

How to Review QC Data in Atwoods (Exhibit 3)

Updated 2/9/2026

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General Notes

1. All test data in Atwoods must be reviewed when materials are submitted for final review.
2. Before any data can be reviewed, you must have review authority on your project. After logging in to Atwoods, click “Review Authority” at the top of the screen. Enter the Contract ID for your project and select your role (either consultant or WisDOT employee). Click “Send Request” to submit.

The screenshot displays the Atwoods system interface. At the top left is the HQMS logo with the text 'HIGHWAY QUALITY Management System'. At the top right is the Atwoods Systems logo with the text 'ATWOODSYSTEMS' and 'Contact Us: (608) 848-6085'. Below the logos is a navigation bar with the following items: HOME, PROJECTS, REVIEW AUTHORITY (highlighted with a red box), REPORTS, MY ACCOUNT, LINKS, and LOG OUT. Below the navigation bar is a section for 'MY PROJECTS' with a 'SEARCH PROJECTS' button and a 'PROJECTS BY REPORT TYPE' button. A 'PROJECT NOTIFICATIONS' button is also visible. Below this is a 'Recent projects:' section with a 'MANAGE PROJECT LIST' button. The main content area is titled 'REQUEST 'APPROVAL AUTHORITY' FOR NEW CONTRACT(S)'. It contains the instruction: 'Enter the Contract ID(s) and your role on the contract. The administrator will review and process your requests.' Below this instruction is a form with five rows, each for a contract. Each row has a 'Contract ID' input field and a 'Role' dropdown menu. The first row is highlighted with a red box. Below the form is a 'SEND REQUEST' button, also highlighted with a red box.

After you have review authority, you can review and finalize lots. This is required for pavement, structures (including barrier wall), HMA, and IRI Ride.

3. Make sure to include any disincentive on the DT1310. Refer to CMM 845 for more information on what to include in DT1310 entries.

Reviewing QMP Pavement Results

1. To view QC data for QMP Pavement, hover over [project ID] Data and click Pavement in the drop-down.

2. QC Data is separated for cylinders and beams. The example in this document is showing how to review beams; however, the process is the same for cylinders. The contractor enters QC results for each lot. To view this information, click “Details”. It’s important to review all information for each lot before adjusting payment.

| Lot ID | Station Start - End | Modulus of Rupture | Standard Deviation | LQI | PWL | Lot Sq. Yards | Approved Sq. Yards | Adjustment / Sq. Yard | Adjustment Total (Est.) |
|--------|---------------------|--------------------|--------------------|-----|-----|---------------|--------------------|-----------------------|-------------------------|
| DT 2 | - | 0.0 | 0.0 | | 0.0 | 2526.00 | 2526.00 | \$0.00 | \$0.00 |

3. It's important to review the following information for each lot:
 - a. The pay equation (QMP equation) matches contract requirements. This is found in the 700 section of the standard specifications or ASP 6 (and sometimes the special provisions).
 - b. The spec. limit is correct (comes from the 700 section of the standard specifications or project plans – project plans override the specifications).
 - c. The lot area (SY) is correct – if this is incorrect, it can be adjusted during the final review. This SY total should match the quantity paid to the contractor.
 - d. The mix design number & associated 132 test number is correct.
 - e. Verify that the incentive/disincentive value is calculating correctly using the QMP equations found in the contract documents.

| | | | | | | | | | | |
|--|--------|-----------------|-------|------|------|-------|---------|---------|--------|-----------|
| | LOT 70 | 413+00 – 421+00 | 880.9 | 32.9 | 7.02 | 100.0 | 4407.67 | 4407.67 | \$1.00 | \$4407.67 |
|--|--------|-----------------|-------|------|------|-------|---------|---------|--------|-----------|

Finald By: Isabelle Holcomb on 12/04/23 (Lot last uploaded on 10/19/23)
 Pay Adjustment (Estimated / Approved): \$4407.67 / \$4407.67 (Final) [ADJUST PAY](#)
 Comments: Qty Eligible = 4407.67 Sy Pwl = 100 Incentive = (0.2*100)-19 = \$1.00/Sy Incentive = \$4407.67 Qmp 6.01

[LOT SUMMARY](#) [SUBLOT SUMMARY](#) [SUBLOT DETAILS](#) [SURFACE RESISTIVITY](#) [LOT AIR SLUMP](#) [SUMMARY REPORT](#)

| | |
|---|--|
| Contract: 20201013001 Project ID: 1060-33-84 Description: Zoo Ic, Ush 45 Pay Equation: QMP 6.02 Spec. Limit: 650 Station Start: 413+00 Lot Area: 4407.67 Standard Deviation: 32.90 Percent Within Limit: 100.00 Est. Total Strength Adj.: \$4407.67 Reviewed By: ISABELLE HOLCOMB Reviewer Approved Lot \$ Adj.: \$4407.67 Review Comments: Qty Eligible = 4407.67 SY PWL = 100 Incentive = (0.2*100)-19 = \$1.00/SY Incentive = \$4407.67 QMP 6.01 | County: MILWAUKEE Lot ID: LOT 70 Highway: USH 045 Tested By: Number of Sublots: 5 Station End: 421+00 Modulus of Rupture: 880.9 LQI: 7.02 Adj. / Square Yards: 1.00 Mix Design: Z364/156-PEM2-22 (Contractor) MIC01.890-132-24-2022 (WisDOT) Date Reviewed: 12/04/23 Reviewer Approved Lot Sq Yd.: 4407.67 |
|---|--|

