compacted Hot Mix Asphalt (HMA)
- T 33, Bulk Specific Gravity and Density of Compacted Asphalt Mixtures Using Automatic Vacuum Sealing Method
- R 79, Standard Practice for Rapid Drying of Compacted Asphalt Specimens Using Vacuum Drying Apparatus
- T 269, Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures
- T 283, Resistance of Compacted Asphalt Mixtures to Moisture-Induced Damage
- TM 13, Volumetric Properties of Hot Mix Asphalt

- R 67, Sampling Asphalt Mixtures after Compaction (Obtaining Cores)
- T 309, Temperature of Freshly Mixed Portland Cement Concrete
- T 119, Slump of Hydraulic Cement Concrete
- T 121, Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete
- T 152, Air Content of Freshly Mixed Concrete by the Pressure Method
- T 23, Method of Making and Curing Concrete Test Specimens in the Field
- T 265, Laboratory Determination of Moisture Content of Soils
- T 99, Moisture-Density Relations of Soils Using a 2.5-kg (5.5-lb) Rammer and 305-mm (12-in.) Drop
- T 180, Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and 457-mm (18-in.) Drop
- T 85, Specific Gravity and Absorption of Course Aggregate
- T 355, Determining the Percentage of Fracture in Coarse Aggregate
- T 310, In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)
- T 272, One-Point Method for Determining Maximum Dry Density and Optimum Moisture
- T 304, Uncompacted Void Content of Fine Aggregate
- R 64, Standard Practice for Field Sampling and Fabrication of 50-mm (2-in) Cube Specimens using Grout (Non-Shrink) or Mortar
- T 359, Pavement Thickness by Magnetic Pulse Induction

ASTM Standards

- FOP for D 4791, Flat and Elongated Particles in Coarse Aggregate
- D 1075, Standard Test Method for Effect of Water on Compressive Strength of Compacted Bituminous Mixtures (Immersion-Compression)
- D 6857, Standard Test Method for Maximum Specific Gravity and Density of Bituminous Paving Mixtures Using Automatic Vacuum Sealing Method
- D 8159, Standard Test Method for Automated Extraction of Asphalt Binder From Asphalt Mixtures (Asphalt Analyzer™)
- D 8225, Standard Method of Test for Determination of Cracking Tolerance Index of Asphalt Mixture Using the Indirect Tensile Cracking Test at Intermediate Temperature

Idaho Standards

- IT 13, Measuring Mortar-Making Properties of Fine Aggregate Idaho
- IT 15, Degradation
- IT 72, Evaluating Cleanness of Cover Coat Material
- IT 74, Vibratory Spring-Load Compaction for Coarse Granular Material
- IT 116, Disintegration of Quarry Aggregates (Ethylene Glycol)
- IT 144, Specific Gravity and Absorption of Fine Aggregate Using Automatic Vacuum Sealing (CoreLok) Method
- IT 61, Sampling and Viscosity Testing Emulsified Asphalt Binders in the Field

- IT 146, Determination of Reclaimed Asphalt Pavement (RAP) Aggregate Bulk (Dry) Specific Gravity (G_{sb})
- IR 128, Sampling Concrete for Chloride Analysis
- IT 131, Total Chloride Content of Hardened Concrete by Gran Plot Method
- IT 133, Determination of the Rate of Evaporation of Surface Moisture from Concrete
- IR 143, Field Sampling of Hydraulic Cement and Fly Ash
- IT 147, Measuring Texture Depth of Portland Cement Concrete Using a Tire Tread Depth Gauge
- IR 7, Inspecting/Sampling Paint and Curing Compound
- IT 121, Determining Total Solids-Latex Percent
- IT 8, Resistance R-Value and Expansion Pressure of Compacted Soils and Aggregates
- IR 162, Taking Undisturbed Soil Samples for Laboratory Consolidation, Shear and Permeability Tests
- Idaho Transportation Department Quality Assurance Manual

WAQTC Standards

- TM 13, Volumetric Properties of Hot Mix Asphalt
- TM 2, Sampling Freshly Mixed Concrete
- IR 87, Pavement Straightedge Procedures
- IT 120, Determining Volume of Liquids in Horizontal or Vertical Storage Tanks

4. SUMMARY OF THE PRACTICE

4.1. This practice describes the testing and analysis needed to perform a comparison of split samples tested by different parties against an allowable degree of test result difference attributed to testing variability.

5. TERMINOLOGY

5.1. *Individual Split Sample Acceptable Range*— The allowable tolerance between individual split sample test results when properly sampled and split.

5.2. *Paired t-Test*— Uses the difference between each pair of tests of the split samples and determines whether the difference is much different from zero.

5.3. *Split Increment*— A representative portion of a split sample that is larger than the minimum size needed for a single party to perform the desired testing.

5.4. *Split Sample*— A sample that will be used for split sample comparison testing.

6. MATERIAL SAMPLING AND SPLITTING AND TESTING

6.1. Obtain a sample in accordance with the Department's approved sampling procedure.

6.1.1. Ensure that the sample is large enough for each party to receive a split increment larger than the minimum sample size.

6.2. Split each sample in accordance with the Department's approved splitting procedure.

6.2.1. Ensure that each split increment meets the minimum sample size for the testing to be performed.

6.3. Each party will test in accordance with Department's approved testing procedures.

6.4. Repeat steps 6.1 to 6.3 until the desired number of split samples are obtained to perform the analysis.

Note: It is recommended to compare a minimum of 3 split samples for material that will be subject to statistical based acceptance (e.g., HMA, aggregates)

7. COMPARISON OF RESULTS

7.1. Compare the split increments for each split sample using the D2S limits (Section 9).

7.2. Compare the sets of split increments for all split samples using the paired t-test (Section 8).

Note: The D2S comparison is simple and can be done for each split sample that is obtained. However, this procedure compares only 2 test results (from one split sample), and is not very powerful due to the limited amount of data being evaluated. The paired t-test, compares multiple sets of split samples, and is a better method for comparison since this test uses the differences between multiple pairs of tests and determines whether the average difference is statistically different from zero.

7.3. Use the ITD-1237 form to perform and report the comparison.

7.4. When differences in results have been identified, the parties will collaborate and investigate to determine the source of the inconsistency and make necessary corrections.

7.5. The possible source of the inconsistencies and any corrections made will be documented on the ITD-1237 form.

8. PAIRED T-TEST COMPARISON (RECOMMENDED)

8.1. Determine the individual difference between split sample test results (X_{dif}) for each split sample.

$$x_{dif} = x_A - x_B$$

Where:

X_{dif} = Individual difference between split sample test results.

X_A = Party A's individual test value.

X_B = Party B's individual test value.

Note: This difference is not the absolute difference, it is the algebraic difference. The subtraction (i.e., Party A's test value minus Party B's test value) is performed in the same direction for every set of split samples.

8.2. Determine the mean of the differences between the split sample test results, calculated as follows:

$$\overline{X}_{dif} = \frac{(x_{dif1} + x_{dif2} + \ldots x_{dif\,n})}{n}$$

Where:

$\overline{X}_{dif}$ = Mean of the differences between the split sample test results.

n = Number of split samples.

8.3. Compute the standard deviation of the differences between the split sample test results, calculated as follows:

$$S_{dif} = \sqrt{\frac{\sum(x_{dif} - \overline{X}_{dif})^2}{n - 1.0}}$$

Where:

S_{dif} = Standard deviation of the differences between the split sample test results.

8.4. Compute the paired t-statistic (t_{pair}) using the following equation:

$$t_{pair} = \frac{|\overline{X}_{dif}|}{\left(\frac{S_{dif}}{\sqrt{n}}\right)}$$

8.5. Compute the degrees of freedom (df). The degrees of freedom are the number of sample pairs (n) minus one, used to compute the t-statistic.

$$df = n - 1$$

8.6. Determine the two-tailed probability distribution (P-value) for the 2 data sets using the degrees of freedom (df) for a two-tailed t-test.

