SECTION 230.00 ACCEPTANCE OF MATERIALS BY MANUFACTURER'S OR FABRICATOR'S CERTIFICATION.

SECTION 200.00 ACCEPTANCE PROGRAM.

In order to implement the quality assurance elements outlined in Section 100.00, the Acceptance Program must provide a frequency guide, identify the location, and identify specific quality attributes for sampling and testing. Section 270.00 contains this information for each contract bid item and the ITD Quality Assurance Special Provision (QASP) has this information for bid items under the QASP.

Quality control sampling and testing results may be used as part of the acceptance decision provided the following requirements are met:

- The contract identifies items for which QC test results may be used in the acceptance decision.
- The sampling and testing must be performed by qualified laboratories and qualified sampling and testing personnel.
- The quality of the material must be validated by verification sampling and testing. The verification testing must be performed on samples taken independently of the quality control samples.
- The quality control sampling and testing must be evaluated by an Independent Assurance (IA) program.

If the results from the quality control sampling and testing are used in the acceptance program, then there must be a dispute-resolution system established.

200.00.01 Test Result Dispute-Resolution. When quality control and verification test results conflict and the conflict cannot be resolved, the Department has established a Test Result Dispute Resolution process in Section 106.07 of the Standard Specifications.

The Central Laboratory will perform all dispute resolutions unless a potential for conflict of interest exists or the Contractor requests an independent laboratory.

200.01 Specifications Compliance and Expenditure of Public Funds. The specifications and plans provide the minimum requirements that must be met for bidding and completing the contract. The Contractor commits to furnishing materials and completing work that will equal or exceed such requirements. The Engineer must be satisfied, through quality assurance measures, that the public is receiving what it is entitled to under the contract. Nothing less should be accepted. To do so is not only a disservice to the state, but would be giving undue advantage to the Contractor. Other Contractors who bid on the same work could contend that they would have offered a lower bid had they been able to anticipate that materials or work outside of specifications is acceptable.

When payment is made to the Contractor for materials furnished and work performed, the duly designated state officials must authorize disbursement of public funds for this purpose. Through the quality assurance program, the Resident Engineer and the project staff will acquire substantiating data in the form of tests,

inspection records, and measurements to justify acceptance of the Contractor's work. Thus, the Engineer can be assured the Contractor has fulfilled the contract obligation and is entitled to payment. The Resident Engineer will withhold payment to the Contractor for any material where the required QC and Verification sampling, testing, and/or certification have not been accomplished.

In case of failure to meet the requirements, the quality assurance program data will constitute the basis for rejection of work deemed unfit for acceptance. This data may also be the basis for acceptance of the work upon appropriate contract price adjustment, if permitted under the provisions of the specifications.

Complete records, including tests and inspection reports covering acceptance or rejection of any materials, are kept in the project files and required copies are distributed to other offices as needed for review and documentation. The Resident Engineer is responsible for compiling the records to provide a Materials Summary Report (MSR) for each project. Follow the instructions in Section 400.00, Project Materials Certification for compiling the MSR. The MSR is used to complete the Materials Certification letter for each project.

200.01.01 Semi-Annual Status Report. The District Materials Section must monitor the Districts' progress on a semi-annual basis and provide the Chief Engineer with reports of deficiencies. Deficiencies are defined as:

1. Payment for out-of-specification material
2. Payment for material that was not sampled, tested, or certified as required by the specifications
3. Failure to perform, or a lack of, Independent Assurance testing
4. Failure to submit the Materials Summary Report and the Materials Certification letter to the Chief Engineer within 60 days from the District Engineer's final acceptance of the project.

200.02 How the ITD Acceptance Program Applies to Various Types of Projects. The ITD Acceptance Program applies to all project types according to the requirements shown in Table 200.02.1. There could be situations where more than one project type is included in a single contract. In these cases, the acceptance will be determined by the specifications that govern each contract item.

For example, a Department contract awarded by Contracting Services could contain several contract items for constructing local roadways and/or buildings which are covered by different local building codes in the contract. The local jurisdiction is responsible for the inspection and acceptance of the items. At the completion of the work, the local jurisdiction must provide a letter to the Department stating the contract item met the contract specifications.

Table 200.02.1: Acceptance Requirements According to the Type of Project

Type of Project	Awarded By	Type of specifications	Materials Inspection & Acceptance	Materials Certification	Final Department Acceptance
ITD Contract	ITD Contracting Services	ITD Standard Specifications	ITD Project Personnel per ITD QA Manual	Resident Engineer per Section 400.01	District Engineer per Section 400.01
ITD Contract	ITD Contracting Services	Public Works Specifications	Out-source to Consultant inspection per contract specifications	Resident Engineer per Section 400.01	District Engineer per Section 400.01
Local Agency Enhancement	Local Agency	Public Works or Local Specifications	Local Agency per contract and specifications	Local Agency provides letter to ITD District Engineer	District Engineer provides Final Acceptance after Final Inspection.
Local Agency Off-System Highway	Local Agency	ITD Standard Specifications	Local Agency per ITD QA Manual.	Local Agency provides letter to ITD District Engineer	District Engineer provides Final Acceptance after Final Inspection.

200.02.01 Rest Areas and Buildings. Rest Area and Building projects that have contract items with acceptance requirements different from ITD specifications will require the following:

1. The Architect of Record will issue a letter of acceptance based on field inspections and approval of required contract submittals for items governed by the Architectural Special Provisions. A copy of the inspections and approvals must be included with the letter.

2. Documented inspections by the Department of Building Safety for the applicable components.

3. Concrete governed by non-ITD specifications will require additional acceptance by:

    a) Department field-inspection personnel must observe Contractor field quality control sampling and testing for proper testing methods and procedures. Actions taken pertaining to Contractor field quality control sampling and testing activities will be recorded in the Construction Diary.

    b) The Department will perform field tests for air, slump, unit weight, and temperature from the same truck as every companion test cylinder set is made.

    c) The Contractor must provide companion test cylinder sets to the Department for acceptance testing at the concrete sampling frequency required by the contract.

4. Metal reinforcement bar governed by non-ITD specifications will require additional acceptance by Department field-inspection personnel in accordance with the Quality Assurance Manual, Section 270.00 Minimum Testing Requirements for 503 Metal Reinforcement.

5. Acceptance and documentation for items with the requirements contained in the Idaho Standards of Public Works Construction (ISPWC) will be accepted by manufacturer's certification referencing the ISPWC specifications. Project inspection and acceptance of ISPWC items will be out-sourced by the owner (the Department or Local Agency).

Items that are not ITD specifications are exempt from the ITD Quality Assurance Manual Independent Assurance requirements.

SECTION 210.00 INSPECTION AND TESTING RESPONSIBILITY. Inspection personnel assigned to a project will inspect all portions of the day-to-day work. They will also inspect, test, and approve all material going into the work. Certification of some material is allowed. Use Section 230.00 for specific directions for accepting material by certification.

All testers and inspectors must be properly qualified in accordance with ITD specifications and policies. Sampling, testing, and inspection personnel are expected to know which materials must be sampled, when and where samples must be taken, the size of samples required, the proper methods of obtaining samples, and methods of field testing.

