

HMA Construction Pre-Work Checklist
PRE-WORK SHEET FOR PROJECT MANAGERS

- 1 Signed Proposal Received?
- 2 Review Proposal, highlight important facts. Know proposal well to be able to find answers quickly.
- 3 Review and check quantities for accuracy.
- 4 Have any items been noted that need addressed during the pre-con meeting?
- 5 Are any pictures needed to be taken for a later date: (i.e. striping, widenings or signing)?
(Can also use KGATE or videolog to review)
- 6 Is the contract on CMS?
- 7 Is the contract downloaded on project manager's laptop?
- 8 Print "Contract Materials Report Final" now.
- 9 Have "Mix Designs" been submitted by the contractor and put on CMS by Materials?
- 10 Once mix designs have been created, check and/or correct all "Primary Material Codes" for those line items. Review all remaining line items for proper material codes.
- 11 Remove any components to line items on CMS that will not be used on project.
- 12 Visit plant site and make sure that the aggregate stock piles to be used are in fact the same as those on the mix design.
- 13 Create All Field Books (Lab, Road, etc.)
- 14 Make personnel assignments for job (i.e. Nuke, Lab, Ticket Taker)
- 15 Are all Subcontractors approved for this project?
- 16 Station the project.
 - Split the project if contractor is not required to.
 - Make sure the contractor splits the entire roadway. Not just measuring in from one side.
- 17 Speak with Maintenance and make sure that temporary "Pass with Care" and "Do not Pass" signs are installed (where applicable).
- 18 Is patching needed? If so; mark it out. If not; change order off.

- 19 Did you get Traffic Control certifications at Preconstruction Meeting?
- 20 Has "Notice to Proceed" been issued?
- 21 Inventory traffic control signs. Is the **quantity and quality** correct for this project.
 - Are the signs / stands NCHRP 350 Compliant? Need letter stating this in file.
 - Discuss uneven lanes signs if required
 - Check flagger certifications
 - Discuss wait for pilot car signs and additional flaggers required
- 22 Have a copy of the original 402 on hand at all times to see how the design was done.
- 23 Notify "District Materials" for witnessing and pre-production(s).
- 24 Does the contractor have any haul roads to designate
 - Yes, contact county/city representative and contractor to document existing condition of roads
 - After project, review designated haul roads and have contractor fix to same or better condition
- 25 Discuss daily profilograph procedures and requirements with contractor
- 26 Record and verify that the contractor has permits for plant site
(KDHE, Bureau of Water, NPDES General permit packet)
- 27 Form 219 For stormwater pollution been filled out and submitted to District
- 28 Does the contractor have a stored material request?
 - Yes, enter into CMS and create conversion factor
- 29 Does the contractor have a request for payment for contract
 - Yes, enter into CMS

HMA Construction Checklist "FIELD LAB"

- 1 **All original Contractor and KDOT documentation (for QC/QA Projects) must be in bound books.**
- 2 Get lab equipment and office supplies ready. **See specific list of lab equipment.**
- 3 Is lab certification current? If not, have "District Materials" certify the lab.
- 4 Get latest version of F&T and Sublot Report spreadsheets from "District Materials".
- 5 Review contract special provision, errata sheets and have contract available at the lab
- 6 Get oil sampling frequencies from CMS for each type of oil and producer. (Re-check monthly)
- 7 Get list of "pre-qualified" oil producers off of the PQL list.
- 8 Are producers prequalified for the type of oil the plant is receiving from them for use on the project?

Visit with plant manager about where to get daily plant paperwork
- 9 (oil stabs, daily aggregate charts, oil tickets etc.) and who will get oil samples etc.
- 10 Get copies of scale certifications from plant and make sure they are up to date.
- 11 Get Q/C lab technician's certifications off CMS.
- 12 Is the Q/C lab equipment calibrated and up to date?
- 13 Collaborate Q/C with Q/A lab technicians so procedures are understood.
- 14 Create files for paperwork (i.e. Q/C tests, Bit. Mix. Analysis, Densities etc.).
- 15 Create a list with all Material Codes, Producer Codes, Mix Designs, Nuke Meter Numbers, Inspector Id's, Plant Number, Phone Numbers etc. to put up on the wall for ease of data entry.
- 16 If possible, run Individuals, so as to avoid problems in the mix prior to job starting.
 - a. Are stockpiles identified correctly?
 - b. Separated correctly?
 - c. Free from mudballs?

- 17 Walk through plant to check for problems. (i.e.)
 - a. Scalping screens in good shape. (No holes or worn out).
 - b. Surge bin dividers tall enough to prevent mixing of individuals.
 - c. Stock piles being managed properly to prevent mud balls, etc.
 - d. Baghouse being properly maintained.
 - e. Check "Gob-Hopper for proper operation (if possible).
 - f. Aggregate bin dividers in place (no damage)?
 - g. Are feeders operating properly (smoothly)?
 - h. Are bin settings correct and flow indicators working?
 - i. Document any of these deficiencies and the corrective actions taken by the contractor.