8.7. Compare the P-value to α (0.05).

8.7.1. If the P-value is greater than α, the paired t-test passes. There is reason to believe that the paired test results are similar and it can be concluded they are from the same population. (i.e., no differences in testing has been identified)

8.7.2. If the P-value is less than α, the paired t-test fails. The difference between the paired test results of the split samples is greater than is likely to occur from chance and therefore the results are not similar. (i.e., difference in testing has been identified)

9. D2S COMPARISON

9.1. Determine the individual difference between split sample test results (X_{dif}).

$$x_{dif} = x_A - x_B$$

Where:

X_{dif} = Individual difference between split sample test results.

X_A = Party A's individual test value.

X_B = Party B's individual test value.

9.1.1. For aggregates, compare X_{dif} to the QA Manual Table 390.01.1.

9.1.2. For concrete, compare X_{dif} to the QA Manual Table 390.01.2.

9.1.3. For HMA, compare X_{dif} to Table 1 in this method.

9.1.4. For all other materials, compare X_{dif} to the precision statement in the test method performed (if available).

9.2. If X_{dif} is greater than the individual split sample acceptable range, they are considered outside of allowable tolerances. (i.e., a difference in testing has been identified)

Table 1 – Allowable HMA Single Individual Split Sample Variations

Test Method	Quality Characteristic	Acceptable Range of Split Sample Results
AASHTO T 308	Asphalt Content (%)	0.15
AASHTO T 30	95 to 100% passing a sieve	1.6
	40 to 94% passing a sieve	3.5
	25 to 39% passing a sieve	2.4
	10 to 24% passing a sieve	2.3
	5 to 9% passing a sieve	1.6
	2 to 4% passing a sieve	1.2
	0 to 1% passing a sieve	0.9
AASHTO T 209	G_{mm}	0.012
AASHTO T 166	G_{mb}	0.017
WAQTC TM 13	G_{se}	0.012
	P_a	0.30
	VMA	0.30
	DP	0.15

10. EXAMPLES

10.1. A Department lab and a Contractor lab performed a split sample comparison on 5 samples. The table below presents the split sample test results for theoretical maximum specific gravity (G_{mm}) to determine whether a difference exists between the Department's and the Contractor's results.

Example 10.1 – AASHTO T 209 Results			
Split Sample Number	Contractor's Results	Department's Results	Difference (X_{dif})
1	2.396	2.405	-0.009
2	2.368	2.374	-0.006
3	2.377	2.381	-0.004
4	2.395	2.390	0.005
5	2.381	2.379	0.002
		$\bar{X}_{dif}$ =	-0.0024
		S_{dif} =	0.00577
		P-value =	0.405

10.1.1. Conclusion: Since the calculated P-value is greater than 0.05 (Section 8) and the X_{dif} of each test is less than the individual split sample acceptable range (Section 9), the split sample comparison indicates that there is not a significant difference in testing between these labs.

Idaho Standard Practice for

Nuclear Density Gauge Correlation

IDAHO Designation: IR-154-21

1. SCOPE

1.1. This Standard Practice is used to determine the nuclear density gauge correlation for each nuclear gauge used for acceptance testing.

1.2. *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the user's responsibility of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations before use.*

2. REFERENCE DOCUMENTS

2.1 *AASHTO Standards*

- FOP for T 355, Method A, In-Place Density of Asphalt Mixtures by Nuclear Methods
- FOP for R 67, Sampling Asphalt Mixtures After Compaction (Obtaining Cores)
- FOP for T 166, Method A, Bulk Specific Gravity of Compacted Bituminous Mixtures Using Saturated Surface Dry Specimens
- T 331, Bulk Specific Gravity and Density of Compacted Asphalt Mixtures using Automatic Vacuum Sealing Method

2.2 *Idaho Standards*

- Idaho IR 148, Stratified Random Sampling

3. SUMMARY OF THE PRACTICE

3.1. The bulk specific gravity (G_{mb}) of the core is a physical measurement of the in-place asphalt mixture and can be compared with the nuclear density gauge readings. Comparing the core value to the corresponding gauge values, a correlation can be established.

3.2. The correlation can then be used to adjust the gauge readings to the in-place density of the cores. The core correlation is gauge-specific and must be determined without traffic allowed on the pavement between nuclear density gauge readings and obtaining the core. When using multiple nuclear density gauges, each gauge will be correlated to the core locations before removal of the core.

3.3. Correlation of the nuclear density gauge with pavement cores must be made on the first lot of paving (within 24 hours) or anytime a change of the testing conditions occurs (see Section 8).

Note: *The Department must correlate all gauges that will be used for acceptance testing for each gauge correlation section.*

4. APPARATUS

4.1. *Density Gauge*— With accessory equipment as specified in FOP for AASHTO T 355.

4.2. *Coring Equipment*— With accessories as specified in FOP for AASHTO R 67 for collecting 6-inch diameter pavement cores.

4.3. *Measuring Device*— Approved measuring device capable of measuring gauge correlation section and sub-section lengths.

5. TERMINOLOGY

5.1. *Gauge Correlation Section*— Pavement placed during production paving that is used to correlate the nuclear density gauge(s) used for acceptance. The gauge correlation section must be constructed to the same placement width and thickness and on the same underlying material as the course it represents.

5.2. *Gauge Correlation Sub-Section*— A portion of the gauge correlation section in equal-length to other sub-sections that is represented by a single test location.

5.3. *Job Mix Formula* (JMF)— End result of a successful mix design that is the Contractor's selected mixture to be produced and includes the aggregate gradation and asphalt binder percentage.

5.4. *Test Location*— The stratified random location within a gauge correlation sub-section where testing will be performed.

5.5. *Test Site Density*— The uncorrected density reading taken on the compacted pavement after finish rolling is complete at a test site for correlation to cores. It is obtained by using the test procedure specified in FOP for AASHTO T 355 without applying a gauge correlation factor. Filler material must be applied as required in the procedure before taking test site density readings.

5.6. *Stratified Random Sampling* —Method used to ensure the specimens for the sample are obtained from throughout the test section, and are not concentrated in one portion of the test section. All sample locations will be determined by the Engineer using a random sampling system in accordance to Idaho IR 148.

6. PROCEDURE

6.1. *Determine the gauge correlation section and testing locations as follows:*

6.1.1. Gauge correlation for each correlation section will be within the first 1,000 tons and consist of a minimum of 1,000 feet of production and anytime there is a change of conditions (Section 8).

6.1.2. Divide the total length of the gauge correlation section into 10 equal-length sub-sections.

6.1.3. Identify a test location for each gauge correlation sub-section in accordance with IR 148.

6.2. *Determine the in-place density using the nuclear density gauge for each test location as follows:*

6.2.1. Determine in-place density using the nuclear density gauge(s) for each test location in accordance with FOP for AASHTO T 355.

Note: *It is recommended that the Contractor's QC personnel also determine in-place density at each test location to develop a correlation factor for QC purposes.*

6.2.2. The ITD-820 form will be used by the Department personnel as the original source document to record the test site densities for each gauge at each test location.

6.3. *Determine the bulk specific gravity (G_{mb}) for each sub-section as follows:*

6.3.1. After the pavement has cooled sufficiently to avoid deformation during coring, the Contractor will obtain 1 core at each test site from each segment in accordance with FOP for AASHTO R 67 in the Engineer's presence. The Engineer will immediately receive the cores. The relative position of the core to the nuclear gauge readings for each test location is illustrated in Figure 1.

Note: The Contractor may core for quality control purposes.

6.3.2. Determine the G_{mb} of each core in accordance with FOP for AASHTO T 166 Method A or AASHTO T 331.

Note: *Determine the G_{mb} of all cores for the gauge correlation section using the same procedure.*

6.3.2.1. Determine the bulk density of the each core by multiplying G_{mb} by 62.245 lb/ft^3 and report the value to the nearest 0.1 lb/ft^3.