The ITD Standard Specifications for Highway Construction state the required sampling and testing methods or the required standard practice methods. Methods include AASHTO, ASTM, Idaho Standard Methods, etc. The QA Manual contains Western Alliance for Quality Transportation (WAQTC) FOPs, Idaho FOPs, and Standard Procedures that modify certain methods. The modifications in the QA Manual govern over the methods shown in the Standard Specification. The Standard Procedures govern over the WAQTC FOPs. The Standard Procedures are included at the end of each applicable method.

Diligent inspection of the work in progress and of each successively completed portion is important. There must be assurance when the work is finished that all parts are acceptable. No amount of sampling and testing can give this assurance without documenting observations at the same time.

210.01 Inspection and Testing at the Project Site. The project inspector must identify and check all materials received on the project before they are incorporated into the work and must ascertain that acceptable test and inspection reports are available for all items inspected by others.

Test reports must show the tester's printed name and qualification number and be initialed or signed by the tester.

Any individual that signs the Checked By box or certify the test results on any materials testing report must have been qualified in the appropriate Sampler/Tester area at one time or be a licensed Professional Engineer in the State of Idaho. This individual can have an expired qualification or license, provided they are not suspended.

Materials that have been inspected by anyone other than project personnel must be reexamined for any damage or contamination that may have occurred subsequently, or for any defects that may not have been observed in the original inspection. Defects or contamination, unless satisfactorily remedied, may be cause for rejection in spite of prior approval.

The project inspector will sample and test as required all materials received on the project without prior inspection and approval. The Contractor is notified if the material was rejected. If the required tests cannot be performed at the project site, send appropriate samples to the District or the Central Laboratory for testing. Upon notification of the test results, the material will be accepted or rejected and the Contractor promptly

notified. The project inspector must know the appropriate options for disposition of any rejected or failing material and fully document the action taken.

Fabricated items accepted by certification must be visually inspected. See Section 230.00 for additional discussion on products or items accepted by certification.

Along with examining and checking all materials brought onto the project site, inspectors must maintain a continuing visual inspection of the Contractor's operations where the materials are handled and incorporated into the work. Any procedures that result in damage or change in any material to the extent that it will fall outside the specification limits will not be permitted to continue. The affected materials will be rejected or the defects satisfactorily remedied.

210.02 Inspector Safety. Sampling and testing procedures may involve hazardous materials, operations, and equipment. The inspector must be aware of safety hazards and comply with established safety procedures. Department safety policies reinforce the necessity of protective clothing and equipment when working around construction equipment and machinery. Occupational Safety and Health Administration (OSHA) regulations must be followed for non-Department personnel on the project site. The Contractors are responsible for providing a safe working environment and a safe means of obtaining random samples. The Department is responsible for stopping any unsafe operations until corrective action is taken.

When there is a safety concern for the sampler, the Department will allow the Contractor, due to familiarity with their equipment or operation, to obtain the sample as long as a WAQTC-qualified sampler observes the sampling.

The sampling and testing technicians must limit the weight of aggregate sample increments to no more than 40 pounds per sack or bucket.

SECTION 215.00 MATERIALS OR WORK FAILING SPECIFICATIONS. For material or work that does not meet specification requirements:

- Reject or remove when incorporated.
- Accept with a price adjustment when allowed to remain in place.
- Correct or remedy, by the Contractor, and re-test.

Failing material that has not been incorporated into the work and can be remedied by further processing may be accepted after correction.

If completed work is found to contain material that is not within specifications, a determination must be made of the extent of the nonconformance with specifications, the limits of use of non-conforming material, and if it is feasible to be remedied.

The action taken must be fully documented by the project inspector or tester in the project file by reports, records covering samples, tests, measurements, and/or corrective action taken, if any. The Resident Engineer is responsible that disposition of the failing material is fully explained, including justification for acceptance, removal, or price reduction. See Standard Specifications Section 105.03.

215.01 Check Tests. Check tests are performed after an acceptance test fails to verify the material does, or does not, meet specifications in the scenarios presented below. Document and report all test results. For the numbering of Check Tests see Section 220.03.01 Numbering Check Tests.

When a failing test result is followed by a passing check test, the check test result becomes the basis for acceptance.

When a failing test result is verified with a check test, additional testing may be performed to define the boundaries of the unacceptable material for corrective treatment.

In all cases, if the check test results indicate the failing test results were caused by a faulty sample or faulty test, record both test results, but add comments to the faulty test data with appropriate reference to the check test.

The field report includes the type of failure, the corrective action taken to get the material back within specifications, and the disposition of the failing material. Include a full explanation of where the failing material was disposed of. After corrective treatment, retesting is required to document acceptability.

Compaction for Excavation, Borrow, Granular Borrow, Backfill: Perform the check test after there has been additional compaction effort and/or remedial efforts, such as drying out or reprocessing the material. The check test will be taken within 10 ft. of the original test and at the same elevation.

Concrete Field Acceptance: Perform the check test immediately after the failing test. Continue checking each load until 2 consecutive tests are passing.

Gradation for Sand Membrane Protection Blanket: Perform check test immediately after failing test. If check test fails, reject material.

215.02 Price Adjustments for Non-compliant Materials or Products. Non-compliant (failing or out of specification) material will be rejected/removed, or remedied by the Contractor, before payment is made to the Contractor. However, if it is not feasible to remove or remedy the non-compliant material incorporated into the project, a price adjustment must be made to the Contractor. The Contractor will not be paid full contract price for non-compliant material.

There are certain materials, listed below, that are subject to price adjustments when laboratory tests indicate the materials have failed the required specifications. All other non-specification material is handled as allowed by the contract.

The magnitude of the price adjustment, expressed as a percentage, will be based on the extent of deviation from the specifications as indicated from test results. The price adjustments are shown in the ITD Laboratory Operations Manual.

The determined price adjustment percentage will be applied to the quantity of material that is represented by the non-compliant test results. The cost amount of the price adjustment will be calculated by the Resident Engineer's office using the actual invoice cost of the product, excluding freight, from the Contractor. The following materials or products are subject to price adjustments:

- Portland Cement.
- Fly Ash.
- Waterborne Traffic Line Paint.
- Coating Systems (all formulas).
- Liquid Deicer.
- Performance Graded Asphalt Binder.
- Emulsified Asphalt.
- Geosynthetics.

SECTION 220.00 SAMPLING PROCEDURES

An ITD Sampler Tester Qualification Program (STQP)-qualified individual will take samples in accordance with the procedures required by the specifications. Samples are taken concurrently with the project operations or from actual material delivered to the project. A stratified random method will be used to obtain samples when required by the contract.

Standard methods of sampling are set forth in the specifications and in this QA Manual for nearly all materials. The District and the Central Laboratory are resources for guidance when a standard method of sampling is not available.

220.01 Sample Size. The required size of a sample for the various tests on a given material is stated in the standard method of sampling. These sample sizes are considered as minimums to avoid any deviation due to sample size alone.

When samples of materials are taken for testing by the Department, the samples are to be of the prescribed size and shipped in the specified type of container in accordance with Table 220.01.1. Consulting or independent laboratories may require slightly modified sample containers; however, the samples must be adequately protected and handled to maintain the sample's condition before testing.