4. Additionally, the following information needs to be checked in the “Sublot Summary” tab:
 - a. Ensure all start-up (SU), quality control (QC) and engineer directed (PC) tests are entered.
 - b. Correct date of placement.
 - c. Correct STA ranges for sublots.
 - d. Test results match QC field reports & inspector’s notes (fresh concrete) or break reports (cylinders or beams). If resistivity testing is required, make sure that is entered as well in the “Surface Resistivity” tab.
 - e. PCCTEC I & CST names match QC reports.
 - f. Lot-Sublot ID matches the field reports, along with the test type.
 - g. The average strength data matches the lab reports (may be slightly off due to rounding, which is acceptable).

| Sublot ID | Date & Time Poured | Test Type | Station Start - End | Sublot Length (ft) | Actual Length Paved (ft) | Sublot Area (Sq. Yds.) | Slump | Net Air Pct | PCCTEC1 /ACT Name | Beam ID 1 | Mod. of Rupture | Beam ID 2 | Mod. of Rupture | Avg. Mod. of Rupture (Rounded) | Certified Concrete Strength Tester /ACT Name | Qualified Lab/ Testing Company |
|-----------|--------------------|-----------|---------------------|--------------------|--------------------------|------------------------|-------|-------------|------------------------|-----------|-----------------|-----------|-----------------|--------------------------------|--|--------------------------------|
| LOT 70-1 | 08/18/23 10:15 | PC | 413+00 - 421+00 | 800.0 | 624.0 | 416 | 0.00 | 5.6 | | | | | | | | |
| LOT 70-1 | 08/18/23 10:40 | QC | 413+00 - 421+00 | 800.0 | 624.0 | 416 | 0.00 | 6.0 | Anthony James / 207199 | 70-1 A | 819 | 70-1 B | 901 | 860 | Mathew Thompson / 106184 | Michels Road & Stone |

5. If all the information is correct, click “Adjust Pay” to finalize the lot.

^ HIDE LOT 70 413+00 - 421+00 880.9 32.9 7.02 100.0 4407.67 4407.67 \$1.00 \$4407.67

Finalized By: Isabelle Holcomb on 12/04/23 (Lot last uploaded on 10/19/23)

Pay Adjustment (Estimated / Approved): \$4407.67 / \$4407.67 (Final) ADJUST PAY

Comments: Qty Eligible = 4407.67 Sy Pwl = 100 Incentive = (0.2*100)-19 = \$1.00/Sy Incentive = \$4407.67 Qmp 6.01

LOT SUMMARY
SUBLOT SUMMARY
SUBLOT DETAILS
SURFACE RESISTIVITY
LOT AIR SLUMP
SUMMARY REPORT

6. To finalize the lot, fill in the approved area, select the adjustment type, and fill in the strength bonus/deduct total. Select “final review” (you can still change things after this if needed). Fill in review comments so that anyone after the fact can see why/why not incentive was paid. Some examples of explanations are shown below.

Incentive example:

Approved Sq. Yards **Original Sq. Yards:** 2793.34

Pay Adjustment Type No Bonus/Deduct Bonus Deduct

Strength Bonus/Deduct (\$ total) **Original Pay Adj. (total):** \$2793.34

Lot Review Status Final Review Partial Review

Review Comments *(Optional)*

Qty Eligible = 2793.34 SY
 PWL = 100
 Incentive = (0.2*100)-19 = \$1.00/SY
 Incentive = \$2793.34
 QMP 6.01

Disincentive example:

Approved Sq. Yards **Original Sq. Yards:** 3356.56

Pay Adjustment Type No Bonus/Deduct Bonus Deduct

Strength Bonus/Deduct (\$ total) **Original Pay Adj. (total):** \$-436.35

Lot Review Status Final Review Partial Review

Review Comments
(Optional)

Qty Eligible = 3356.56 SY
PWL = 83.0
Disincentive = $(2.0/35 \times 83.0) - (170/35) = -\$0.11/\text{SY}$
Disincentive = $-\$369.22$
QMP 6.01

No pay adjustment examples

Approved Sq. Yards **Original Sq. Yards:** 2551.12

Pay Adjustment Type No Bonus/Deduct Bonus Deduct

Strength Bonus/Deduct (\$ total) **Original Pay Adj. (total):** \$0.00

Lot Review Status Final Review Partial Review

Review Comments
(Optional)

No incentive since standard deviation is greater than 60 psi.