6.3.3. The ITD-820 form from Section 6.2.2 will be used by the Department personnel as the chain of custody documentation and the original source document used to record the G_{mb} of each core.

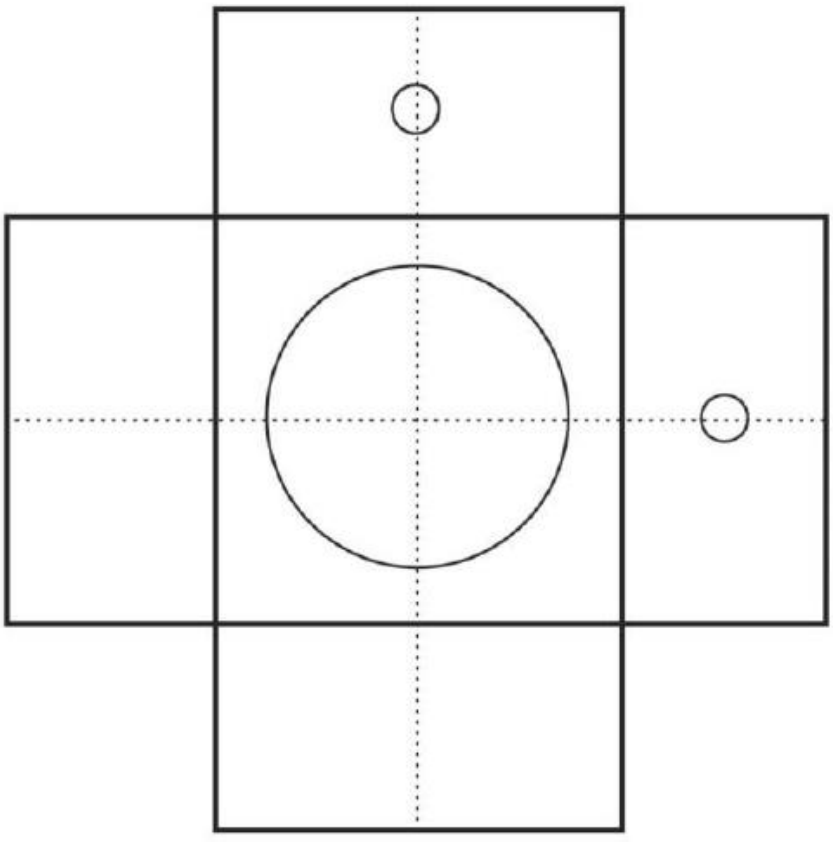

Figure 1. *Footprint of the gauge test site. Core location in the center of the test site.*

7. CALCULATION OF CORRELATION

7.1. *Calculate a correlation factor for the nuclear gauge reading as follows*:

7.1.1. Calculate the difference between the core density and nuclear gauge density at each test site to the nearest 0.1 lb/ft^3. Calculate the average difference and standard deviation of the differences for the entire data set to the nearest 0.1 lb/ft^3.

7.1.2. If the standard deviation of the differences is equal to or less than ±2.5 lb/ft^3, the correlation factor applied to the nuclear density gauge reading will be the average difference calculated in Section 7.1.1.

7.1.3. If the standard deviation of the differences is greater than ±2.5 lb/ft^3, the test location with the greatest variation from the average difference must be eliminated from the data set, and the data set properties and the correlation factor recalculated following Sections 7.1.1 and 7.1.2.

If the standard deviation of the modified data set still exceeds the maximum specified in Section 7.1.2, additional test sites will be eliminated from the data set, and the data set properties and the correlation factor will be recalculated following Sections 7.1.1 and 7.1.2. If the data set consists of less than 5 test locations, additional test sites must be established.

8. CHANGE OF CONDITIONS

8.1. A correlation factor is valid only for:

8.1.1. A specific project.

8.1.2. A specific JMF.

8.1.3. For the specific nuclear density gauges correlated.

8.1.4. Specific gauge thickness setting.

8.1.5. Specific gauge mode setting.

8.1.6. Specific underlying material.

8.1.7. Specific pavement thickness.

8.1.8. A specific pavement lift.

8.1.9. A specific calendar year.

8.2. Re-correlation of the gauge must occur when any of the above conditions change.

9. REPORT

9.1. The Department will report the results of testing on the ITD-820 form.

9.2. Project information.

9.3. Make, model, and serial number of the nuclear density gauge.

9.4. Stratified, random numbers.

9.5. Location of test and thickness of layer tested.

9.6. Underlying material.

9.7. Mixture type.

9.8. JMF identification.

9.9. Date.

9.10. Density standard.

9.11. Gauge readings.

9.12. Name and signature of individual performing AASHTO T 355.

9.13. Name and signature of individual performing AASHTO R 67.

9.14. Name and signature of individual performing AASHTO T 166 or T 331.

9.15. Nuclear gauge correlation to 0.1 lb/ft^3.

Idaho Standard Practice for

Procedures for Checking Asphalt Mix Plant Calibrations

IDAHO Designation: IR-155-21

1. SCOPE

1.1. These procedures are used in conjunction with the Department's Standard Specifications for Highway Construction for checking asphalt drum mix plants to assess plant conformance. This procedure is used for original plant approval, annual plant approval, after plant relocation (if necessary), or trouble shooting. If, at any time the Engineer has reason to believe plant calibration should be checked and provides documentation supporting the reason(s), only the meter(s) or scale(s) in question will be considered verified if the indicated metered or scaled amount, at a production rate within the range stated in the Plant Quality Control Plan, is confirmed when within ±1.0% of the actual scaled or measured amount. Some variations from this procedure may be necessary depending upon the configuration of the plant, including volumetric plants.

1.1.1. Volumetric plants are defined as those plants that meter some or all constituent materials using volumetric metering, such as a volumetric asphalt meter rather than a mass flow meter, or aggregate feeder gate and conveyor speed settings rather than individual belt scales.

1.2. All calibration procedures stated below are required to be completed in the Department's presence for plant verification, unless the Department waives, in writing, witness of calibration. Documentation will be provided to the Department that the tests have been completed and meet specification tolerances. If the Engineer requests how to read and interpret the plant information provided, the Contractor will inform the Engineer.

1.3. *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the user's responsibility of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations before use. All individuals must comply with the Contractor's safety program requirements at the plant.*

2. MEASURING DEVICES

2.1. Any weighing device used for payment must meet Section 109.01.A.6.b.

2.2. All measuring devices must meet the current edition of the National Institute of Standards and Technology Handbook 44, except as modified by Table 2.1. The Contractor must provide all personnel and equipment for calibrating measuring devices.

2.3. Balance and zero conditions of scales must be checked daily, and at any other time requested by the Department. The Engineer may, at any time, direct that any measuring device be tested by the producer or an outside agency if there is any doubt about the accuracy of the measuring device. Certificates of inspection must be posted in a prominent place in the plant, and a copy must be promptly submitted to the Engineer.

2.4. Production plant tolerances must meet the following table:

Table 2.1

Material	Measurement Tolerance [a]	Unit of Measure
Aggregate	0.2%	Weight
RAP	0.2%	Weight
Asphalt	0.2%	Weight or Volume
Additives	0.5%	Weight or Volume

[a] Measurement tolerance equals the smallest scale or meter graduation divided the quantity or volume measured (e.g., 20-pound graduations / 10,000 pounds measured = 0.2%)

3. BELT SCALES ON COLD FEEDERS

3.1. Use a certified scale(s) to check each individual belt scale, including RAP, at its high production rate and low production rate, as stated in the Plant Quality Control Plan. The Contractor will determine the amount of material needed to ensure plant calibration is accurate within ±1.0%. A minimum of 2 tests will be run at each range to check for repeatability and eliminate any outliers.

3.2. ***Plant Test Procedure:***

3.2.1. Each bin and its belt scale are tested individually.

3.2.2. Some plants may have to use a zero percent moisture input to ensure accuracy.

3.2.3. Check the belt scale accuracy at both high range and low range by running material over the belt scale and checking the indicated computer weight (accumulator) against the actual net weight of the material in the truck.