220.01.01 Improper Sampling. Any sample received that has not been properly sampled will not be tested. The laboratory will immediately notify the Resident Engineer and the sampler. Another sample must be obtained as soon as possible to replace the rejected sample. Lack of required samples is a project deficiency. The laboratory will document the improper sampling for the project files by creating a test report with a note to indicate the sample was improperly taken. The test report will be distributed as usual with one copy forwarded to the District IA Inspector. The District IA Inspector will complete a buff-colored IA evaluation form, obtain resolution, and distribute according to the usual procedures, including a copy submitted to the ITD Sampler Tester Qualification Committee (STQC) for action.

Quality control and verification samples must not be collected at the same location. They must be taken independently of each other.

220.02 Frequency of Sampling. The frequencies at which samples are taken will conform to the Minimum Testing Requirements (MTRs Section 270.00). The frequencies include fractions of quantity and are minimums. When the minimums are not met, this will constitute a deficiency on the project that could impact payment to the Contractor or funding to the Department. Department project personnel and the Contractor are responsible for meeting the daily minimum frequency and fraction thereof, thus ensuring adequate samples are taken for the total quantity of material used/paid.

220.02.01 Inspection and Observations Made While Sampling and Testing. Reliance must not be placed wholly on the sampling and testing results to determine the acceptability of the materials and construction work. The sampling and testing must be supplemented by sufficient visual inspection of the materials as a whole to ascertain whether the samples and tests are reasonably representative of the entire mass of material. In addition, there must be sufficient observation of the actual construction operations and processes to ascertain whether they can be expected to consistently produce uniform, satisfactory results.

220.03 Numbering. Field tests will be numbered consecutively starting with test number 1 for each contract item. When a variety of field tests are performed for the same contract item, multiple series of test numbers will be necessary. For example, gradation tests and compaction tests are required for aggregate base. Numbers 1 to 100 could be assigned to gradation tests and numbers 101 to 200 could be used for the compaction tests. Test numbering must be consecutive to verify tests were not skipped or not recorded.

220.03.01 Numbering Check Tests. Circle failing test numbers on the test result form, along with the failing test result. A check test will be performed and numbered as follows:

Compaction and Gradation: The sample numbering will continue sequentially with each test and check test. Add a remark on the check test report to indicate the test is a check test. Note the location where failing material is disposed.

Concrete: The sample numbering will continue sequentially with each test and check test. Add a remark on the check test report to indicate the test is a check test.

220.04 Transporting Flammable and Hazardous Material Samples. The following is reference information to help comply with the shipping regulations. Local conditions and/or regulations may vary and must be complied with when shipping flammable and/or hazardous materials.

220.04.01 U.S. POSTAL SERVICE: Flammable materials [flashpoint below 101°F] cannot be shipped by air mail but can be shipped by surface mail if properly labeled, packaged, and certified. Combustible materials [flashpoint between 101°F and 200°F] can be shipped by air mail when properly packaged, labeled, and certified.

220.04.02 BUS. All flammable and hazardous materials are prohibited – specifically mentions paints. Includes all flammable, combustible, corrosive, and/or caustic materials.

220.04.03 AIR FREIGHT. Flammable materials can be shipped by most air freight companies but must be properly packaged, labeled, and certified. Need to know exact chemicals involved, flashpoints, etc.

220.04.04 PARCEL SERVICES. Shipping of flammable materials is allowed under certain conditions depending on the exact chemical and amount. Packages must be labeled with a flammable sticker and a Hazardous Materials label filled out. The information for the Hazardous Materials label can be obtained by:

- Calling carrier and exactly identifying the chemical to be shipped

OR

- Referring to the carrier handbook, which gives hazard codes, packaging instructions, and certificates required for shipping

Nuclear density gauges have special shipping requirements. If help is needed in arranging for transportation of these devices, contact the Central Laboratory Radiation Safety Officer (RSO).

Table 220.01.1 Materials, Sample Size and Container for Shipping

MATERIAL	MINIMUM SAMPLE SIZE	SAMPLING METHOD	TYPE OF CONTAINER[1]
AGGREGATES:			
Preliminary Base and Surfacing	400 lb	All aggregates will be	
F.A. for Concrete	30 lb	sampled according to	
C.A. for Concrete	55 lb	FOP for AASHTO T 2 /	
P.C.C. Pavement Design (Pit Run)	1,500 lb	FOP for AASHTO R 76.	
P.C.C. Pavement Design (Crushed)	500 lb Coarse	Minimum mass of field	
	300 lb Fine	samples will be based on	
Base Course[2]	80 lb	the maximum nominal size	Canvas Sacks
Surface Course	80 lb	of the aggregates.	or 5 gallon Plastic Buckets
Cover Coat Material	60 lb	Samples for quality testing	
Mineral Filler	25 lb	should be at least 60 lb	
Special Backfill	60 lb	Single aggregate sacks must	
Borrow & Granular Borrow	60 lb	not contain more than 40 lb	
Blotter	30 lb		
SUPERPAVE HMA JOB MIX FORMULA (Submitted by Contractor for Confirmation)	See 405.03	FOP for AASHTO R 66	[1]Screw Top Can
SUPERPAVE HMA	See 405.03	FOP for AASHTO T 168	Cardboard Box of approximate equal dimensions
ASPHALTS:			
PG Binder	Three 1 qt containers	FOP for AASHTO R 66	[1]Screw Top Can
Emulsified Asphalts	1 qt	FOP for AASHTO R 66	[1] Screw Top Plastic Jar
Anti-Strip Additive	4 oz		Glass or Plastic Bottle
CONCRETE:			
Cement/Fly Ash/Silica Fume	1 gal	Idaho IR 143	[1]Cylinder Can
Cylinders	Set of 3	FOP for AASHTO T 23	[1]Cylinder Cans
Curing Compound	1 qt	Idaho IR 7	Metal Screw Top Can
Water	1 gal		Plastic Bottle
Concrete for Chlorides	15 grams pulverized	Idaho IR 128	New 20-Gram Plastic Vial

GLASS BEADS	1- 50 lb Sack		Sack
JOINT MATERIAL	24 in. x full width		
LIME	1 gal	AASHTO T 218	Plastic bucket
METALS:			
Reinforcing Steel (All Grades, All Sizes)	Two - 36 in.	Field sample from shipments delivered to project.	
Dowel Bars for Transverse Joints in Concrete Pavement	Two – Special cut by the supplier- Approximately 36 in.		
Tie Bars for Longitudinal Joints in Concrete Pavement	Two - At least 30 in.	See Section 230.03.02	
Prestressing Reinforcement	60 in. Length each heat number		Ship Straight (do not kink or bend)
Welded Wire Fabric	24 in. Square		Ship Flat
PAINT			
Waterborne	1 qt	Idaho IR 7	Plastic Screw Top Can or Lined Metal Friction Top Can
Solvent	1 qt	Idaho IR 7	Lined Metal Friction Top Can
PIPE:			
Galvanized Coating (Steel Sheet)	2 in. Square	AASHTO M 36	Cardboard Box
SALT	10 lb	ASTM D632	[1]Plastic Wide Mouth or Cylinder Can
SEALANTS (SILICONE)	1 qt		
SOIL & SOIL AGGREGATE MIX			
pH & Resistivity (T 288, T 289)	5 lb	AASHTO R 13	Sealed Non-Metallic Container
Soil Classification (M 145)	5 lb	AASHTO R 13	Sealed Non-Metallic Container
pH & Resistivity & Soil Classification (T 288, T 289, M 145*)	5 lb	AASHTO R 13	Sealed Non-Metallic Container
'R' Value, Soil Classification, pH & Resistivity (IT 8, M 145*, T 90, T 176, T 288, T 289)	26 lb	AASHTO R 13	Sack/ Canvas Bag
Complete Soils Tests (IT 8, M 145*, T 99, T 180. T 100, T 176, T 288, T 289)	50 lb	AASHTO R 13	Sack/ Canvas Bag