Approved Sq. Yards **Original Sq. Yards:** 1985.78

Pay Adjustment Type No Bonus/Deduct Bonus Deduct

Strength Bonus/Deduct (\$ total) **Original Pay Adj. (total):** \$0.00

Lot Review Status Final Review Partial Review

Review Comments
(Optional)

No incentive since less than four sublots

| | | |
|---|---|--|
| Approved Sq. Yards | <input type="text" value="3125.00"/> | Original Sq. Yards: 3125.00 |
| Pay Adjustment Type | <input checked="" type="radio"/> No Bonus/Deduct <input type="radio"/> Bonus <input type="radio"/> Deduct | |
| Strength Bonus/Deduct (\$ total) | <input type="text" value="0.00"/> | Original Pay Adj. (total): \$0.00 |
| Lot Review Status | <input checked="" type="radio"/> Final Review <input type="radio"/> Partial Review | |
| Review Comments <i>(Optional)</i> | <input type="text" value="No incentive for HES"/> | |

7. Some other things to consider when assessing incentive/disincentive:
 - a. Check Standard Spec 715.5.2 for additional notes about when lots are not eligible for incentive.
 - b. Incentive is not paid for concrete that is nonconforming in another property. This quantity of material will need to be subtracted from the approved square yards total. This only applies to QC testing (incentive can still be earned on a nonconforming QV test). Some examples of other nonconforming properties that affect the quantity eligible for incentive are as follows:
 - i. Air content
 - ii. Slump
 - iii. Pavement thickness
 - iv. Concrete aggregates
 - v. Etc.
 - c. No incentive is paid for HES concrete. Fresh concrete results will be entered for these lots, but strength will be entered as 0. These lots still need to be reviewed and approved.
 - d. If 28-day strengths are low, refer to 715.3.2 for more information about evaluation for possible removal and replacement.
8. Click “save changes” to finalize the lot.

Reviewing QMP Structures & Barrier Wall Results

1. To view QC data for QMP Structures, hover over [project ID] Data and select “Structures” from the drop-down.

HQMS™ HIGHWAY QUALITY Management System **ATWOODSYSTEMS**
Contact Us: (608) 848-6085

Project 1060-33-84 – Zoo Ic, Ush 45
Contract ID: 20201013001

FIELD OFFICE DETAILS
Office: *Phone Number Not Available*
Cell: *Phone Number Not Available*
Fax: *Fax Number Not Available*
Address: 2515 N. 124th St., Brookfield
[VIEW ON GOOGLE MAPS](#)
Directions:

PROJECT LEADER
Jason Zembroski
jzembroski@cginc.net
Office: (414)443-2000
Cell: (414)315-0018

MANAGER
Sean Race
sean.race@dot.wi.gov
Office: *Phone Number Not Available*
Cell: 414-750-2380

PROJECT INFO
VERIFIED REPORTS ✓ DATA FOUND
STRUCTURES ✓ DATA FOUND
PAVEMENT ✓ DATA FOUND
PCC THICKNESS ✓ DATA FOUND (MITSKAN - CONTRACTS 2018 AND LATER)
PCC THICKNESS ✗ NO DATA (OLD PROBING METHOD - CONTRACTS PRIOR TO 2018)
HMA ✓ DATA FOUND
RIDE ✓ DATA FOUND
SOILS & AGG ✓ DATA FOUND
AGG SOURCES ✓ DATA FOUND

[PRINT](#)

2. The contractor enters QC results for each lot. To view this information, click “Details”. It’s important to review all information for each lot before adjusting payment.

Entered By: ANDY DAVIS

| Lot ID | Avg. Comp. Strength (PSI) | Standard Deviation (PSI) | LQI | PWL | Lot Volume Cu. Yards | Approved Cu. Yards | Adjustment / Cu. Yard (Est.) | Adjustment Total (Est.) |
|---------------------------------|---------------------------|--------------------------|------|-------|----------------------|--------------------|------------------------------|-------------------------|
| ▼ DETAILS Lot 1 | 6199.7 | 588.7 | 4.59 | 100.0 | 500.00 | 500.00 | \$0.00 | \$0.00 |

Finalized By: Nicole Roberts on 01/19/22 (Lot last uploaded on 03/30/21)
Pay Adjustment (Estimated / Approved): \$0.00 / \$0.00 (Final) [ADJUST PAY](#)

3. It’s important to review the following information for each lot:
 - a. The pay equation (QMP equation) matches contract requirements. This is found in the 700 section of the standard specifications or ASP 6 (and sometimes the special provisions).
 - b. The spec. limit is correct (comes from the 700 section of the standard specifications or project plans – project plans override the specifications).
 - c. The lot volume (CY) is correct – if this is incorrect, it can be adjusted during the final review.
 - d. The mix design number & associated 132 test number is correct.
 - e. Verify that the incentive/disincentive value is calculating correctly using the QMP equations found in the contract documents.

[LOT SUMMARY](#) | [SUBLOT SUMMARY](#) | [SUBLOT DETAILS](#) | [SURFACE RESISTIVITY](#) | [LOT AIR SLUMP](#) | [LOT SUMMARY REPORT](#)

Contract: 20201013001 County: MILWAUKEE
 Project ID: 1060-33-84 Lot ID: 1
 Description: Zoo Ic, Ush 45 Highway: USH 045
 Testing Company:
 Pay Equation: QMP 2.01
 Spec. Limit: 3500
 Lot Volume: 500.00
 Standard Deviation: 588.70
 Percent Within Limit: 100.0
 Est. Total Strength Adj.: \$ 0.00
 Reviewed By: NICOLE ROBERTS
 Reviewer Approved Lot \$ Adj.: \$0.00
 Review Comments: None

Tested By:
 Number of Sublots: 10
 Average Comp Strength: 6199.70
 LQI: 4.59
 Adj / Cu. Yds: 0.00
 Mix Design: 4196 - WEST ALLIS (Contractor)
 GEI01.029-132-1-2021 (WisDOT)
 Date Reviewed: 01/19/22
 Reviewer Approved Lot Volume: 500.00