3.2.4. The allowable error must not exceed ±1.0% from the certified truck scale weight.

3.2.5. The final belt scale (totalizer) will be checked at its high production rate and low production rate, as stated in the Plant Quality Control Plan. The Contractor will determine the amount of material needed to ensure plant calibration is accurate within ±1.0%

4. BELT SCALE ON VOLUMETRIC PLANTS

4.1. ***Plant Test Procedure:***

4.1.1. The final belt scale will be tested using two high-production rate runs and two low-production rate runs as stated in the Plant Quality Control Plan. The allowable error must not exceed ±1.0%.

5. FEEDER BINS ON VOLUMETRIC PLANTS

5.1. Use a certified scale(s) to check each individual volumetric feeder, including RAP, gate setting and underbelt speed, at its high production rate and low production rate, as stated in the Plant Quality Control Plan. The Contractor will determine the amount of material needed to ensure plant calibration is accurate within ±1.0%. A minimum of 2 tests will be run at each range to check for repeatability and eliminate any outliers.

5.2. Test Procedure:

5.2.1. Each bin and its gate setting(s) and underbelt speed(s) are tested individually.

5.2.2. Record the gate setting and underbelt speed at both high range and low range by running material over the belt scale and recording the indicated computer weight or the actual net weight of the material in the truck divided by the run time and record the tons per hour for those settings.

6. ASPHALT METER ACCURACY

6.1. The asphalt meter is checked at its estimated high production rate and low production rate, as stated in the Plant Quality Control Plan. Run 2 checks at each rate.

6.2. ***Test Procedure:***

6.2.1. Enter the correct specific gravity or lb/gal and temperature for the liquid asphalt being used for the test into the computer system. The Contractor will determine the amount of material needed to ensure plant calibration is accurate within ±0.5%. Follow the manufacturer's recommendation for calibration of the asphalt meter or the asphalt metering system. The calibration tank must be certified or verified with test weights before calibrating the asphalt meter.

6.2.2. Check the asphalt meter accuracy at the high range and low range by running material through the meter and checking the indicated computer weight (accumulator) against the actual net weight of the material in the truck or calibration tank. For volumetric meters, convert the actual net weight to volume using the specific gravity and correcting for temperature.

A minimum of 2 test runs at the high production rate and low production rate will provide repeatability and eliminate any outliers.

7. BAGHOUSE FINES RETURN SYSTEM

7.1. If baghouse fines are returned, the returns will be in accordance with the quality control plan.

8. MINERAL FILLER SYSTEM

8.1. If mineral filler (e.g., lime, other mineral additive) is added separately and does not come into contact with the other aggregates until it is in the drum mixer, it is handled in the same manner as the asphalt meter check.

Note: *This is not the baghouse fines return system. The fines in the baghouse fines return system has contact with the other aggregates before reaching the drum mixer.*

8.2. *Materials and Equipment:*

8.2.1. Calibration vessel, container, or truck with sufficient capacity for calibrating mineral filler.

8.3. *Test Procedure:*

8.3.1. The mineral filler is pumped through its meter into a tared calibration vessel where it is weighed on an approved scale and compared against the quantity as recorded by the plant automation. The Contractor will determine the amount of material needed to ensure mineral filler calibration is accurate within ±5.0%.

9. ANTI-STRIP ADDITIVE CALIBRATION

9.1. Anti-stripping additive calibration check must be performed in a manner satisfactory to the Engineer; at both the high and low production rates and all percentages of additive addition in accordance with the Plant Quality Control Plan. The Contractor will determine the amount of material needed to ensure anti-strip additive calibration is accurate within ±0.5%.

10. NO-FLOW SYSTEM

10.1. Aggregate, RAP, mineral filler system, and asphalt interlocks must issue an audible alarm if a no-flow situation occurs.

10.2. *Test Procedure:*

10.2.1. The no-flow test will be run on each cold feed bin including RAP.

10.2.2. Material will be placed in the bin, and the bin will be allowed to run empty. An audible alarm must immediately occur.

10.2.3. The asphalt and mineral filler systems will be placed in a "No-Flow" condition or otherwise halted and an audible warning must immediately occur.

11. REPORTS

11.1.1. After the plant calibration and/or verification is complete, the Contractor will supply the Engineer with a printout of all calibration numbers which verify the calibration of the system and show that it meets all Department specifications. The Engineer will sign and date a copy for the Contractor to retain.

11.1.2. The Contractor will supply upon request either a display or printout of all calibration numbers that verify the calibration of the system has not changed since the annual calibration and still meets Department specifications.

Idaho Standard Practice for

Determining Rolling G_{mm}

IDAHO Designation: IR-156-21

1. SCOPE

1.1. This Standard Practice is used to determine the maximum theoretical specific gravity (G_{mm}) used for calculating percent compaction of in-place density during production paving.

1.2. *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the user's responsibility of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations before use.*

2. REFERENCE DOCUMENTS

2.1 *AASHTO Standards*

- FOP for T 209, Bowl Method, Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
- FOP for T 355, In-Place Density of Asphalt Mixtures by Nuclear Method
- FOP for R 97, Sampling Asphalt Mixtures
- FOP for R 47, Reducing Samples of Hot Mix Asphalt to Testing Size

2.2 *Idaho Standards*

- Idaho IR 148, Stratified Random Sampling
- Idaho IR 125, Acceptance Test Strip for Hot Mix Asphalt (HMA)

3. SUMMARY OF THE PRACTICE

3.1. The maximum theoretical specific gravity (G_{mm}) for determining the percent compaction will be determined using a rolling, consecutive 2-lot average (i.e., the most recent 2 completed lots) of the Department's acceptance test results. For the first 2 lots of production paving, the average G_{mm} from the test strip is used for determining percent compaction.

4. PROCEDURE

4.1. *Determine the rolling G_{mm} for each lot as follows:*

4.1.1. For the first 2 lots of production paving, use the average of all Department acceptance G_{mm} results from the test strip.

Note: The Department must provide the G_{mm} preliminary results before production the next day to the Contractor.

4.1.2. For all other lots of production paving, use the average of all Department acceptance G_{mm} results from the previous 2 lots.

Note: For previously used mix designs, use the average of Lot 1 results of the current project for the first 2 lots of production paving.

4.2. The rolling G_{mm} established in this procedure is used for performing the calculations in the FOP for AASHTO T 355 for the current lot.

5. PROCEDURE FOR TEST RESULT CHALLENGE

5.1. When test result challenge resolution is performed in accordance with Subsection 106.07 of the Standard Specifications, the original Department acceptance test results are replaced with the challenge resolution test results and the rolling G_{mm} for the subsequent lots will be re-determined.

5.2. The rolling G_{mm} established in 5.1 will be used for performing the calculations in place of the G_{mm} determined in Section 4.

6. EXAMPLE

6.1. The table below presents the G_{mm} results from the samples for the first 4 completed lots of production paving. Lot 1 was the test strip. The rolling G_{mm} for the first 5 lots are calculated as follows:

6.1.1. Lot 1 rolling G_{mm} = 2.402 (average of lot 1 combined G_{mm})

6.1.2. Lot 2 rolling G_{mm} = 2.402 (average of lot 1 combined G_{mm})

6.1.3. Lot 3 rolling G_{mm} = 2.399 (average of lot 1 and lot 2 combined G_{mm})

6.1.4. Lot 4 rolling G_{mm} = 2.398 (average of lot 2 and lot 3 combined G_{mm})

6.1.5. Lot 5 rolling G_{mm} = 2.392 (average of lot 3 and lot 4 combined G_{mm})

Lot Number	Sample Number	Combined G_{mm}
1	1	2.396
1	2	2.410
1	3	2.401
2	4	2.395
2	5	2.419
2	6	2.389
2	7	2.391
2	8	2.392
3	9	2.381
3	10	2.422
3	11	2.398
4	12	2.379
4	13	2.388
4	14	2.391
4	15	2.385

Idaho Standard Practice for

QUALITY CONTROL PLAN (QCP) DEVELOPMENT AND IMPLEMENTATION

IDAHO Designation: IR-158-21

1. SCOPE

1.1. The purpose of this guide is to establish minimum requirements for the Contractor's quality control system and quality control plan (QCP). It is intended that these requirements be used as a procedural guide in detailing the inspection, sampling, and testing deemed necessary to maintain compliance with the Department's specifications.