Complete Soils Tests Plus Permeability (IT 8, M 145*, FOP for T 99/T180,T 100, T 176, T 288, T 289, T 215)	100 lb	AASHTO R 13	2 Sacks/ Canvas Bags
Complete Soils Tests Plus Resilient Modulus (IT 8, M 145*, FOP for T 99, FOP for T 180, T 100, FOP for T 176, T 288, T 289, T 307) *Note M 145 requires T 88, T 89, T 90 for Classification	100 lb	AASHTO R 13	2 Sacks/ Canvas Bags
GEOSYNTHETICS			
Geotextiles	At least 6 LF across the entire roll width		See Section 230.09
Biaxial Geogrids	At least 6 LF across the entire roll width		See Section 230.09
Uniaxial Geogrids	At least 15 LF across the entire roll width		See Section 230.09
FENCING:			
Barb Wire	6 LF	AASHTO M 280	
Woven Wire	6 LF	ASTM A 116	
Chain Link	3 LF	AASHTO M 181	
Tension Wire	3 LF	AASHTO M 181	

[1]Standard ITD Supply Inventory item; do not re-use a sample container; all sample containers must be new.

[2]If Idaho T 74 (vibrator compactor curve) is required; submit at least 100 lb of material for minus 3/4" material and 150 lb for minus 3" material.

SECTION 225.00 TESTING QUALIFICATIONS. Testing and sampling should be done strictly in accordance with the specified procedures. Standard testing procedures have been developed by organizations such as AASHTO, ASTM, AWS (American Welding Society), WAQTC, and ITD.

Section 590.00 is the ITD STQP and contains all the instructions for the required qualifications.

For areas not covered by STQP, qualification to the appropriate recognized standard is required. An example would be nondestructive testing related to welding inspection, which would be covered by qualification programs of the AWS and American Society for Nondestructive Testing (ASNT). The ITD District Materials Engineer, with the assistance of Construction/Materials and the Central Laboratory sections if necessary, will verify and document the qualification of those not covered by STQP qualification. The Independent Assurance Inspector will evaluate and document the competency of personnel qualified through STQP according to the IA Program. See Section 590.30

SECTION 230.00 ACCEPTANCE OF MATERIALS BY MANUFACTURER'S OR FABRICATOR'S CERTIFICATION.

Standard Specification Subsection 106.04 allows the acceptance of certain materials based on certification provided by the manufacturer or fabricator. The certification must be complete and meet the criteria outlined in this section and any additional criteria if specified in the contract.

230.01 General Provisions. Standard ITD certification forms will be used. The standard forms are:

- ITD-914 Steel
- ITD-849 Geotextile and Geogrid
- ITD-851 Miscellaneous Items
- ITD-966 PG Asphalt Binder
- ITD-968 Cement / Fly Ash
- ITD-875 Non-Structural Concrete

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 ITD 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.

230.02 Certification Program Procedures for Portland Cement and Fly Ash. Cement or fly ash manufacturers approved under the ITD Qualified Products List (QPL) Program can supply cement and/or fly ash to Department projects by certification. The Central Laboratory determines which manufacturing plants have met the requirements for the certification program.

To be approved under the program, the Department will evaluate the following:

- A copy of manufacturer's current quality control program.

- Historical certification records and copies of all test results.
- Certified Mill Analysis test reports for material delivered to Department projects.
- Acceptable verification tests on 10 samples submitted from Department projects.
- Other methods deemed necessary by the Department.

Once approved under the Department's QPL Program, the manufacturer must continue to provide certified test results for all material produced.

If a project sample indicates out-of-specification material based on Department verification testing, additional testing may be conducted to define the extent of the problem. Price reduction or item removal will be required when specified tolerances are exceeded. In the event of continual non-conformance, the manufacturer will be removed from the certification program.

230.02.01 Portland Cement. The Department only accepts portland cement by certification from manufacturers approved by the Department's QPL Program. Cement from manufacturers not approved under the QPL requires pre-approval before use.

The concrete supplier furnishing portland cement to any Department project from a manufacturer approved under the Department's QPL Program must provide to the project inspector, at the end of each week in which concrete is placed, a completed ITD-968 Concrete Supplier's Cement / Fly Ash Certificate form with the cement bill of lading attached with the mill analysis number.

Failure to submit the completed form with the appropriate signatures will result in material rejection.

The cement manufacturer must submit certified mill test reports to the Central Laboratory for all cement produced. The cement manufacturer's certified mill test reports must include:

- Name of the cement manufacture company.
- Location of the cement mill.
- Cement Type.
- Mill analysis number.
- Manufacturer's bin or silo number from which cement was shipped.
- Mill analysis test report date and production period.
- Mill analysis test results pertinent to Idaho specifications.
- Certification statement indicating the cement meets all specification requirements pertinent to Idaho specifications.
- Signature, title, and date by the cement company chemist or other authorized official.

The test result data will be monitored for compliance with the specifications and for the manufacturer to remain under the certification program.

Cement samples must be taken for the project, in accordance with the Minimum Testing Requirements (Section 270.00) and Idaho IR-143, from the bulk tank during unload to the concrete plant silo. Samples must be immediately shipped to the Central Laboratory in Boise in moisture-proof containers. A 6" x 12" concrete cylinder container must be used for the sample, with the lid securely taped shut. The cylinder

container must be completely filled and immediately sealed to eliminate excess air in the sample and to avoid moisture absorption and aeration. **Sample cans received that are not completely filled (discounting normal settling) may be rejected.**

The Contractor or the supplier may take as many cement samples as they want for information only.

Samples are tested for chemical and physical parameters to monitor production characteristics and to verify the certification.

230.02.01.01 Cement Testing. The Central Laboratory groups cement samples according to the manufacturer's mill analysis numbers as the samples are received from projects. Samples with the same mill analysis number are referenced as a mill analysis unit.

The Central Laboratory performs a complete test on the first sample received in the mill analysis unit. The selected sample is tested for all specification parameters. If the first tested cement sample complies with the specifications, The Department will randomly choose one cement sample from the mill analysis unit and perform an alkali test for every 150 tons of cement received for Items 411 and 502 (500 tons for Item 409).

If a cement sample does not comply with the specifications, additional testing will be performed on samples from the mill analysis unit until the extent of the non-compliant material has been determined. The initial and additional test results for each specification item are averaged and the average value for each specification item will be considered the final value. These final values are used to determine compliance or noncompliance of the mill analysis unit.

When test results indicate the cement does not meet specifications, a price adjustment is applied to the entire quantity of material representing that mill analysis unit. The penalty is assessed according to Section 340.05.02 of the ITD Laboratory Operations Manual.

230.02.01.02 Cement Testing Appeal Process. The Central Laboratory retains sufficient cement material from each mill analysis unit for dispute resolution.