4. Additionally, the following information needs to be checked in the “Sublot Summary” tab:
 - a. Ensure all start-up (SU), quality control (QC) and engineer directed (PC) tests are entered.
 - b. Correct date of placement.
 - c. Test results match QC field reports & inspector’s notes (fresh concrete) or break reports (cylinders). If resistivity testing is required, make sure that is entered as well in the “Surface Resistivity” tab.
 - d. PCCTEC I & CST names match QC reports.
 - e. Lot-Sublot ID matches the field reports, along with the test type.
 - f. The average strength data matches the lab reports (may be slightly off due to rounding, which is acceptable).

| Sublot ID | Sublot Vol (Cu. Yds.) | Date & Time Poured | Test Type | Slump | Net Air Pct | PCCTEC1 /ACT Name | Cyl ID 1 | Strength (PSI) | Cyl ID 2 | Strength (PSI) | Cyl 1 + 2 Avg Strength (PSI) | Certified Concrete Strength Tester /ACT Name | Qualified Lab/ Testing Company Name |
|-----------|-----------------------|--------------------|-----------|-------|-------------|----------------------------|----------|----------------|----------|----------------|------------------------------|--|-------------------------------------|
| 2-1 | 50 | 05/10/21 12:15 | QC | 3.00 | 5.2 | Jesse Ponyicsanyi / 201163 | A | 7094.4 | B | 7567.0 | 7331.0 | Aaron Hamberger / 202446 | Gestra Engineering Inc |

5. If all the information is correct, click “Adjust Pay” to finalize the lot.

[HIDE](#) Lot 2 7331.0 0.0

Finaled By: Nicole Roberts on 01/18/22 (Lot last uploaded on 05/11/21)

Pay Adjustment (Estimated / Approved): \$0.00 / \$0.00 (Final) [ADJUST PAY](#)

6. To finalize the lot, fill in the approved volume, select the adjustment type, and fill in the strength bonus/deduct total. Select “final review” (you can still change things after this if needed). Fill in review comments so that anyone after the fact can see why/why not incentive was paid. Some examples of explanations are shown below.

Incentive example

| | |
|---|--|
| Approved Cu. Yards | <input type="text" value="500"/> |
| Pay Adjustment Type | <input type="radio"/> No Bonus/Deduct <input checked="" type="radio"/> Bonus <input type="radio"/> Deduct |
| Strength Bonus/Deduct (\$ total) | <input type="text" value="5000.00"/> (Approved Cu. Yards × Bonus/Deduct per Cu. Yard) |
| Lot Review Status | <input checked="" type="radio"/> Final Review <input type="radio"/> Partial Review |
| Review Comments <i>(Optional)</i> | <div style="border: 1px solid #ccc; padding: 5px;"><p>QMP 2.01 PWL = 100 CY = 500 (no nonconforming placed in lot 38) Pay Adjustment = \$10/CY Incentive = \$10/CY x 500 CY = \$5000</p></div> |

Disincentive example

| | |
|---|---|
| Approved Cu. Yards | <input type="text" value="1,000"/> |
| Pay Adjustment Type | <input type="radio"/> No Bonus/Deduct <input type="radio"/> Bonus <input checked="" type="radio"/> Deduct |
| Strength Bonus/Deduct (\$ total) | <input type="text" value="-12800.00"/> (Approved Cu. Yards × Bonus/Deduct per Cu. Yard) |
| Lot Review Status | <input checked="" type="radio"/> Final Review <input type="radio"/> Partial Review |
| Review Comments <i>(Optional)</i> | <div style="border: 1px solid #ccc; padding: 5px;"><p>Lot Volume = 1000 Cy PWL = 75.3% Pay Adjustment = -\$12.86/CY (eqn. QMP 2.01) Disincentive = 1000 Cy x -\$12.86 = -\$12,800</p></div> |

No pay adjustment example:

| | |
|---|---|
| Approved Cu. Yards | <input type="text" value="10"/> |
| Pay Adjustment Type | <input checked="" type="radio"/> No Bonus/Deduct <input type="radio"/> Bonus <input type="radio"/> Deduct |
| Strength Bonus/Deduct (\$ total) | <input type="text" value="0.00"/> (Approved Cu. Yards × Bonus/Deduct per Cu. Yard) |
| Lot Review Status | <input checked="" type="radio"/> Final Review <input type="radio"/> Partial Review |
| Review Comments <i>(Optional)</i> | <input type="text" value="No incentive for less than 4 sublots."/> |

7. Some other things to consider when assessing incentive/disincentive:
 - a. Check Standard Spec 715.5.2 for additional notes about when lots are not eligible for incentive
 - b. Incentive is not paid for concrete that is nonconforming in another property. This quantity of material will need to be subtracted from the approved cubic yard total. This only applies to QC testing (incentive can still be earned on a nonconforming QV test). Some examples of other nonconforming properties that affect the quantity eligible for incentive are as follows:
 - i. Air content
 - ii. Slump
 - iii. Concrete aggregates
 - iv. Etc.
 - c. No incentive is paid for HES concrete. Fresh concrete results will be entered for these lots, but strength will be entered as 0. These lots still need to be reviewed and approved.
 - d. If 28-day strengths are low, refer to 715.3.2 for more information about evaluation for possible removal and replacement.
8. Click “save changes” to finalize the lot.