2. GENERAL REQUIREMENTS

2.1. As stated in the Standard Specifications for Highway Construction, a QCP must be developed by the Contractor/producer and submitted in writing to the Engineer at the preconstruction conference. Acceptance of the QCP by the Engineer will be contingent upon its concurrence with the Standard Specifications and this standard method. For this reason, the QCP will clearly describe the methods by which the quality control program will be conducted. For example, the items to be controlled, tests to be performed, testing frequencies, sampling locations, and techniques will be included with each item listed separately. Also include a table stating what actions will occur when test results indicate specification limits are approached or exceeded. See Table 1 at end of this guide for an example. Also, a detailed plan of action regarding disposition of non-specification material will be included. Such a plan will provide for immediate notification of all parties involved in the Quality Assurance process in the event nonconforming situations are detected. Example 1. Quality Control Plan may be used as an example.

2.2. Inspection and testing records must be maintained, kept current, and made available for periodic review by Department personnel throughout the life of the contract. All other documentation (e.g., date of inspections, tests performed, temperature measurements, and accuracy, calibration or re-calibration checks performed on production of testing equipment) will be recorded.

2.3. The Contractor will maintain standard equipment and qualified personnel in accordance with the contract and specification requirements for the item(s) being produced.

3. QUALITY CONTROL PLAN

3.1. Operation quality control plans will be submitted for each contract/project to the Engineer for approval. Distribution of the approved quality control plans will be made by the Engineer.

3.2. Follow Example 1. Quality Control Plan as a general guideline but at a minimum include the following:

3.2.1. Contract bid item covered by the quality control plan.

3.2.2. Sampling location and techniques.

3.2.3. Sampling plan.

3.2.4. Tests and test methods.

3.2.5. Testing frequencies.

3.2.6. Testing forms to be used.

3.2.7. Inspection frequencies and areas of inspection.

3.2.8. Detailed description of production and placement equipment and methods.

3.2.9. Detailed calibration processes and procedures (if applicable)

3.2.10. Documentation procedures, including:

3.2.10.1. Inspection and test record requirements and document management.

3.2.10.2. Temperature measurements.

3.2.10.3. Accuracy, calibration, or recalibration checks performed on production or testing equipment.

3.2.11. QC personnel, including the company official ultimately responsible for the quality of work.

4. ADDENDA TO THE QUALITY CONTROL PLAN

4.1. Addenda are defined as an addition or deletion to the QCP. Each page of the QCP that is revised is required to include the project key lead number, bid item number, date of revision, and means of identifying the revision. The addenda are required to be signed and dated by the Contractor's representative who is responsible for insuring that all items of work will comply with Department Specifications and subsequently signed and dated when approved by the Engineer.

EXAMPLE 1

¾” Aggregate Type B Base Quality Control Plan

Date:
To: (RESIDENT ENGINEER)
From: (CONTRACTOR(s) NAME)
Subject: 3/4” Aggregate Type B for Base Quality Control Plan

1. Project Information

1.1. We are submitting our Quality Control Plan, developed in accordance with Idaho IR 158 for:

Project Number:_____
Lead Key Number:_____
Bid Item Number:_____
Date Submitted:_____

1.2. (NAME) will be responsible for insuring that all items of work will comply with the contract and Department specifications.

2. Material Source

2.1. General Information:

Source Number:_____

Address of Source:_____

2.2. The aggregate source operation is under the direction of (NAME) who can be contacted at (ADDRESS, EMAIL, AND TELEPHONE).

2.3. (DETAILED DESCRIPTION OF THE PRODUCTION PROCESS)

3. Delivery and Placement

3.1. The field operation is under the direction of (NAME) who can be contacted at (ADDRESS, EMAIL, AND TELEPHONE).

3.2. (LIST OF EQUIPMENT TYPE, YEAR, MAKE, MODEL)

3.3. (DETAILED DESCRIPTION OF THE PLACEMENT PROCESS)

4. Quality Control Sampling and Testing,

4.1. The laboratory performing quality control testing is (LAB QUALIFICATION NUMBER), located at (LOCATION).

4.2. The quality control program is under the direction of (NAME OF PERSON), who can be contacted at (ADDRESS, EMAIL, AND TELEPHONE).

4.3. During the production operations of the aggregate we will perform at a minimum quality control tests per attached schedule. Sampling and testing will be the responsibility of (NAME(s), WAQTC number (NUMBER(s)).

4.4. During the placement operations of the aggregate (NAMES) will perform, at a minimum, quality control tests in accordance with the attached schedule. Also attached are the proposed method to select locations and/or times for sampling.

4.5. All testing will be completed by (NAME(s)), (WAQTC NUMBER(s)), within (HOURS) hours of sampling and all original documentation of results will be completed on the attached original documentation forms.

4.6. Testing reports and original source documents will be reviewed and checked by (NAME(s)), (WAQTC NUMBER(s)), within (HOURS) hours of testing being completed. All reporting will be completed on the attached forms.

5. Records.

5.1. Testing reports and all backup documentation will be located at (LOCATION) for review by the Department between the hours of (TIME) and (TIME) during the life of the contract/project.

5.2. Testing reports and all backup documentation will be located at (LOCATION) for review by the Department between the hours of (TIME) and (TIME) for (YEARS) after the completion of the project.

6. Notifications.

6.1. Any material found to be noncomplying will be addressed by (NAME) who will notify the Engineer immediately.

6.2. (NAME) will notify all appropriate Department personnel at least 48 hours before any work is to begin.

7. Nonconforming Material.

7.1. (STATE THE PROCESS FOR DISPOSITION OF NONCONFORMING MATERIAL)

Table 1: Example of QC Actions to Implement When Approaching or Exceeding Specification Limits

Test Description	Test Method	QC Action Limits		Situation		Action
		Single Test	4-Point Moving Avg. or Daily Avg.	Single Test	4-Point Moving Avg. or Daily Avg.	
Aggregate Gradation	FOP for AASHTO T 27 and AAHTO T 11	NA	Approaching Limit	5 percent on +#4 3 percent on -#4	Approaching Limit	Increase frequency of tests and prepare for process modification
Sand Equivalent	FOP for AAHTO T 76	NA	Approaching Limit	NA	Approaching Limit	Increase frequency of tests and prepare for process modification

Note: When 2 consecutive test results fail or if any of the 4-point moving average values fail, production will be suspended and corrective action will be taken. The process will be corrected before production resumes.

Idaho Standard Practice for

QUALITY CONTROL PLAN (QCP) REVIEW PROCESS

IDAHO Designation: IR-159-19

1. SCOPE

1.1. The purpose of this process is to establish a standard for reviewing the Contractor's quality control plan (QCP).

2. REFERENCE DOCUMENTS

2.1. Idaho Standards:

- IR 152, Asphalt Mixtures Quality Control Plan (QCP) Development and Implementation
- IR 155, Procedures for Checking Asphalt Drum Mix Plant Calibrations
- IR 158, Quality Control Plan Development and Implementation

2.2. Standard Specifications for Highway Construction

2.3. Quality Assurance Manual

2.4. Laboratory Operations Manual

3. GENERAL REQUIREMENTS

3.1. As stated in the Department's Standard Specifications for Highway Construction, a QCP must be developed in accordance with Idaho IR 158 and in concurrence with the Standard Specifications applicable to the bid item by the Contractor/producer and submitted in writing to the Engineer at the preconstruction conference. Acceptance of the QCP by the Engineer will be contingent upon its concurrence with the Standard Specifications and this standard method.