If the Contractor wishes to appeal the Department's test results and price reductions, a written appeal request must be submitted within 14 calendar days of the reported test results. The appeal must state the grounds or the circumstances of the appeal. If the test results are in question, the appeal must be accompanied by all of the quality control test results that represent the mill analysis unit in question. The appeal must also be accompanied by Contractor-obtained test results for at least one complete cement test series conducted on the mill analysis in question. The state will not accept appeals when Contractor test results are out of specifications.

When an appeal is accepted, the appeal testing must include all specification parameters for the material in question.

If the appeal is not accepted, the Department will submit a denial letter to the Contractor stating the grounds for the denial.

Appeal testing will be conducted by an independent, AASHTO accredited laboratory, mutually acceptable to the Contractor and the Department. The AASHTO accredited laboratory will report the results to the Department. The results of such tests will be binding to both parties and any price reduction on the unit in question will be based on those test results. The Contractor will agree to bear the costs of the appeal testing if the tests verify noncompliance.

230.02.02 Fly Ash. The Department will accept fly ash by certification only from those manufacturers approved by the ITD QPL Program. Fly ash from manufacturers not approved under the certification program requires pre-approval before use.

The concrete supplier furnishing fly ash to any Department project from a manufacturer approved under the ITD QPL Program must provide to the project inspector, at the end of each week in which concrete is placed, a completed ITD-968, Concrete Supplier's Cement/ Fly Ash Certificate form with the fly ash bill of lading attached with the Sample Identification Number.

Failure to submit the completed form with the appropriate signatures will result in material rejection.

The fly ash manufacturer must submit certified test reports to the Central Laboratory for all fly ash produced. The fly ash source's certified laboratory test reports must include:

- Name of the fly ash source company.
- Plant Origin.
- Sample Identification number.
- Laboratory test report date and production period.
- Laboratory test results pertinent to Idaho specifications.
- Signature, title, and date by the testing laboratory chemist or other authorized official.

The test result data will be monitored for compliance with the specifications and for the fly ash source to remain under the certification program.

Fly ash samples must be taken, in accordance with the Minimum Testing Requirements (Section 270.00) and Idaho IR-143, from the bulk tank during unload to the concrete plant silo. Samples must be immediately shipped to the Central Laboratory in Boise in moisture-proof containers. A 6" x 12" concrete cylinder container will be used, with the lid securely taped shut. The cylinder container must be completely filled and immediately sealed to eliminate excess air in the sample and to avoid moisture absorption and aeration of the sample. **Sample containers received that are not completely filled (discounting minor settling) may be rejected.**

These samples are tested for chemical and physical parameters to monitor production characteristics and to verify the certification.

The Contractor or the supplier may take as many fly ash samples as they want for information only.

230.02.02.01 Fly Ash Testing. The Central Laboratory groups fly ash samples according to the manufacturer's identification numbers as the samples are received from projects. Samples with the same identification number are referenced as a mill analysis unit.

The Department's AASHTO accredited laboratory performs a complete test on the first sample received in the mill analysis unit. The selected sample is tested for all specification parameters.

If a fly ash sample does not comply with the specifications, additional testing will be performed on samples from the mill analysis unit until the extent of the non-compliant material has been determined. The initial and additional test results for each specification item are averaged and the average value for each specification item is considered the final value. These final values are used to determine compliance or noncompliance of the mill analysis unit.

When test results indicate the fly ash does not meet specifications, a price adjustment is applied to the entire quantity of material representing that mill analysis unit. The penalty is assessed according to Section 340.05.08 of the ITD Laboratory Operations Manual.

230.02.02.02 Fly Ash Testing Appeal Process. The Central Laboratory retains sufficient fly ash material from each mill analysis unit for dispute resolution.

If the Contractor wishes to appeal the Department's test results and price reductions, a written appeal request must be submitted within 14 calendar days of the reported test results. The appeal must state the grounds or the circumstances of the appeal. If the test results are in question, the appeal must be accompanied by all of the quality control test results that represent the mill analysis unit in question. The appeal must also be accompanied by Contractor-obtained test results for at least one complete fly ash test series conducted on the mill analysis unit in question. The state will not accept appeals when Contractor test results are out of specifications.

When an appeal is accepted, the appeal testing must include all specification parameters for the material in question.

If the appeal is not accepted, the Department will submit a denial letter to the Contractor, stating the grounds for the denial.

Appeal testing will be conducted by an independent, AASHTO accredited laboratory, mutually acceptable to the Contractor and Department. The AASHTO accredited laboratory will report the results to the Department. The results of such tests will be binding to both parties and any price reduction on the unit in question will be based on those test results. The Contractor will agree to bear the costs of the appeal testing if the tests verify noncompliance.

230.03 Steel. The steel fabricator must complete the standard ITD-914, Steel Certification form for each shipment of a steel product to a project. Certified mill test reports from the steel mill for all heats in the shipment must be attached to the ITD-914 form, except as noted in the MTRs.

The certified mill test report must include the following:

- Name and location of the rolling mill.
- Consignee and/or destination of the shipment.
- Specification.
- Size.

- Heat number.
- Chemical analysis.
- Physical tests.
- Certificate number, order release number or shipment number, etc.
- Signature of authorized official.
- Buy America certification.

230.03.01 Steel Bridge Girders. The Construction/Materials Section will provide inspection during the fabrication of steel bridge girders. The district must contact the Construction/Materials Section as soon as the fabricator is known so the inspection can be scheduled. The inspection may be contracted to an independent company, hired by the Department, when the fabrication is out-of-state.

The Construction/Materials Section will obtain the required certifications, including form ITD-914, Steel Certification, during the fabrication of the steel girders.

The Construction/Materials Section will notify the Resident Engineer by departmental memorandum when the fabrication of the girders is satisfactorily complete and accepted for delivery to the project. Copies of the inspection and certification reports will be forwarded to the Resident Engineer for the project files.

Project personnel should contact the Construction/Materials Section before final erection of the steel girders to schedule an in-place inspection, including, paint, bolting, fabrication tolerances, and field welding.

230.03.02 Metal Reinforcement. The metal reinforcement (reinforcing steel or rebar and cable strand) supplier must submit the ITD-914 form and the certified mill test reports with each shipment of bars delivered to a project site (See Section 230.03).

Metal reinforcement is sampled in the field by Department personnel from shipments delivered to the project. A sample is defined as two 36-inch pieces cut from materials delivered to the project of the same size and heat number. A cable strand sample requires one 6-foot sample cut from every reel. Department inspectors must witness or perform the sampling at the project site.

See Standard Specification Section 503.

The two additional bars which replace the field samples, if from the same heat number, will not require sampling. It is not necessary to resample any bars from a heat number that has previously been tested for the project.

In the event the same heat number is used for a long bar and a shorter bar, the shorter bar will be used for the sample to minimize the cost for the replacement bar.

Some fabricated bent bars may not have a 36-inch length for sampling, however, the sample bars should be submitted and the Central Laboratory will determine if a test specimen can be obtained.

Sampling of bars comprised of spirals will be taken from the extra length of the spiral as required by the specifications. No cutting that would require splicing to obtain samples will be permitted.

In the event of a specialized, non-standard length or size bar, the Central Laboratory should be consulted for the correct sampling technique.

Samples must be promptly shipped or delivered to the Central Laboratory within two working days for testing. Next-day shipping is recommended when necessary. Tests are performed to detect non-specification steel for replacement before incorporation into the structure. Samples must be properly tagged and accompanied by ITD-914, ITD-1044, and the Mill Certifications.