Reviewing QMP HMA Results

1. Before reviewing HMA data, determine the method of acceptance for density on your project.
 - a. Department Acceptance
 - b. QMP PWL
 - c. QMP Nuclear Density
 - d. Core Only

Only results for QMP Nuclear Density are entered by the contractor and need to be approved by the project team. Department acceptance testing is entered by the department (or the department's representative) and can be found under Verified Reports – 262 Asphaltic Pavement Nuclear Density tests.

Use the "NucDensityIncentive.xlsx" document found in WisDOT Pantry > Region Specific > SE – Southeast Region > Southeast Materials to calculation incentive and disincentive for acceptance testing.

QMP PWL results are reported in the PWL spreadsheet that is shared between the contractor, the project team, and the region. The department acceptance tests part of PWL (e.g. shoulders, etc.) can also use the above mentioned _____ form.

Core only results must be entered into MRS by the contractor.

2. To view HMA data entered by the contractor, hover over [Project ID] Data and select "HMA" from the drop-down.



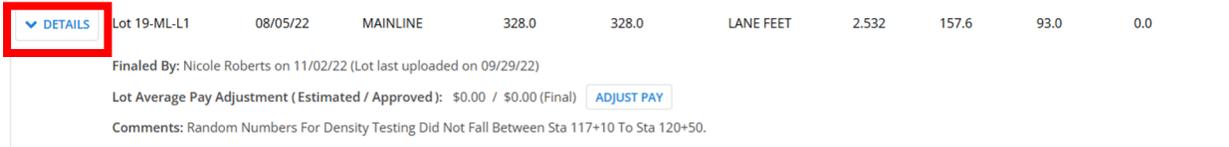
HIGHWAY QUALITY
Management System



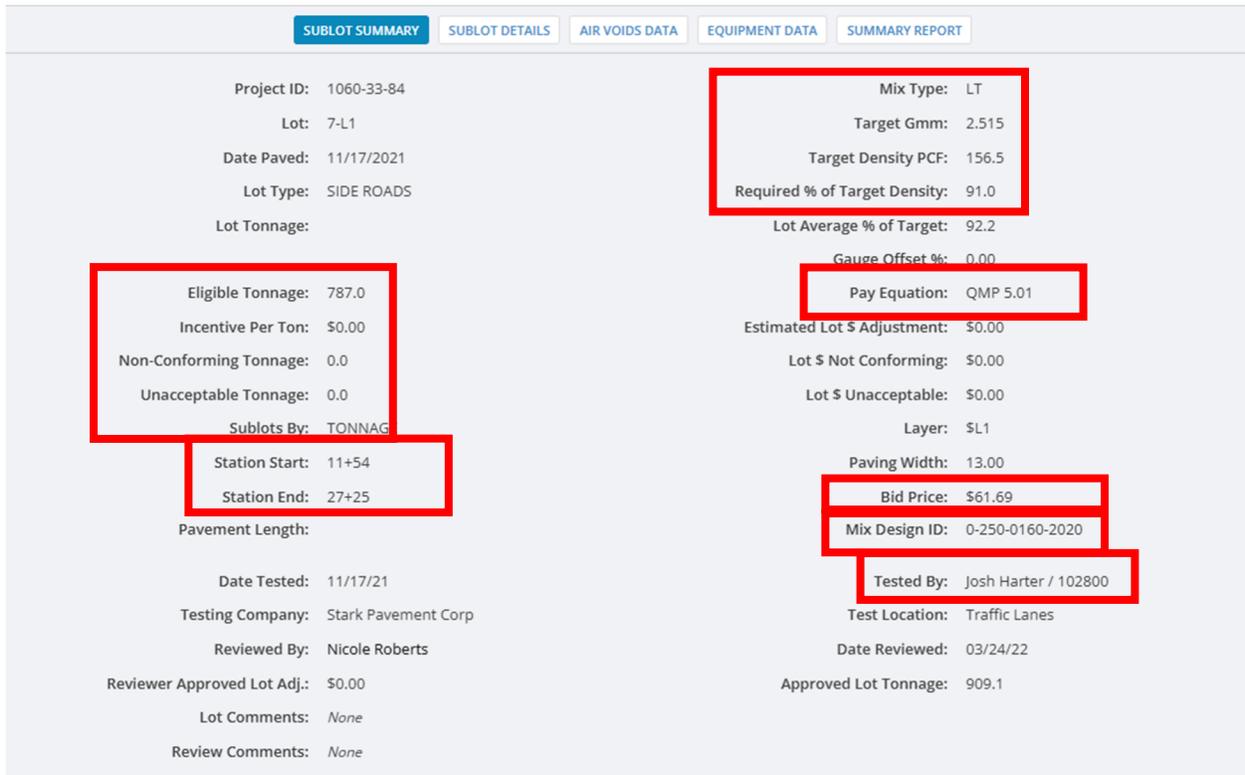
Contact Us: (608) 848-6085

The screenshot shows the HQMS web application interface. At the top, there is a navigation bar with links for HOME, PROJECTS, REVIEW AUTHORITY, 1060-33-84 DATA (with a dropdown arrow), and LINKS. Below the navigation bar, the main content area is divided into two columns. The left column displays project information for 'Project 1060-33-84 - Zoo Ic, Ush 45' with contract ID 20201013001. It includes field office details such as office, cell, fax, and address, along with a 'VIEW ON GOOGLE MAPS' button and directions. The right column shows a list of data categories: PROJECT INFO, VERIFIED REPORTS (DATA FOUND), STRUCTURES (DATA FOUND), PAVEMENT (DATA FOUND), PCC THICKNESS (MITSCAN - CONTRACTS 2018 AND LATER) (DATA FOUND), PCC THICKNESS (OLD PROBING METHOD - CONTRACTS PRIOR TO 2018) (NO DATA), HMA (DATA FOUND, highlighted with a red box), RIDE (DATA FOUND), SOILS & AGG (DATA FOUND), and AGG SOURCES (DATA FOUND). A 'PRINT' button is visible in the top right corner of the data menu.

- The contractor enters QC results for each lot. To view this data, click “Details”. It’s important to review all information for each lot before adjusting payment.



- It’s important to review the following information for each lot:
 - Mix type and target info (including correct WisDOT-250 number). Be sure to verify the Gmm is accurate.
 - Pay equation which is found in the special provisions under QMP Nuclear Density.
 - Nucdensity tester and gauge used.
 - Eligible tonnage, non-conforming tonnage or unacceptable (depending on what your project entails).
 - STA range.
 - Make sure the bid price is entered as well.
 - Verify that the incentive/disincentive value is calculating correctly using the QMP equations found in the contract documents.



5. Click on the “Sublot Details” tab to view density data for the sublot.

| Sublot ID: 12-4 | | Station Begin - End: | 759+74 - 740+01 | Test Station | Offset | Gauge Density | Percent of Target | |
|-----------------|--|----------------------|-----------------|---------------------------------|--------|---------------|-------------------|------|