4. MINIMUM REQUIREMENTS OF A QUALITY CONTROL PLAN

4.1. Requirements shown in Idaho IR 158.

4.2. Subsection 106.03.A.2 of the Standard Specifications

4.3. Requirements of the contract bid item covered by the quality control plan (e.g., subsection 405.03.C of the Standard Specifications).

4.4. Sampling location and techniques.

4.5. Sampling plan.

4.6. Tests and test methods.

4.7. Testing frequencies.

4.8. Testing forms to be used, including examples.

4.9. Inspection frequencies and areas of inspection.

4.10. Detailed description of production and placement equipment and methods.

4.11. Detailed calibration processes and procedures (if applicable).

4.12. Documentation procedures, including:

4.12.1. Inspection and test record requirements and document management.

4.12.2. Temperature measurements.

4.12.3. Accuracy, calibration, or recalibration checks performed on production or testing equipment.

4.13. QC personnel, including the company point of contact responsible for the quality of work.

4.14. Processes for addressing non-conforming material.

5. REVIEW OF THE QUALITY CONTROL PLAN

5.1. Review the quality control plan to ensure it meets the minimum requirements in Section 4 and that adequate quality control measures are in place for the specific project.

6. REVIEW OF ADDENDA TO THE QUALITY CONTROL PLAN

6.1. Addenda are defined as an addition or deletion to the QCP. Each page of the QCP that is revised is required to include the project key lead number, bid item number, date of revision, and means of identifying the revision. The addenda are required to be signed and dated by the Contractor's representative who is responsible for insuring that all items of work will comply with the Department's specifications.

6.2. Review addenda to the quality control plan to ensure the revised QCP meets the minimum requirements and that adequate quality control measures are in place for the specific project.

7. APPROVAL OF THE QUALITY CONTROL PLAN

7.1. The QCP and each addenda will be approved only once the minimum requirements have been met.

7.2. The QCP, and addenda if applicable, as approved by the Department, is binding upon the Contractor as a contract requirement.

Idaho Standard Practice for

DEVELOPMENT, EVALUATION, AND APPROVAL OF HMA PLANT QUALITY CONTROL PLANS

IDAHO Designation: IR-160-21

1. SCOPE

1.1. This procedure covers requirements for plants producing hot mix asphalt (HMA) or warm mix asphalt (WMA) paving mixtures. The requirements in this procedure are the minimum requirements for a plant to meet 405.03.E of the Department's Standard Specifications for Highway Construction ("Standard Specifications").

1.2. *This procedure may involve hazardous materials, operations, and equipment and may not address all of the safety problems associated with the use of the test method. It is the user's responsibility to establish the appropriate safety and health practices and determe the applicability of regulatory limitations before use. All individuals must comply with the Contractor's safety program requirements at the plant.*

2. REFERENCE DOCUMENTS

2.1. AASHTO Standards:

- M 156, Standard Specifications for Requirements for Mixing Plants for Hot-Mixed, Hot-Laid Bituminous Paving Mixtures
- R 66, Sampling Asphalt Materials
- T 19M/T 19, Bulk Density ("Unit Weight") and Voids in Aggregate
- T 27, Sieve Analysis of Fine and Coarse Aggregates
- T 30, Mechanical Analysis of Extracted Aggregate
- T 84, Specific Gravity and Absorption of Fine Aggregate
- T 166, Bulk Specific Gravity (G_{mb}) of Compacted Asphalt Mixtures Using Saturated Surface-Dry Specimens
- R 97, Sampling Asphalt Mixtures
- T 209, Theoretical Maximum Specific Gravity (G_{mm}) and Density of Hot Mix Asphalt (HMA)
- T 283, Resistance of Compacted Asphalt Mixtures to Moisture-Induced Damage
- T 308, Determining the Asphalt Binder Content of Asphalt Mixtures by the Ignition Method
- T 312, Preparing and Determining the Density of Asphalt Mixture Specimens by Means of the Superpave Gyratory Compactor

3. TERMINOLOGY

3.1. Check—A specific type of inspection or measurement performed on equipment or materials to indicate compliance with the stated criteria (e.g., lime check, calibration check of the cold feed system).

3.2. Continuous Mix Plant—A manufacturing facility for producing asphalt paving mixtures that continuously proportions the aggregate, asphalt binder, RAP, and other chosen additives into the mix by a continuous volumetric or mass proportioning system without definite batch intervals.

3.3. Drum Mix Plant—A manufacturing facility for producing asphalt paving mixtures that continuously proportions the aggregate, heats and dries it in a rotating drum, adds any chosen additives, and simultaneously mixes the material with a controlled amount of asphalt binder.

3.4. Batch Plant - A manufacturing facility for producing asphalt paving mixtures that proportions and mixes the aggregate, asphalt binder, RAP, and other chosen additives into the mix by in discrete batches.

3.5. Hot Mix Plant (or Plant)—Any manufacturing facility used to produce asphalt paving mixtures.

3.6. Interlock—A system whereby plant production will be interrupted when any one of the interlocked raw material constituents fails to meet the targeted requirements established within the specifications or plant requirements.

3.7. Baghouse fines (dust) - That portion of the aggregate removed during drying and heating by the hot gas stream that accumulates in the particulate emission control baghouse. For purposes of this definition, aggregate removed from the hot gas stream by intermediate collectors such as knockout boxes is not considered baghouse fines.

3.8. Mineral Filler—A finely divided mineral product with a maximum of 3 percent retained on the 0.800 mm (No. 30) sieve and at least 70 percent of which will pass a 0.075 mm (No. 200) sieve. The most common mineral fillers include pulverized limestone, other stone dust, hydrated lime, portland cement, fly ash, and certain natural deposits of finely divided mineral matter. Baghouse fines are not considered mineral filler.

4. PLANT REQUIREMENTS

4.1. Prerequisite for Plant Approval:

4.1.1. Inspection of Equipment—The plant owner or manager will schedule an inspection of the plant facilities to determine compliance with this standard. The equipment will be maintained in a satisfactory operating condition and be capable of its intended function at all times during production.

4.1.2. Quality Control Program—Each plant will have a quality control program and have a designated person to administer the program. This program will include the testing and control of the individual component materials and the final product produced at the plant. Plant operations will be conducted in a manner to ensure a uniform product is produced which will meet specified requirements.

4.1.3. Truck Scales—Scales must meet the requirements of 109.01.A.6.b of the Standard Specifications.

4.1.4. Uniformity—The plant must be capable of producing homogenous asphalt mixtures even though the individual components include such diverse materials as various sizes of aggregate from

stockpiles, reclaimed asphalt pavement (RAP), asphalt binder, and other admixtures, as required by the mix design.

5. WEIGHT MEASURING SYSTEMS

5.1. Furnish (at the Contractor's expense) certified scales to weigh bulk asphalt plant mixtures, regardless of the type of weight measuring system used for payment.

5.2. Ensure that the documentation for certified scales complies with state and/or federal requirements. Platform scales must be certified at a minimum annually. Certified scales must be certified/re-certified if they are moved, re-calibrated, or relocated.

5.3. Each platform scale system must be capable of taring truck weights with each load.

5.4. When not using platform scales, provide calibrated weighing devices that record the mixture's net weight delivered to the truck. Weighing devices will be calibrated at a minimum before the start of the paving season and each time a plant is moved to a new location. A net weigh system will include, but is not limited to, the following:

5.4.1. Hopper weigh system that delivers asphalt mixture directly to the truck.

5.5. The weighing system used to determine the net weight will have a printing system used in conjunction with automatic mixing systems. All printing systems must be approved by the engineer.

5.6. Verify adequate installation of the net weight scale mechanism or device by the manufacturer to ensure acceptable performance and operation.

5.7. Provide information on the project tickets per Section 109.01 of the Standard Specifications.

5.8. Certify the accuracy of the weighing system by an approved registered scale service person at least once annually or whenever the plant is moved or relocated.