When epoxy-coated steel is specified, the coater must mark the portion of ITD-914 referring to the epoxy-coating and provide a certification statement that the coating complies with ASTM A775. Copies of holiday tests and coating thickness tests representing the shipment will be included. An occasional check of coating thickness will be made on the sample bars during laboratory testing using a dry film paint thickness gauge.

Epoxy-coated steel must be visually inspected for coating damage upon delivery to the project, using criteria of ASTM A775. It is especially important to check the outside of bends for cracking, de-bonding, and rust.

230.03.03 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 must be certified that the steel and iron was 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 (temporality installed), do not require certification.

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 (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.

230.03.03.01 FHWA Q&A on Buy America. Additional information is available at the following website:

https://www.fhwa.dot.gov/construction/contracts/buyam_qa.cfm

Below is a commonly asked question concerning FHWA Buy America.

Question #13. Does Buy America apply to recycled steel?

Answer to #13. No. Although raw materials used in the steel manufacturing process may be imported, all manufacturing processes to produce steel products must occur domestically, including the addition of additives and the application of coatings. However, raw materials such as iron ore, limestone and waste products are not covered. The FHWA's November 25, 1983 final rule defined waste products to include scrap as steel that is no longer useful in its present form (e.g. steel from old automobiles, machinery, pipe, railroad tracks, etc.).

230.04 Concrete Pipe Products. Concrete pipe or related products (catch basins, manhole sections, elbows, etc.) delivered to a Department project will be accompanied by form ITD-851, Miscellaneous Items, completed by the manufacturer certifying that all material furnished was manufactured in accordance with the specifications set forth in the contract. All quantities and sizes included under the certification for that project must be listed on the ITD-851 form.

The ITD-851 form for reinforced concrete pipe (RCP) must certify the concrete strength (psi) and wall thickness of the pipe delivered to the project meets the requirements of the contract.

Manufacturers furnishing concrete pipe and related products must hold current certification under the NPCA Plant Certification Program, the ACPA Q-Cast Plant Certification Program, or PCI Plant Certification.

230.05 Concrete Guardrail and Other Pre-cast Concrete Products. Concrete Guardrail and other pre-cast concrete products are required to meet Standard Specification Section 502. Standard Form ITD-851 must be completed by the manufacturer and list all materials used.

Manufacturers furnishing pre-cast concrete products must hold current certification under the NPCA Plant Certification Program, the ACPA Q-Cast Plant Certification Program, or PCI Plant Certification.

230.05.01 Pre-cast, Pre-stressed Concrete. All manufacturers furnishing pre-cast, pre-stressed concrete girders are required to hold current PCI plant certification.

The Contractor is required to give the Resident Engineer advance notice before starting pre-cast operations for the State. Advance notice will allow Department personnel time to review items 1, 2, & 3,

and perform appropriate testing of items 4, 5, & 6 listed below. Items 4, 5, & 6 will be obtained by Department inspectors or during their presence.

Provide the following items to the Resident Engineer:

1. Shop drawings on 22"x34", approved by the Department.
2. Production schedule for the entire project: what is being produced on what day and a tentative timeframe for pre-placement inspections and placing of concrete.
3. All submittal information and approved mix design.
4. Aggregate samples with ITD-1044 to confirm gradation.
5. Cement/Fly Ash/Slag Cement sample with ITD-1044, Mill Analysis, and Bill of Lading.
6. Reinforcing samples – Rebar, Strand, Misc. connections/parts with ITD-914, ITD-1044, and all Manufactures Mill Analysis/Certifications.

The Department requires 5 working days to review and test items mentioned above to ensure compliance with the specification.

The Department will conduct random inspections at precast facilities to verify release strengths before removal of forms, stressing release and the stressing of the cable strand during pre-placement operations.

Precast manufacturers are NOT to do any type of work on a Department item until a Department Inspector or equivalent has had the opportunity to inspect the product after it has been removed from the form. Once removed from the form, the product is to be set in the precast facilities storage area and await Department approval. The piece must be marked accordingly or communication must be made with precast facilities management.

The Contractor is required to give 48-hour notice to the Resident Engineer before shipping items to project site. This allows the Department time to check products in the precast yard for final inspection and sign-off. Products will have the precast facilities Quality Control Manager's initials or signature on them before final plant inspection of the product. The Precast facility must furnish a tag or identification sticker to initial and apply to the product, signifying the Department has done a final inspection and the product is ready to be loaded and shipped.

The Department will provide on-site inspection of the manufacturing process of each member, including acceptance, field sampling, and testing as required per Section 270.00 Minimum Testing Requirements. The Department inspector will provide written acceptance of each girder to the Resident Engineer by interdepartmental memo. The Resident Engineer is required to perform on-site inspection for acceptance of the girder upon delivery to the project and throughout the installation of the member. No member will be accepted that contains failing material.

The documentation of the samples and testing, as well as required manufacturer's certification, will be collected by the Department on-site inspector at the manufacturing plant and the originals provided to the Resident Engineer with the acceptance memo.

230.06 Concrete with Specified Strength 3000 psi or Less (Including Seal Concrete). When 3000 psi or less concrete is specified, the concrete may be accepted by certification if produced using a qualified aggregate source. Section 265.02 explains the requirements for qualification of aggregate sources. The concrete mix design must be submitted for review.

The concrete producer must furnish a signed, completed ITD-875 form with the class and concrete mix design designation listed. Department project personnel will provide project placement locations on the form.

The specifications require the producer or Contractor to perform quality control field tests and compressive strength tests for concrete placed on the project. The test results must be attached to the ITD-875 certification.

Follow the requirements of Section 230.03 when concrete products require metal reinforcement.

230.07 Corrugated Metal Pipe and Corrugated Plate Pipe. The supplier will furnish a completed ITD-914 Steel Certification form, covering the quantity of steel shipped to the project. The ITD form will be accompanied by mill test reports from the pipe manufacturer for all heats of steel involved. A certification will be attached to the ITD-914 and be accompanied with Quality Control test results from the galvanizer indicating the galvanized coating complies with the applicable specification. The appropriate AASHTO or ASTM specifications must be referenced on the form.

For aluminum corrugated metal pipe, the supplier must furnish a completed ITD-851 form from the pipe manufacturer, citing appropriate AASHTO or ASTM specifications in accordance with the contract.

Visual inspection is required at the project site to check for obvious defects, including damage in handling and shipping. Coated or bare galvanized pipe must always be checked for damage or visible gaps in the protective layers.

Bituminous coating must be verified by field inspection.

230.08 Plastic Pipe. The supplier will furnish a completed certification ITD-851 form from the pipe manufacturer, citing appropriate AASHTO or ASTM specifications in accordance with the contract. Final acceptance is subject to visual inspection for damage in shipping or handling or other obvious defects.

230.09 Geosynthetics. The Contractor must furnish the manufacturer's certified test results and the completed ITD-849 form covering the quantity furnished to the project.

- The documentation and sampling for the Department will be in accordance with Standard Specifications Subsection 718.02 and 718.03 for geotextiles; the contract special provisions for Geogrid (See also Section 270.60, MTR Section 640).

