

Appendix B – Final Materials Certification

A Final Materials Certificate (FMC) is issued for each project and summarizes the results of quality assurance testing of the material and assurance testing personnel and equipment used on the project. The responsibility of the Division of Materials Testing, when all material used on the project are sampled and found to meet the specification, and all the testing personnel and equipment on the project are found to be in good working order and performing the tests according to specification, is to issue a Final Material Certificate without exceptions. All testing must be complete in accordance with the “Minimum Schedule of Sampling Materials for Test”, Chapter 7 in this manual. Frequency of testing must also be met so that the total quantity of material used on the project is represented by acceptable samples.

It is also the responsibility of the DMT to identify what material or testing personnel/equipment that did not meet the project specifications or testing standards. This is accomplished through the issuance of a FMC listing exceptions to the specifications.

When material does not meet specification a form, the MAT- 103 “Report of Rejected Material” is used to document how the deficiency was addressed. This form must be completed for any rejected material samples, and must include the signatures of appropriate Project and District personnel acknowledging the rejection.

Section 1 of the Form, “Action Taken” describes the physical action taken to retest or replace the material. This addresses when rejected materials were removed and replaced with acceptable material, or were resampled and found acceptable. The Lab # of the acceptable re-test is required on this form. Within the DMT, this form requires the review and dated initials of Supervising Engineers, to acknowledge that the rejected material was addressed. If physical action was not taken, Section 2 of the MAT 103 must be completed.

Section 2 of the Form, “Alternate Acceptance of Rejected Material” documents the acceptance of non-compliant materials or minor quantities of untested materials in accordance with Section 1.06.02 of the Department’s Standard Specification. This Section states that the Engineer may accept a material or combination of materials and therefore waive noncomplying test results, provided that all of the following conditions are met:

1. Results of prior and subsequent series of tests of the material or materials from the same source or sources are found satisfactory.
2. The incidence and degree of non-conformance with the Contract requirements are, in the Engineers judgment, within reasonable limits.
3. The contractor, in the Engineers judgment, had diligently exercised material controls consistent with good practices.
4. No adverse affect on the value or serviceability of the completed work could result.

Supervising Engineers within the DMT must carefully review this section to ensure the material can be accepted under this criteria. Projects that did not perform any testing would obviously not meet the above, while a job that utilized minor amounts of non-conformant material from a producer who generally meets requirements may meet the above. Exception can be taken and noted on the Final Certification if it is determined by the DMT that the alternate acceptance criteria has not been met.

Adequate Assurance Testing: Project related assurance testing is required as specified in the minimum schedule, or Exceptions for deficiencies will be noted on the Final Materials Certificate. This does not include internal Assurance Testing requirements that are not directly associated with the project, and are described in Appendix H.

Examples of Final Materials Certificates follow.

The following memorandum is addressed to the Administrator of Construction and is required for all Federal aid projects.

STATE OF CONNECTICUT

DEPARTMENT OF TRANSPORTATION

Memorandum

COM-09A REV. 2/91 Printed on Recycled or Recovered Paper

to [Name]
Construction Administrator
Bureau of Engineering and
Highway Operations

subject MATERIALS CERTIFICATION
STATE PROJECT NUMBER: [XXX-YYY]
FAP No: [ABCDEFGHIJ]

date [Month, day year]

from [Name]
Director of Research and Materials
Bureau of Engineering and
Highway Operations

THIS IS TO CERTIFY THAT:

Results of tests on acceptance samples indicate the materials incorporated in the construction work and the construction operations controlled by sampling and testing were in conformity with approved plans and specifications, and that such results compare favorably with the results of independent assurance sampling and testing.

Exceptions to the plans and specifications are documented in the project records and are also listed below:

1. (If these are too numerous an attachment is used to list them. An example of this attachment is shown on the following page.)
- 2.
- 3.
- 4.

If you have any questions regarding this information, please contact [Name], Supervising Materials Testing Engineer, at this office. His Telephone number is (860) 258-[XXXX].