6. EQUIPMENT FOR PREPARATION OF ASPHALT BINDER

6.1. Tanks for storage of asphalt binder must provide adequate capacity and means to ensure proper continuous circulation between the individual storage tank and proportioning units during the entire operating period.

6.2. The delivery and metering system for the asphalt binder must have adequate capacity to provide proper continuous flow between the storage tank, proportioning unit, and mixing equipment during the entire operating period.

6.3. Storage tank capacity and operation must allow for continuous operation of the plant and uniform temperature of the asphalt binder when it is introduced into the aggregate. Metering devices must be calibrated in accordance with Idaho IR 155. Any additives based on liquid volume or mass flow must be interlocked with an audible alarm system.

6.4. A sampling valve must be provided in the asphalt binder injection lines connecting the storage tanks to the asphalt binder control unit. The valve will be located in such a manner as to allow for adequate safety for the person obtaining the sample and to allow the Department to safely witness sampling.

6.5. Any tank used for storing polymer-modified asphalt binders must be equipped with an agitation system or circulation system to ensure the liquid asphalt is maintained in a homogenous state without separation.

6.6. The mechanisms used to introduce WMA additives to asphalt mixtures at the hot mix plant must be capable of uniformly feeding and metering the additive. WMA additives typically consist of additives added at the binder production facility, dry material added through cold feeds, or water injection. Depending on the type of WMA process, the plant must be equipped with automatic controls to monitor the feed system and interrupt plant production if there is an interruption in the feed process. Equipment used to produce WMA must be approved by the Engineer before mixture production.

7. COLD AGGREGATE FEEDERS

7.1. A mechanism that must be capable of uniformly feeding the aggregates into the dryer to ensure uniform production and temperature. The mechanism must be capable of accurately combining aggregates from different storage bins.

7.2. Cold bins for storing aggregates before proportioning will be monitored to ensure that bins do not become empty or restricted. The bins will be interlocked so that a production interruption will occur or an audible warning will sound if an interruption in supply of material from any cold feed bin occurs.

7.3. Adequate and convenient facilities must be provided for obtaining samples of the full flow of aggregate from the total of the bins.

7.4. Control will be based on frequent samples from each component aggregate as well as samples taken from the combined cold aggregate feeders.

7.5. All plants are to be equipped with a means of diverting aggregate on the conveyor belt away from the dryer and into an empty haul truck for cold bin calibration purposes.

8. RECLAIMED ASPHALT PAVEMENT (RAP)

8.1. The recycled mixture will be a homogenous mixture of RAP, virgin aggregate, hydrated lime (if required), asphalt binder, and any additives. If recycling capability is required, the plant will be equipped with mechanical means for feeding the desired weight of RAP into the mix.

8.2. RAP bins for storing material before proportioning will be monitored to ensure that the bins do not become empty or restricted. The bins will be interlocked so that a production interruption will occur or an audible warning will sound if any interruption in supply of material from any cold feed bin occurs.

8.3. Adequate and convenient facilities will be provided for obtaining samples of the full flow of RAP material from the total of the bins.

8.4. Use a hot mix plant for the recycling process with necessary modifications to process the recycled material. The ratio of the RAP to virgin aggregate will be controlled by weight.

8.5. For drum and continuous mix plants, use electronic belt weighing devices to monitor the flow of RAP and the flow of virgin aggregate.

8.6. Equip plants with an interlocking system of feeders and conveyors that synchronize the RAP flow with the virgin aggregate flow. Ensure that the electronic controls monitor the flow rates indicated by the belt weighing devices and automatically maintain the desired ratio at varying production

rates. Design the RAP feeder bins, conveyor system, and auxiliary bins (if used) to prevent the material from segregating and sticking. RAP will be screened before crossing the weigh bridge with a 2-inch to 3-inchscreen.

9. EMISSIONS CONTROLS FOR DUST COLLECTOR FINES

9.1. A dust collection system must be provided. The system will be made to waste the material collected, or to return all or any part of the collected material uniformly to the mixture.

9.2. Other emissions, with the exception of water vapor, , will be controlled to be in compliance with applicable environmental limits.

9.3. *Control the dust collection as follows:*

9.3.1. When collecting airborne aggregate particles and returning them to the mixture, ensure the return system delivers the desired portion of the collected dust uniformly into the aggregate mixture and wastes the excess.

10. SURGE AND STORAGE SYSTEMS

10.1. *Provide surge and storage bins as follows:*

10.1.1. Ensure that bins for asphalt mixture storage are insulated and have a working seal, top, and bottom to prevent outside air infiltration and to maintain an inert atmosphere during storage to ensure the asphalt mixture maintains temperature at the working temperature. Bins not intended for storage may be used as surge bins to hold asphalt mixtures for part of the working day; however, empty these surge bins completely at the end of each working day.

10.1.2. Ensure that surge and storage bins can retain a predetermined minimum level of mixture in the bin when trucks are loaded. The determination of the minimum mixture level will be based on minimizing mixture segregation and any other pertinent operational constraints.

10.1.3. Ensure that surge and storage systems do not contribute to mix segregation, loss of homogeneity, lumpiness, temperature loss, draindown, or stiffness.

10.2. A plant may be permitted to store asphalt mixtures in a silo after prior evaluation and approval by the Engineer. Use will conform with all limitations on retention time, type of mixture, heater operation, silo atmosphere, mix level, mix draindown time, or other characteristics set forth in the applicable specifications.

10.3. Approval of silos may be removed or restrictions may be applied if it is determined the silo contributes to segregation, does not maintain temperature, or fails in any other way to provide a homogeneous mix.

11. MINERAL FILLER

11.1. *When mineral filler is required as a mixture ingredient:*

11.2. Use a separate feed system to proportion the required quantity into the mixture with uniform distribution.

11.3. *Control the feeder system with a proportioning device that meets the following:*

11.3.1. Is accurate to within ±5 percent of the filler required by weight.

11.3.2. Has a convenient and accurate means of calibration.

11.3.3. Interlocks or audible/visual alarms with the aggregate feed or weigh system to maintain the correct proportions for all rates of production.

11.4. Provide flow indicators or sensing devices for the mineral filler system and interlock them with the plant controls to interrupt mixture production if the mineral filler introduction fails to meet the required target value after no longer than 60 seconds.

11.5. *Add mineral filler to the mixture as follows, according to the plant type:*

11.5.1. Continuous Plants Using Dryer Drum Mixtures—Add the mineral filler so that the dry mixing is accomplished no less than 18 inches before the addition of the asphalt binder and ensure that the filler does not become entrained into the air stream of the dryer.

12. HYDRATED LIME TREATMENT SYSTEM

12.1. *When hydrated lime is required as a mixture ingredient:*

12.2. Use a separate bin and feed system to store and proportion the required quantity into the mixture.

12.3. Ensure that the aggregate is uniformly coated with hydrated lime at least 18 inches before the addition of the asphalt binder to the mixture. Ensure the hydrated lime does not become entrained in the exhaust system of the dryer or plant.

12.4. *Control the feeder system with a proportioning device that meets the following:*

12.4.1. Is accurate to within ±10 percent of the hydrated lime required by weight.

12.4.2. Has a convenient and accurate means of calibration.

12.4.3. Interlocks or audible/visual alarms with the aggregate feed or weigh system to maintain the correct proportions for all rates of production to ensure mixture produced is properly treated with lime.

12.5. Provide flow indicators or sensing devices for the hydrated lime system and interlock or audible/visual alarms them with the plant controls to interrupt mixture production if hydrated lime introduction fails to meet the required target value after 60 seconds.

13. FIBER SUPPLY SYSTEM

13.1. *When stabilizing fiber is required as a mixture ingredient:*

13.2. Use a separate bin and/or feed system to store and uniformly proportion by weight the required quantity of fiber into the mixture.