- Silt Fence; see Section 270.10, MTR Section 212-1.
- Pavement Fabrics; see Section 270.30 MTR, Section 405.8, and Standard Specifications 718.02 and 718.08
- For handling and disputes; see Standard Specifications Section 106.06 and 106.07 respectively

230.09.01 Shipping Procedures. Follow the procedures below to ship the samples. Placing multiple samples in a capped tube is acceptable and preferred as follows.

230.09.01.01 Geotextile:

1. Fold the sample to match the uncut selvedge edges.*
2. After rolling the first sample, place the documents under the outside layer.
3. Use a paint pen (silver is preferable) to identify the sample with key #, pay item #, and sample #.
4. Roll the next samples on over the previous ones.
5. Shipping is available on the contracted freight trucks between the District Supply Offices and HQ. Tubes are returned to the district of origin.

230.09.01.02 Geogrid*:*

1. Fold the sample to match the uncut selvedge edges.*
2. Roll the sample from the fold and tie as necessary.
3. Place the required documents securely under the outside layer.
4. Ship as above.

***Selvedge** - The longitudinal edges of a fabric are formed in such a way to prevent unraveling.

Acceptance of geosynthetics must be in accordance with ASTM D 4759 Standard Practice for Determining the Specification Conformance of Geosynthetics.

230.10 Performance Graded Asphalt Binder. The supplier must submit, on a yearly basis, a Quality Assurance plan to the Central Laboratory for Performance Graded Asphalt Binder, see Section 255.00.

230.10.01 Certification. ITD-966, PG Binder Supplier's Certification, accompanies the initial shipment of PG binder to the project. Qualified personnel must furnish this form with each lot change of PG binder shipped to the project. The Supplier will attach a completed ITD-966 form to the bill of lading that represents the first shipment of each new lot.

230.10.02 Sampling. The first load of asphalt binder delivered to the project must be sampled from the delivery truck. Thereafter, each shift that produces plant mix requires a binder sample comprised of three one-quart cans. The Department determines, at a random time, when to take the samples from the mix plant's asphalt-binder tank injection line. Representatives of the Department and the Contractor, one of which must be WAQTC Asphalt qualified, must obtain or witness the sampling. Both parties must then sign the ITD-859 sample identification form. The Department must retain all three

quarts of the samples. Purge at least one gallon from the injection line valve before taking the sample and adhere to FOP for AASHTO R 66.

Send all three cans to the Central Laboratory. Two quarts are for the Department's verification testing and one quart is for dispute resolution. The Contractor or the supplier may take as many samples as they want for information only.

Note: Standard Specifications, Section 405.03.C – Mixing Plants, states "provisions shall be made for measuring and sampling contents of the (PG binder) storage tanks." Personnel must be aware that the injection line is usually under pressure. The Contractor must provide a safe means to obtain the random samples.

When mix plant operations are just starting or after being suspended for more than 48 hours, the sampling sequence must not begin with a completely random sample; instead, take this binder sample near the beginning or at the resumption of operations.

Samples must be submitted to the Central Laboratory for testing no later than 30 days after the sample date.

230.10.03 Binder Verification Unit. The quantity of binder used in one week's production of plant mix, except as modified in the remainder of this subsection, constitutes a binder verification unit. A binder verification unit is comprised of daily binder samples.

A binder unit must include only one PG grade. Thus, if the PG grade is changed within a production day, one daily binder sample will be taken for each PG grade used and grouped with other daily binder samples representing the corresponding binder verification unit.

Complete the ITD-859 PG Binder Sample Identification Form. The daily binder sample, comprised of three individual quart cans, must be labeled with the sample identification numbers (i.e., 2001-C for the first day, 2002-C for the second day, etc.). Include the daily binder sample identification number and sample date on each sample. The Department and the Contractor must sign the form for each daily binder sample and indicate on the ITD-859 form the date when a supplier's binder lot changes. Idaho IT-99, Presence of Anti-Strip, must be completed in accordance with the required frequency as shown in Section 270.30, Minimum Testing Requirements. Record these results on the ITD-859 form.

The Contractor is responsible for inspecting or certifying their storage tank for contamination.

230.10.04 Testing. The Central laboratory will randomly choose one daily binder sample from each unit to represent the entire unit and either completely or partially test the selected daily binder sample. If the tested PG grade complies with the specified PG grade properties, the binder unit will be accepted. If the PG grade does not comply with the specified PG grade, additional testing will be performed on the verification unit until the extent of the non-compliant material has been determined.

If multiple tests are conducted on the same binder sample, the initial and additional test results for each specification item will be averaged and the average value for each specification item will be considered

the final value. These final values will be used to determine compliance or noncompliance. Non-compliant materials will be subject to the price reduction as specified in the ITD Laboratory Operations Manual.

230.10.05 Appeal Process. The Central Laboratory will retain one daily binder sample for dispute resolution.

If the Contractor wishes to appeal the Department's test results and price reductions, a written appeal request must be submitted within 21 calendar days of the reported test results. The appeal must state the grounds or the circumstances of the appeal. If the test results are in question, the appeal must be accompanied by all of the quality control test results and worksheets that represent each verification unit in question. The Contractor must also supply complete PG binder test results on all daily binder samples in question. The state will not accept appeals when Contractor test results are below the minimum specifications.

When an appeal is accepted, the appeal testing must include all specification parameters for the material in question. If the appeal is not accepted, the Department will submit a denial letter to the Contractor, stating the grounds for the denial.

Appeal testing must be conducted by an independent, AASHTO accredited laboratory, mutually acceptable to the Contractor and the Department. The AASHTO accredited laboratory will report the results to the Department. The results of such tests will be binding to both parties and any price reduction on the unit in question will be based on those test results. The Contractor will agree to bear the costs of the appeal testing if the tests verify noncompliance.

Anti-strip additives must be on the QPL before use, see Section 240.02.

230.11 Emulsified Asphalt. The supplier must submit, on an annual basis, a Quality Assurance Plan to the Central Laboratory for emulsified asphalt, see Section 256.00.

A supplier's bill of lading must be furnished to the inspector with each load of liquid asphalt or emulsion supplied to the project. The bill of lading must contain the following information in accordance with Standard Specification Section 702.05 and 702.08:

- Date of delivery, project number, key number, county, bill of lading number, and name of customer.
- Product identification, tonnage, truck/trailer number, specific gravity, Saybolt viscosity for emulsified asphalt, and signed certification statement.
- Supplier's name, address, and phone number.

Department project inspectors only sample undiluted emulsified asphalt, as received from the Supplier, for verification testing in accordance with the individual bid schedule items in Section 270.00 Minimum Testing Requirements.

Department project inspectors perform field viscosity testing on sealcoat emulsions as required by the Minimum Testing Requirements in Section 270.00, Section 403 from the truck on the project site or at a

location as close to the project as practical. The Contractor must provide a safe means for obtaining the emulsion samples, including but not limited to fall protection, heat resistant clothing and gloves, etc.