| 09/13/2024 | | Length (ft): | 1973 | Station 1 | 751+43 | 9.2 | 147.0 | 94.2 |
| | | Offset Reference: | CENTERLINE | Station 2 | 749+08 | 7.5 | 145.4 | 93.2 |
| | | Sublot Status: | C | Station 3 | 740+71 | 3.7 | 149.0 | 95.5 |
| | | NC Tonnage: | 0.0 | Station 4 | | 0.0 | 0.0 | 0.0 |
| | | NC Disincentive: | 0.00 | Station 5 | | 0.0 | 0.0 | 0.0 |
| | | UA Tonnage: | 0.0 | Station 6 | | 0.0 | 0.0 | 0.0 |
| | | UA Disincentive: | 0.00 | Station 7 | | 0.0 | 0.0 | 0.0 |
| | | | | Sublot Avg. % of Target: 94.3 % | | | | |

Information for each sublot should match QC density reports submitted to the project team. Check the station/offset and average gauge density.

- SMA mixes will have a gauge offset that will need to be checked.
- If any sublots are greater than 1.0% below the required minimum density, the sublot does not contribute to the lot average calculation and the sublot is subject to a disincentive.
- Sublots (or individual tests) with average densities more than 3.0% below the required minimum density are subject to be removed and replaced at the discretion of the engineer. If allowed to remain in place, the material will be paid at 50% of the contract unit price.

| Station | Offset | Gauge Density | Percent of Target |
|---------|--------|---------------|-------------------|
| 740+71 | 3.7 | 149.0 | 95.5 |
| 749+08 | 7.5 | 145.4 | 93.2 |
| 751+43 | 9.2 | 147.0 | 94.2 |

Average these values

6. For a lot to be eligible for incentive, both the QC and QV air voids test data must be within limits shown in the Standard Spec (see 460.5.2.3). To check this, click the “Air Voids Data” tab. Air voids must also be checked to make sure they match QC test reports. Make sure the contractor is also entering the QV air void results.

- The target air void is now shown on Atwoods. Review that to make sure the target air void was entered properly (target is 2.5 - 4.0 percent or for SMA 4.0 - 5.5 percent).
- SMA lots containing an individual density test greater than 97.0 percent Gmm will not be eligible for incentive pay adjustment.
- For shoulders paved integrally with the traffic lane, if the traffic lane does not meet incentive requirements, the department will not pay for incentive on the integrally pavement shoulder according to standard specification 460.5.2.3 (3).

[SUBLOT SUMMARY](#) [SUBLOT DETAILS](#) **[AIR VOIDS DATA](#)** [EQUIPMENT DATA](#) [SUMMARY REPORT](#)

Air Void Target %: 4.0 - 5.5

| Date Tested | Sample ID | Air Void % | Test Type |
|-------------|-----------|------------|-----------|
| 09/11/2024 | 1-1 | 3.6 | QC |
| 09/11/2024 | 1-2 | 4.0 | QC |
| 09/11/2024 | 1-3 | 4.8 | QC |

| Vol. Properties | | | | | Void % | |
|--------------------------------------|------|-----------------|------------|------------------|--------|-------|
| JMF Targets | | | | | 4.5 | |
| QMP Warning or PWL Acceptance Limits | | | | | LWL | LWL |
| Date | Test | Planned Tonnage | Daily Tons | Total Accum Tons | 3.5 | 5.5 |
| | | | | | Ind | Ave/4 |
| 9/10/2024 | TS-1 | | | | 4.1 | |
| 9/10/2024 | TS-2 | 550.0 | 515.1 | 515 | 3.2 | |
| 9/11/2024 | 1-1 | | | | 3.6 | 3.6 |
| 9/11/2024 | 1-2 | | | | 4.0 | 3.6 |
| 9/11/2024 | 1-3 | 1900.0 | 1690.9 | 1,691 | 4.8 | 4.1 |