- 18 Record Asphalt Meter Setting and Anti-Strip Meter Setting (if used).
 - a. Anti-strip totalizer working?
 - b. Anti-strip quantities checked?

- 19 Record Settings of Aggregate Cold Feeds and if RAP is used check % as per special provision.
 - a. Blend % check (AM)?
 - b. Blend % check (PM)?

- 20 Are Thermometers Operating Properly? Have they been calibrated recently?
 - a. Are thermometers in place?
 - b. Are temperature charts working?
 - c. Are temperatures within operating range?

- 21 Check Automatic Operation of Surge Bins.

- 22 Get 2 scale checks per week.

- 23 Get Asphalt Stabs (beginning and ending plus received)
 - a. Know if your job is "English or Metric".
 - b. Convert **Gallons to Tons** or **Liters to Megagrams**.
 - c. Correct "Asphalt" quantity to 60° F or 15.6° C.

- 24 For each oil sample have two 1 quart cans filled (minimum) by plant personnel.
Make sure that Project #, Contract #, Line #, Type of Oil, Specific Gravity (off Bill of Lading), whether anti-strip is used and Date taken are on both cans.

- 25 Make spreadsheets for each mix with random numbers (for Densities) that figure sample locations for both the contractor and KDOT. Or, do this manually with a calculator. Irregardless, this must be entered into field book. Make sure KDOT and Contractors random numbers are on separate sheets and contractor should not see KDOT's numbers.

- 26 Have several "Superpave Bituminous Mix Analysis" (pencil copies) worksheets printed off for use while performing tests. (Pencil Copy)

- 27 Read, understand and have copies of mix designs and the special provisions that pertain to testing on hand.

- 28 **Daily List for Lab during Project.**
- a. Record Oil Received.
 - b. Get paperwork from plant each morning (circle charts, stabs etc.)
 - c. Run two separate tapes of tons (if road did not do this) (Project specific computerized tickets)
 - d. Fill out lab books as required (orange bound books not spreadsheets).
 - e. Fill out QC/QA Spreadsheets.
 - f. Have random numbers produced for the contractors testing.
 - g. Have random numbers produced for KDOT's testing.
 - h. Make sure KDOT & Contractors test results have been exchanged and also faxed to District Materials.
 - i. Check quantities with contractors lab people for pay (densities and air void).
 - j. Make sure lab books balance with road books each day.
- 29 **Are platform scales used for weighing trucks?**
- a. Performing and recording tares correctly?
 - b. Zeroing and checking scales daily?
- 30 Have all required QC/QA tests been scheduled/ran? (Lottman, Sand Equivalent, ect.)

Items Needed in Plant for Superpave

- 1. Gloves (Minimum of Welding Gloves)
- 2. 2 Rolls Duct Tape
- 3. 2 Fans (For Cooling Samples)
- 4. Splitter (Hot Asphalt Sample) (Contractor)
- 5. Minimum 6 Small Pans (Steel)
- 6. 2 Timers
- 7. Thermometers (Probe Type & Sensor Type)
- 8. Scales (Electronic w/bottom screw attachment)
- 9. Minimum 2 Stirring Blades (Putty Knives, several sizes)
- 10. Set of Sieves (Preferably Large)
- 11. Mary Ann (Shaker)
- 12. Scoop & Trowels
- 13. Paper Towels, Shop Towels
- 14. Cooler (For Hot Sample)
- 15. Shovel and Sample Template
- 16. Soft paint brush (for fine sieves)
- 17. Spatula (Metal)
- 18. 3 Power Strips with Surge Protector
- 19. Citrus Cleaner in squirt bottle (from Maintenance)
- 20. Laptop
- 21. Printer w/extra cartridges & paper
- 22. Mop
- 23. Broom
- 24. Dustpan
- 25. Heavy Paper Grocery Sacks (for back half of samples)
- 26. Calendar
- 27. Stapler
- 28. Paperclips
- 29. 2-Ring Punch
- 30. Thumbtacks
- 31. File Box with Folders
- 32. Brass Brushes
- 33. Concrete Cylinder Molds
- 34. Rice Equipment (from District Materials)
- 35. Back-up tank heater
- 36. Oven
- 37. 2 Scale Pans
- 38. 6 Aggregate sample bags
- 39. (6) 1 quart asphalt cement sample cans
- 40. Sample Tags
- 41. 2 Cloth Towels
- 42. Aggregate Splitter

HMA Construction Checklist "DAILY FIELD DATA"

**All original Contractor and KDOT documentation (for QC/QA Projects) must be in bound books.
Use this check list in conjunction with Part IV of the KDOT Construction Manual**