230.12 Seeding. For Contractor Furnished Seed, the Contractor must provide official certification tags with tests results for each seed species and verify it meets the contract specifications. The Contractor must verify the company or person(s) providing the seed holds a valid Idaho Seed Dealer's License issued for the current year and must meet all provisions of the Idaho Pure Seed Law. Before acceptance, a member of the Association of Official Seed Certifying Agencies (AOSCA) or state laboratory must provide seed certification tags and test results as well as validate that the seed has been tested within the current year. The official AOSCA tag or report must accompany each species and be submitted to the Engineer at least sixty (60) working days before seeding. The official tag or report must indicate seed classification, seed germination rate, seed germination purity, lot number, number of weed seeds, number of noxious weed seeds, and number of crop seeds. All restricted, prohibited, and noxious weed seeds found during testing must be displayed in an official AOSCA tag or report. All seed bags (Department or Contractor-supplied) must have the analysis (certification) tag attached and secured to each bag or container.

No additional seed tests are required for Department-supplied seed if the project meets all of the following parameters:

- Project has two acres or less to be seeded.
- Project is using seed from district stored seed inventory.
- Seed to be used has original certification tags attached to the bag(s).
- Seed tags indicate seed tests were conducted within one year from the date of seeding or seed was tested at ISDA for purity and germination rates within one year of the date the project will be seeded.
- Seed samples are taken and tested to verify seed germination rate and purity as well as absence of noxious weeds. Seed germination and purity can be drastically reduced between the time it is originally tested and when it is actually seeded. For this reason, the Department requests seed to be tested 6 weeks before seeding. If there is inconsistency with seed germination and/or purity information on the tags and the current test results, the Department can adjust the seeding rates in the field to obtain optimal seed germination and increase the success rate.

One random sample from unblended and individually packaged seed containers from each species and each lot must be obtained and placed in a one-gallon size heavy-duty zipped plastic bag (See note 1 below). The samples must be submitted to the Idaho State Seed Laboratory for analysis and verification. The sample must not be taken from the top layer of the container. Send the completed ITD-1044 form to the test lab with a copy of the seed certification tags and seed samples. Refer to the instructions for the ITD-1044 so all required information is included. Allow 30 days for testing and receiving official test results. The test results must show the seed meets the contract specifications before seeding. ISDA will email the test results to the Resident Engineer and copy the HQ Roadside Program Manager. After receiving the test

results, contact the Roadside Program Manager for acceptable purity and germination limits and acceptable seeding rates before seeding. The test lab will return all useable seed if the Resident Engineer's address is shown on the ITD-1044.

Address: Idaho State Seed Lab
2240 Kellogg Lane
Boise, ID 83712

Note 1: Fill the one-gallon bag approximately half full for medium seed species including wheatgrasses, squirreltail, and wildrye (150 g). Fill the one-gallon bag approximately full for large seed including grain, Lupines, Biscuitroot, Bitterbrush and similar size seed, as well as Brome species and Woods Rose (550 g). Fill the one-gallon bag approximately one-quarter full for small seed species including fescues, saltgrass, alfalfa, clover, and blue flax (70 g). Fill the one-gallon bag approximately one-eighth full for very small seed species including bluegrasses, penstemon species, sagebrush, rabbitbrush, globemallow, and yarrow, (40 g). All other large seed types require a full one-gallon bag. For species not covered here, refer to ISDA website for specific species sample weights: http://www.agri.state.id.us/Categories/Laboratories/Seed/sampleWeights.php

The State Seed Lab will bill the Resident Engineer for the testing. Contact the District Business Manager or District Records Inspector for charging the costs to the project.

230.13 Miscellaneous Items Accepted by Certification. Certification of miscellaneous materials is acceptable as defined in this section.

230.13.01 General Provisions. In addition to the materials discussed individually in Section 230.00, the following miscellaneous items may also be accepted on the basis of the manufacturer's or fabricator's (not the supplier unless the supplier is also the manufacturer) certification, using form ITD-851 signed by the manufacturer's representative who has quality control responsibility. The material must be manufactured in accordance with specification requirements. Each certification must detail the quantity of material furnished to the project under that certification. Laboratory test reports must also be furnished where applicable (e.g., steel mill test reports, wood preservative treatment reports).

230.13.02 List of Miscellaneous Materials Accepted on the Basis of the Manufacturer's or Fabricator's Certification. Table 230.1 lists miscellaneous items that may be accepted by certification. The manufacturer's or fabricator's certification will not preclude the sampling and testing of the material or its final acceptance or rejection on the basis of the test results. Project samples are to be taken, as indicated in the Minimum Testing Requirements (Section 270.00), for verification testing. Samples may also be taken and tested at the option of the Materials Engineer or Resident Engineer.

Visual inspection for obvious defects and handling and shipping damage should always be done. Where feasible, simple measurements of specified properties must be spot-checked at least once per project and recorded to verify certification (e.g., measuring length, mass per unit length, thickness of steel items).

Table 230.1 Miscellaneous Materials Accepted by Certification

Material	Standard Specification **Section**
Bearing Pads and Plates	507
Brick and Blocks, Masonry	Miscellaneous
Bridge Rail, Metal	504
Concrete, Rapid Set	Special Contract Provision
Delineators and Mileposts	617
Dowel Bars and Tie Bars for Concrete Pavement	409, 503, 510, 609, 611
Dust Oil	Miscellaneous
Electrical	Miscellaneous
Epoxies	Miscellaneous
Epoxy Patch	Miscellaneous
Guard Rail and Posts	612
H-Beam Piles	505
Illumination Poles and Bases	619
Joint Sealants and Sealers	409, 502, 625
Paint (only small quantities less than 25 gallons (100L))	504, 505, 627
Sewers (Storm and Sanitary)	605
Signs and Posts	616
Steel Shell Piling	505
Structural Bolts	504
Timber (Structural)	609, 612, 616
Traffic Signal Poles and Mast Arms	656

SECTION 240.00 PRE-TESTED AND PRE-QUALIFIED MATERIALS.

240.01 Pre-tested Materials. The following materials require pre-testing before acceptance on a project.

- Traffic Line Paint
- Glass Beads
- Curing Compound

The Department project personnel must verify the material/product is approved before use on a project. Those materials/products deemed acceptable will appear on the pre-approved list found on the ITD Central Laboratory Intranet page or on a list obtained from the Central Laboratory.

240.01.01 Bulk Material/Products Sampled at the Manufacturing Plant. A major portion of the pre-tested products are sampled at the manufacturer's plant for bulk production. The Central Laboratory is responsible for obtaining the samples at the plants and testing such material.

240.01.02 Materials/Products Sampled at the Project. Department project personnel must obtain samples, or witness the sampling, at the project site when the lot/batch of traffic line paint, glass beads, or curing compound is not shown as pre-tested or pre-approved.

The samples will be obtained from the material delivered to the project and sent to the Central Laboratory for testing. Allow 30 days for the testing. The material must be accepted before use. The sample must be properly identified with sample date, sampler's name, the product & manufacturer, and the lot or batch number.

240.02 Pre-Qualified Materials. The Department established a Qualified Products List (QPL) to formalize the process for the use of pre-qualified products on Department highway projects. The list of pre-qualified products is disseminated via the Department's official website to department staff, materials suppliers, manufactures, consultants, and Contractors.

QPL products still need the appropriate tests and certifications required by the contract in order to be accepted on the project.

The QPL is administered by the Product Review Committee (PRC). Activities of the PRC are coordinated by the QPL Program Administrator. Details of the QPL program are described on the QPL webpage:

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

Documentation (such as a printout of the QPL page showing approval of the item) must be placed in the project files and posted in the MSR for QPL items that were on ITD's QPL at the time of the project.