7. If all the information is correct, click “Adjust Pay” to finalize the lot.

[DETAILS](#) Lot 11-ML-L1 11/13/23 MAINLINE 65.3 65.3 LANE FEET 2.543 158.3 93.0 0.0

Finaled By: Isabelle Holcomb on 11/14/23 (Lot last uploaded on 11/14/23)
 Lot Average Pay Adjustment (Estimated / Approved): \$0.00 / \$0.00 (Final) **ADJUST PAY**

8. To finalize the lot, fill in the approved tonnage, select the adjustment type, and fill in the lot pay adjustment total. Select “final review” (you can still change things after this if needed). Fill in review comments so that anyone after the fact can see why/why not incentive was paid. Some examples of explanations are shown below.

Approved Lot Tonnage

Pay Adjustment Type No Bonus/Deduct Bonus Deduct

Lot Pay Adjustment

Lot Review Status Final Review Partial Review

Review Comments *(Optional)*

[CANCEL CHANGES](#) [SAVE CHANGES](#)

Approved Lot Tonnage

668.0

Pay Adjustment Type

No Bonus/Deduct Bonus Deduct

Lot Pay Adjustment

534.40

Lot Review Status

Final Review Partial Review

Review Comments

(Optional)

Eligible for incentive since air voids data is within 4.0-5.5 percent per 460.5.2.3.
Lot density 2.4% above specified minimum
Incentive = \$0.80 * 668 tons = \$534.40
Paid in estimate #12

CANCEL CHANGES

SAVE CHANGES

9. Click “save changes” to finalize the lot.

QMP IRI Ride Review

1. To review IRI Ride data, hover over [Project ID] Data and select "Ride".



Contact Us: (608) 848-6085

Project 1090-09-76 – IH 43 Rock Freeway
Contract ID: 20240109008

FIELD OFFICE DETAILS
Office: (414)750-1403
Cell: *Phone Number Not Available*
Fax: *Fax Number Not Available*
Address: W18957777 Racine Ave, Muskego, WI 53150 (414)750-7490
[VIEW ON GOOGLE MAPS](#)

Directions:

PROJECT LEADER
Brian Perz
brian.perz@dot.wi.gov
Office: (414)750-1403
Cell: 414-750-1403

MANAGER
Alex Grasse
alex.grasse@dot.wi.gov
Office: 414-750-1404
Cell: *Phone Number Not Available*

WisDOT MATERIALS PERSON
Email Not Available
Office: *Phone Number Not Available*
Cell: *Phone Number Not Available*

CONTRACTOR MATERIALS PERSON
Mike Jacobs
mjacobs@rockroads.com
Office: *Phone Number Not Available*
Cell: (608)931-2965

TRAFFIC COMPANY
Mega Rentals
Office: (262)786-6900

1090-09-76 DATA

- PROJECT INFO
- VERIFIED REPORTS ✓ DATA FOUND
- STRUCTURES ✓ DATA FOUND
- PAVEMENT ✗ NO DATA
- PCC THICKNESS (MITSCAN - CONTRACTS 2018 AND LATER) ✗ NO DATA
- PCC THICKNESS (OLD PROBING METHOD - CONTRACTS PRIOR TO 2018) ✗ NO DATA
- HMA ✓ DATA FOUND
- RIDE ✓ DATA FOUND**
- SOILS & AGG ✓ DATA FOUND
- AGG SOURCES ✗ NO DATA

[PRINT](#)

2. Verify that the overall information is correct – this included lane description, pavement type, spec. equation, and station range.

Details Submitted By: JAKE AMUNDSON

| Description | Run Date | Type | Pay Spec | Station Start – End | Pay Adjustment / Review |
|----------------|-------------------|------|-----------|---------------------|--|
| IH43 SB LANE 1 | 09/25/24 11:10 | HMA | RIDE 2.01 | 759+72 – 468+43 | ADJUST PAY (Click "Details" to View Pay Adjustment Dollars) Reviewed By: ISABELLE HOLCOMB on 10/23/24 (Lane last uploaded on 09/25/24) |
| IH43 SB LANE 2 | 09/25/24 11:10 | HMA | RIDE 2.01 | 759+72 – 468+42 | ADJUST PAY (Click "Details" to View Pay Adjustment Dollars) Reviewed By: ISABELLE HOLCOMB on 10/23/24 (Lane last uploaded on 10/22/24) |
| IH43 NB LANE 1 | 10/22/24 11:10 | HMA | RIDE 2.01 | 467+35 – 758+86 | ADJUST PAY (Click "Details" to View Pay Adjustment Dollars) Reviewed By: ISABELLE HOLCOMB on 10/23/24 (Lane last uploaded on 10/22/24) |
| IH43 NB LANE 2 | 10/22/24 11:10 | HMA | RIDE 2.01 | 467+35 – 758+86 | ADJUST PAY (Click "Details" to View Pay Adjustment Dollars) Reviewed By: ISABELLE HOLCOMB on 10/23/24 (Lane last uploaded on 10/22/24) |