{Author}:[typist]/[Drive location/filename]

cc: [Name of District Engineer] - District [X]
[Name of District OOC liason]
[DRM NAME] - DMT Files

Attachment

To: [Construction Administrator]
From: [Director of R&M][month day, year]
STATE PROJECT NUMBER: [xxx-yyy]

EXCEPTIONS - ITEMS NOT TESTED

<u>Item No.</u>	<u>Final Quantity</u>	<u>Final Quantity</u>
1.12	Detour Signs	400 SF
2.7	Pervious Structure Backfill	60 CY
2.8	Class A Concrete	87 CY
2.13	Dampproofing	60 SY
2.18	Concrete Handhole	1 Ea.
2.21	T.C. Fnd. Spanpole	2 Ea.
2.22	T.C. Fnd. Type I	3 Ea.
2.23	T.C. Fnd. Controller type 4	1 Ea.
2.34	Loop Detector	3 Ea.
2.62	Alum. Sign Face	265 SF
2.65	4" Yellow Painted Lines	1808 LF
2.66	4" White painted Lines	1729 LF
2.67	Painted Legend Arrows	100 SF
2.70	Street Light Pole Bases	28 Ea.
2.84	Metal Beam Rail	1 Ea.
5.14	Compacted Gravel Backfill	350 CY
5.24	Catch Basin	2 Ea.
5.30	Replace C.B. Top	2 Ea.
5.38	30" R.C.P.	352 LF
8.13	5" Concrete Sidewalk	831 SF
8.14	8" Concrete Sidewalk	658 SF
8.16	Processed Agg Base	515 CY
8.17	Bit. Pave Class I	561 Ton
8.27	20"x8' Sliding Chain Link Fence	1 Ea.
8.28	4" White Pave Marks	2112 LF
8.29	Painted Legend, Arrows	2 SF
8.31	2' Concrete Retaining Wall	60 LF
8.36	Bit. Curbing	3250 LF
8.43	2" RMC	614 LF
8.45	Aluminum Sliding Gate	1 Ea.
8.46	Swing Gate	1 Ea.
8.48	4' PVC Chain Link Fence	33 LF
8.52	5' Pedestrian Gate	1 Ea.

The following memorandum is addressed to the Administrator of Maintenance and is required for all maintenance projects funded with Federal aid funds.

**STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION**

memorandum

COM-09A REV. 2/91 Printed on Recycled or Recovered Paper

Project No. XXX-YYYY
FAP No.: [yyy-XXXXXXXX]

date [Month Day, Year]

to [Name]
Transportation Maintenance Administrator
Bureau of Engineering and
Highway Operations

from [Name]
Director of Research and Materials
Bureau of Engineering and
Highway Operations

THIS IS TO CERTIFY THAT:

Results of tests on acceptance samples indicate the materials incorporated in the construction work and the construction operations controlled by sampling and testing were in conformity with approved plans and specifications, and that such results compare favorably with the results of independent assurance sampling and testing.

Exceptions to the plans and specifications are documented in the project records and are also listed below:

- 1.
- 2.
- 3.
- 4.

[Author]:[typist]/[drive location/file name]

cc: [Name(s) District maintenance]
[Name Capital Services]
[Name DMT] - DMT File

The following letter is addressed to the FHWA Division Administrator and is required for all Department projects funded with Federal aid.

[Month Day, Year]

[Name]
Division Administrator - HPR-CT
Federal Highway Administration
628-2 Hebron Avenue - Suite 303
Glastonbury, Connecticut 06033

Dear [Name]:

Subject: MATERIAL CERTIFICATION
State Project Number: [XXX-YYY]
Federal Aid Number: [MGS-STPA/B-951(151),]
[STPA-STPB-95-1(151)2]

THIS IS TO CERTIFY that results of tests on acceptance samples indicate the materials incorporated in the construction work and the construction operations controlled by sampling and testing were in conformity with approved plans and specifications, and that such results compare favorably with the results of independent assurance sampling and testing.

Exceptions to the plans and specifications are documented in the project records and are also listed below:

- 1.
- 2.
- 3.

Sincerely,

[Name]
Director of Research and Materials
Bureau of Engineering and
Highway Operations

[Author]:[typist]\[Drivelocation]/[file name]
bcc: [Name Manager of Construction]
[Name District Engineer] - District [X]
[Name -Cap Services]
[Name DMT] - DMT Project Files
bcc: [Name] -FHWA-CT