13.3. Control the feeder system with a proportioning device that meets the following:

13.3.1. Is accurate to within ±10 percent of the fiber required by weight. Automatically adjust the feed rate to maintain the material within this tolerance at all times.

13.3.2. Has a convenient and accurate means of calibration.

13.3.3. Provides in-process monitoring, consisting of a digital display of output of feed rate, in pounds (kilograms) per min, to verify feed rate.

13.3.4. Interlocks or audible visual alarms with the aggregate feed or weigh system to maintain the correct proportions for all rates of production.

13.4. Provides flow indicators or sensing devices for the fiber system and interlocks them with the plant controls to interrupt mixture production if the fiber introduction fails to meet the required target value.

13.5. *Introduce the fiber as follows, according to the plant type:*

13.5.1. When a continuous or dryer-drum-type plant is used, add the fiber uniformly to the aggregate and disperse it before the injection of the asphalt binder. Ensure the fibers will not become entrained in the exhaust system of the dryer.

14. CALIBRATION OF PLANT EQUIPMENT

14.1. Calibration of the plant must meet Idaho IR 155.

14.2. *Calibration will occur, at a minimum:*

14.2.1. If the material changes, or if a plant component supply system effecting the ingredient proportions has been repaired, replaced, or adjusted, recalibrate the proportions.

14.3. *Calibrate the mixing plant as follows:*

14.3.1. Before producing mixture for the project, calibrate by scale weight the electronic sensors or settings for proportioning the mixture ingredients.

14.3.2. Calibrate the ingredient proportioning for the anticipated range of production rates as shown in the Plant QCP. Do not operate outside the calibration range without first calibrating the proportioning systems for the new range of production rates.

15. THERMOMETRIC EQUIPMENT

15.1. Provide appropriate recording thermometers, of suitable temperature ranges, to accurately assess the temperature of the asphalt mixture at or near the discharge point. Harden the thermometer mechanism as necessary to ensure durability of the device and continuous operation. Thermometers must be calibrated by the manufacturer for the full range of mixture production temperatures. The thermometers must be verified periodically during production to ensure their accuracy.

15.2. Measure the temperature at the discharge chute of the dryer and record the temperature data automatically.

16. DEVELOPING AND MAINTAINING A PLANT QUALITY CONTROL PLAN

16.1. Develop and maintain a Plant Quality Control Plan (Plant QCP). The plant must have an approved Plant QCP prior to the plant being used on Department projects. This plan must address each section of this procedure and describe how these requirements will or will not be met.

16.1.1. If any of the minimum requirements cannot be met; describe in detail why, and how, the plant will mitigate any adverse effects from deviation of this procedure's minimum requirements.

16.2. See Section 19 (Plant QCP template) for a template of the plant quality control plan.

17. PLANT QCP REVIEW

17.1. The Department will review the Plant QCP at a minimum of once per calendar year.

17.2. Review the Plant QCP to ensure all requirements in the previous sections are met or that adequate processes and procedures are in place to mitigate any adverse effects (See Section 16.1.1)

18. PLANT QCP APPROVAL

18.1. If the Plant QCP review finds that the plant's quality control plan is sufficient to ensure a quality product will be produced, the Plant QCP will be approved.

18.2. If the Plant QCP is approved, return a signed copy of the Plant QCP to the plant. The approval is valid for one calendar year.

Company Name:
Year:

Plant Quality Control Plan

Quality Control Plan Administrator

Name

Contact Information

Reviewed By:
Reviewed Date:

Approved By:
Approval Date:

Quality Control Plans for Plants

Template

1. Plant Description
    a. Plant Type (Drum/Batch)
    b. Plant Address
    c. Detailed narrative meeting the requirements of Subsection 17.1 and 17.1.1

2. Plant Laboratory Personnel
    a. Qualified Personnel/Contact Information/WAQTC#/ Exp. Date (Scanned Copy)

3. Laboratory Qualification
    a. Idaho Lab Qualification Number
        i. Date last completed
        ii. Certification Posted in Laboratory
    b. AMRL accreditation (if applicable)
        i. Date last completed

4. Plant Inspection
    a. Performed Yearly
        i. Certification is posted at plant
    b. Plant complies with Idaho IR 160

5. Truck Scales
    a. Calibration Frequency
    b. Testing agency – copies on file

6. Plant Weighing/Measuring Devices
    a. Calibration frequency
    b. Testing agency – copies on file

7. Aggregate Stockpiles
    a. Construction Method
        i. Separation/Labeling
        ii. Segregation Control
        iii. Moisture Control (if applicable)
    b. Testing (method/frequency)

8. RAP stockpile
    a. Construction methods of stockpiles
        i. Separation/Labeling
        ii. Segregation Control
        iii. Moisture Control (if applicable)

b. Testing (method/frequency)

9. Plant Mix Temperatures
    a. Plant Monitor/Control
    b. Temperature checks

10. Binder
    a. Storage
    b. Hauling
    c. Sampling (include location)
    d. Source Change – Notification/Start-up testing
    e. List how corrective action will be taken

11. Asphalt Mix Design
    a. Responsibility

12. Asphalt Mix Sampling
    a. Location for QC
    b. Plant check processes and procedures
    c. Sampling frequency
        i. Low tonnage (< 200 tons)
        ii. > 200 tons

13. Mix Gradation
    a. Test method

14. Asphalt Content
    a. Test method

15. Volumetric Properties
    a. Test methods

16. Mix Diagnostic and Corrective Action Plan
    a. Items to address: #13-15, and on-site density

17. Project Records – Idaho Standard Specs. 106.03.A.2.
    a. Maintain and make avalable to the Engineer upon request complete records (including hand written worksheets) of sampling, testing, actions taken to correct problems, and quality control inspection results. Provide copies of the Reports when requested.
    b. Control Charts

18. Truck Loading
    a. Loading method
    b. Segregation control

19. Warm Mix Capabilities (if applicable)
    a. Plant used for WMA?

b. Type: Foamed, Additive, etc.
c. Operation (e.g. rate(s), temperatures, etc.)

20. Anti-Strip
    a. Type/Brand
    b. Method of dosing

It is hereby certified that the information contained in this Plant Quality Control Plan meets the requirements of Idaho IR 160.

Company Name:

Signature:

First & Last Name:

Quality Control Plan Administrator

Title VI Special Provisions

In compliance with the United States Department of Transportation (USDOT) Standard Title VI/Non-Discrimination Assurances (DOT Order No. 1050.2A):

"The Idaho Transportation Department, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 US.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award."

During the performance of work covered by this Contract, the Contractor for themselves, their assignees and successors in interest agree as follows to adhere to Appendix A and E of the USDOT Standard Title VI/Non-Discrimination Assurances:

APPENDIX A

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration (FHWA), as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 2 l.

3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.

4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration (FHWA), to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration (FHWA), as appropriate, and will set forth what efforts it has made to obtain the information.

5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Nondiscrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration (FHWA) may determine to be appropriate, including, but not limited to:

a. withholding payments to the contractor under the contract until the contractor complies; and/or
b. cancelling, terminating, or suspending a contract, in whole or in part.

6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the

Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration **(**FHWA) may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

APPENDIX E

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 4 71, Section 4 7123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U .S.C. 1681 et seq).

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

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 reprocurement 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 reprocurement 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.

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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.

TRAVELERS

Travelers Casualty and Surety Company of America
Travelers Casualty and Surety Company
St. Paul Fire and Marine Insurance Company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint **Danielle Marchant** of **SALT LAKE CITY**, **Utah**, their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this **21st** day of **April**, **2021.**

State of Connecticut

City of Hartford ss.

By: _____
Robert L. Raney, Senior Vice President

On this the **21st** day of **April**, **2021**, before me personally appeared **Robert L. Raney**, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the **30th** day of **June**, **2026**

_____
Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, **Kevin E. Hughes**, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this **7th** day of **March**, **2024**.

_____
Kevin E. Hughes, Assistant Secretary

To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.
Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.