

Failed Materials Committee Update

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Director, Division of Materials and Tests



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Failed Materials Committee

- Spec
- History
- Current Committee
- Directive



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Failed Materials Committee

101.24 Failed Material

Material or a finished product determined not to be in accordance with applicable specifications or tolerances and that has been adjudicated by the Department's Failed Materials Committee or other Department representatives in accordance with 105.03.

If the Engineer finds the materials or the finished product in which the materials are used are not within reasonably close conformance with the plans and specifications but that reasonably acceptable work has been produced, the Engineer will determine if the work will be accepted and remain in place. In this event, the basis of acceptance will be documented by contract modification which will provide for an appropriate adjustment in the contract price for such work or materials as deemed necessary to conform to the determination based on engineering judgment.

If the Engineer finds the materials or the finished product in which the materials are used or the work performed are not in reasonably close conformance with the plans and specifications and have resulted in an inferior or unsatisfactory product, the work or materials shall be removed and replaced or otherwise corrected with no additional payment.



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Failed Materials Committee

- Met as a Committee monthly
 - Chairman – Chief Engineer
 - Members
 - Chief, Materials and Tests Division
 - Chief, Contracts and Construction Division
 - District Director or appointed representative
- Around 2010, Committee moved away from regular meetings
- Committee business handled via email
- While efficient, collaboration was muted



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Failed Materials Committee

- January 2020
- Resumed monthly meetings
- Added/Amended members
 - Asset Management – Jason Lowther
 - Construction – Joe Novak
 - Design – Jeremy Hunter
 - Materials – Jim Reilman
- More participation
 - Research (Tommy Nantung)

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Failed Materials Committee

- June 2021
- Field Investigation Engineer – David Jacobs
 - FMC Point of Contact
 - Schedules meetings
 - Prepares agenda and takes minutes (via Teams/OneNote)
 - Sends all FMC correspondence
 - Perform field visits
 - Provides technical guidance as needed
 - (Also SiteManager/AASHTOWare Project)

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Failed Materials Committee

- What should go to FMC?
 - Material testing failures
 - Wrong/unapproved material used
 - Everything else?
 - “Visual” failures
 - Specs not followed
 - Cold weather concrete curing, no trial batch, etc.
 - Do these need to come to FMC?
 - Case-by-case



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FMC Workflow

- Failure happens
- Information Collected
 - How does Tommy fit in?
- District Testing generates pink sheet (TD-305)
- Pink sheet sent to Dave Jacobs
- Case # generated
- Case sent to appropriate section
- Section recommends an adjudication
- Adjudication is presented at next FMC meeting for concurrence



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FMC Workflow (continued)

- Letter is sent to Prime Contractor
- Contractor can appeal within 15 days
- All Contractors have right to an appeal hearing
 - 30 minutes
- Chief Engineer (Greg) and FMC will discuss and make a final decision
- Final decision sent to Prime Contractor



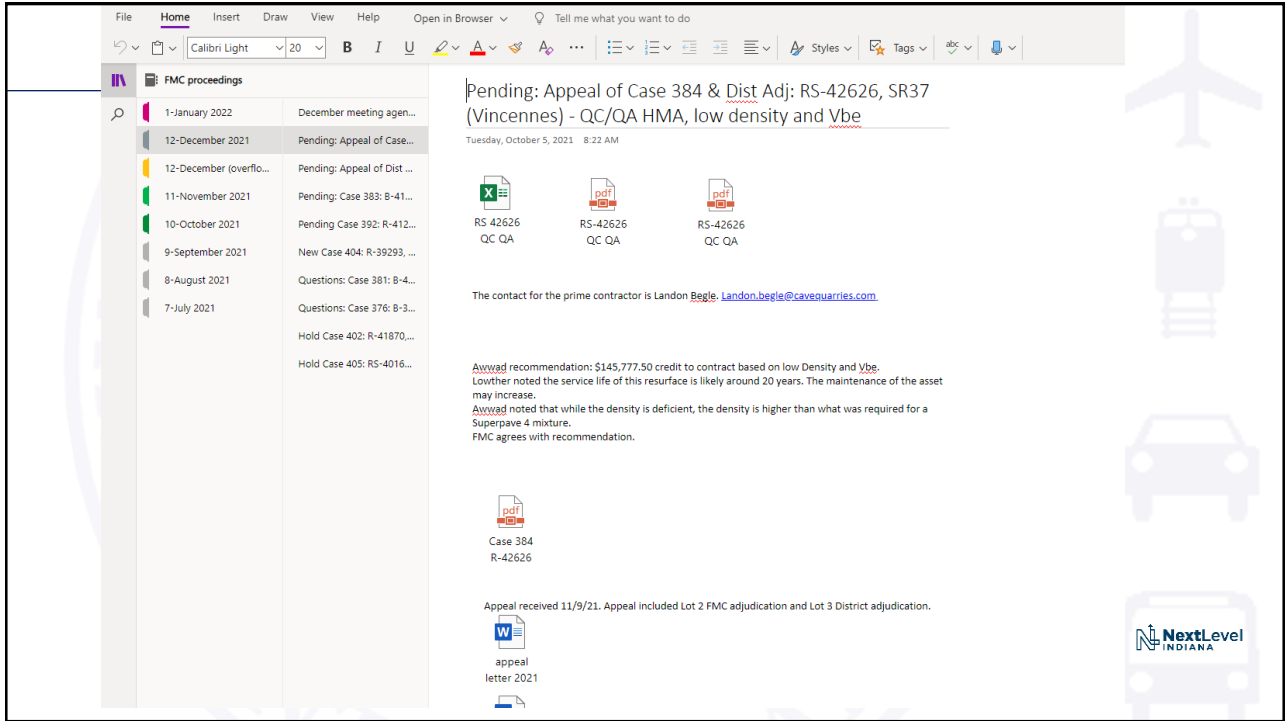
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Failed Materials Committee

- Teams/OneNote



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Failed Materials Committee Stats

Number of Cases	46		
Number of Cases Appealed	8		
Average days to adjudicate	23		
Average credit	\$ 29,253.33		
Largest Remain-in-place credit	\$148,050.35		
Number of Failures, by Type		Most Common Case	
Aggregate	3	Incorrect Material Used for Structure Backfill, Type 2	
Concrete	8	PCC, Class C, Superstructure (Bridge deck cracking)	
HMA	27	QC/QA HMA, Density	
Miscellaneous	8	Threaded Tie bars (not being tested)	
Number of Failures, by District		Avg Days to Adjudicate	
Crawfordsville	7	21	
Fort Wayne	6	25	
Greenfield	11	10	
LaPorte	13	30	
Seymour	5	32	
Vincennes	4	28	

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Failed Materials Committee

- Areas for improvement
 - More District information and participation!
 - Standard pink sheets statewide
 - Standardize the information collected
 - Output to Asset Management on effect of failures
 - Directive 112 updates



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Thank you!

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