Daily Diary Items

- 1 Record time contractor began setting up traffic control. Traffic control checked.
- 2 Record what time Pilot Car started.
- 3 Record reason for **NOT** charging a working day.
- 4 Record what work being done by contractor or sub-contractor.
- 5 Record weather conditions.
- 6 Record controlling Item of Work.
- 7 Record equipment and Personnel listed.
- 8 Record length and cause of delays.
- 9 Record disputed items. (Not a place for personal opinions)
- 10 Record pilot car operations what time it was ceased.
- 11 Record what time the contractor was completely off roadway, and open to unrestricted traffic.
- 12 Record all visitors on site and their purpose (Area Engineer, District Engineer, City or County Engineer, Topeka Personal/Representatives, etc)

Daily Field book Items

- 13 Record Traffic Control Checks.
- 14 Record rolling procedure and changes as needed
- 15 Record temperature checks
- 16 Record Pilot Car Checks.
- 17 Record Tack Oil Shots. (Temperature Corrected).
- 18 Record of Laydown / Patching / Waste. (Contractor should initial waste quantity on ticket)
- 19 Road Crown Checked and Recorded. (before and after laydown)
- 20 Screed Crown Checked and Recorded.
- 21 Road Width / Laydown Width / After Rolling Width Checked and Recorded.
- 22 Loose Stabs > Yield Checks or Tons Per Sta. Recorded
- 23 Run tape('s) at the end of each days production. Put tapes and tickets for each days run in a manilla envelope with date, project number, contract number, station to station, contract line number, mix designation etc. on the envelope.
- 24 Balance books daily with Lab.

((recorded in field book (not spreadsheet) and checked by two (2) different inspectors))!

Miscellaneous Data

- 25 Record that Edge Slope of 1:1 or flatter is being maintained
- 26 On multiple lift projects; are centerline joints being staggered properly?
- 27 Record the rolling procedure and that it is being finished before 175° F?
- 28 Record the check the vibrator in the screeds
- 29 Record that Joint Densities are being obtained
- 30 Have "Segregation Profiles" been completed / passing? Have the segregation profiles been sent to the District Materials Engineer as required by the "Special Provisions".
- 31 Record Roller frequencies / range and speeds
- 32 Is "compaction foreman" getting the desired results?
- 33 Is a uniform texture being obtained? If not, have contractor make repairs, inform Engineer if not being accomplished.
- 34 Are uneven lane signs needed? If so, what are the requirements, spacing and quantities needed?
- 35 Is the road reasonably clean? (Roadkill, mud etc.)
Keep a close eye on the contractors equipment for leaking fluids.
- 36 (diesel, antifreeze, hydraulic oil etc.)
- 37 Record Profilograph profiles
- 38 If no profilograph specification required, areas of concern should be check with a straightedge
- 39 Project has liquidated damages record whether damages are Type A or Type B
- 40 Make sure intermediate payments have been entered for Bonus/Deducts if necessary
- 41 Has reflectometer test been ran for striping?
- 42 Pay 90% of permanent striping items until 180 observation period has been observed
- 43 If contract bond has been paid, at 50% completion remove contract bond from contract
- 44 Have a straight edge available on the job to check the construction joint and areas of concern so that corrections can be made while the mat is still warm
- 45 Review Density requirements for projects. Greater than 1.5" requires density bonus/deduct. Less than 1.5" requires a minimum of 10 densities by contractor plus a rolling procedure.

HMA Construction Checklist "Finaling"

- 1 Are all dates entered in CMS (Work Complete, Acceptance, etc.)?
- 2 Print "Material Report Final" from CMS (both "acceptance" and "non-acceptance" reports).
- 3 Are all the "Primary Material Codes" correct at this point. If not, it would be best at this point to simply make the incorrect ones a "substitute" instead of trying to correct them completely by transferring materials off and then back.
- 4 Are all "Daily Plant Output" screens entered properly? (compare this to field and lab books) If not, either delete the incorrect ones and re-enter or be prepared to explain it on the deviation report.
- 5 Have all test reports been written for all the PG graded asphalt that has been delivered? Was there enough asphalt delivered to cover what CMS has broken it down to? If not are you missing delivery tickets? Did the verification samples pass that were sent in to Topeka?
- 6 Have the test reports been written for all the "Tack Oil" delivered? Did the verification samples pass that were sent in to Topeka?
- 7 Have all the "individuals" for each mix designation been entered into CMS under "Field Gradation Tests" (Type of Test = "ACI")?
- 8 Was the "Lab Inspector" witnessed by "District Materials" as was earlier required?
- 9 Are conversion factors needed? Do you have a square meter or square yard type of contract? If so, apply the appropriate conversion factors.
- 10 Submit final quantities change order for these line items along with newly created line items for "air voids" and "densities" for final pay increase or pay decrease.
- 11 Make any necessary material re-assignments.
- 12 Prepare deviation report as per "District Policy".
- 13 Plant site released
- 14 Quarry roads reimbursement submitted
- 15 If stored material is on contract, make sure it is zero
- 16 Review striping after 180 day observation period and accept if satisfactory, if not have contractor correct necessary areas then accept project.
- 17 Does original contract amount plus/minus change order amount equal current contract amount?
- 18 Final estimate sent to contractor
- 19 Finals and proper forms sent to District