3. There are two components to IRI Ride – Segment IRI Ride and Localized Roughness.
 - a. Segment IRI Ride incentive/disincentive is calculated using the spec equation (in the example photos, Ride 2.01 was used). Each segment is 500 LF long. See snip below from the 2024 Standard Spec for an example of how segment incentive/disincentive is calculated. There is no department adjustment of IRI Ride pay adjustments – just review this information to make sure it’s entered and calculated correctly.
 - b. Be sure to check the following:
 - i. The category type matches the definitions included in section 740 of the standard specifications.
 - ii. The lane number and start and end station. You need to make sure that all areas where IRI ride was required were profiled and uploaded.
 - iii. Ensure all sections which were required to be profiled were indeed profiled.
 - iv. Excluded areas are accurate per standard spec 740 directions.

(a) The department will adjust pay for 500-foot long standard segments nominally one wheel path wide using equation "ride 2.01" as follows:

| For HMA I Pavement: | Initial IRI (in/mile) | Pay Adjustment (dollars/500 feet) |
|---------------------|-----------------------|------------------------------------|
| | < 30 | 250 |
| | >= 30 to <35 | 1750 - (50 x IRI) |
| | >= 35 to < 60 | 0 |
| | >= 60 to < 75 | 1000 - (50/3 x IRI) ^{1/3} |
| | >= 75 | -250 ^{1/3} |

| Category | Segment Type | Lane | Station Start | Station End | Segment Length | IRI (in/mile) | | Pay Adjustment (\$) | | Exclude Segment | |
|----------|--------------|------|---------------|-------------|----------------|---------------|-------|---------------------|--------|-----------------|-------|
| | | | | | | Left | Right | Left | Right | Left | Right |
| HMA I | MAINLINE | 1 | 759+72 | 754+72 | 500 | 50.30 | 37.00 | 0.00 | 0.00 | No | No |
| HMA I | MAINLINE | 1 | 754+72 | 749+72 | 500 | 27.80 | 17.40 | 250.00 | 250.00 | No | No |
| HMA I | MAINLINE | 1 | 469+72 | 468+42 | 130 | 68.00 | 81.80 | -34.67 | -65.00 | No | No |

- c. Localized Roughness requires department review and pay adjustment. After review of the data, the project team must decide between the options listed in Standard Spec section 740 for Corrective Action for Localized Roughness.
 - i. Please note that areas with excessive IRI ride (see standard spec 740 for definitions) must be corrected and re-profiled. The re-profiled data may only be uploaded as a reference document.
 - ii. All localized roughness areas that received corrective action (e.g. grinding) are required to be re-profiled. That re-profiled data may only be uploaded as a reference document.

740.3.4.2 Corrective Action for Localized Roughness

- (1) The engineer will assess each wheel path for areas of localized roughness within 5 business days of being notified that ProVAL reports are uploaded. For each area that exceeds 200 in/mile, the engineer will do one of the following:
 - 1. Direct the contractor to correct the area to minimize the effect on the ride.
 - 2. Leave the area of localized roughness in place with no pay reduction.
 - 3. Assess a pay reduction for each area in each wheel path as follows:
 - Length <=25 feet: (localized roughness in/mile - 200) dollars/foot or \$250 whichever is least
 - Length >25 feet: (localized roughness in/mile - 200) dollars/foot or 10 dollars/foot whichever is least
 The department will not reduce pay for localized roughness within HMA IV and PCC IV segments.
- (2) Re-profile corrected areas to verify that the localized roughness is less than 140 in/mile. Upload a revised ProVAL ride quality module report for corrected areas into MRS software.

After corrective action is performed (or the material is allowed to remain in place as-is), review the data in Atwoods by clicking “Adjust Pay”.

Ride Data for Project 1090-09-76 – IH 43 Rock Freeway PRINT

Viewing Options: [RUN LIST](#) [REFERENCE DOCS](#) [LANE MASTER DATA](#) Filter: All Records

Details Submitted By: JAKE AMUNDSON

| Description | Run Date | Type | Pay Spec | Station Start – End | Pay Adjustment / Review |
|--|-------------------|------|-----------|---------------------|---|
| DETAILS IH43 SB LANE 1 | 09/25/24 11:10 | HMA | RIDE 2.01 | 759+72 – 468+43 | <div style="border: 2px solid red; padding: 2px; display: inline-block;">ADJUST PAY</div> <small>(Click 'Details' to View Pay Adjustment Dollars)</small> Reviewed By: ISABELLE HOLCOMB on 10/23/24 <small>(Lane last uploaded on 09/25/24)</small> |

Enter the adjusted pay reduction and fill out the “Remarks” field. In this section, indicate which corrective action option was selected. This is important so that anyone looking at the data after the fact can understand why pay was or was not adjusted.

| LANE | WHEEL PATH | STATION START | STATION END | IRI VALUE | PAY ADJUSTMENT (FROM CONTRACTOR) | PAY ADJUSTMENT (REVIEWED) | EXCLUDE |
|--|------------|---------------|-------------|-----------|----------------------------------|---------------------------|---------|
| 2 | Left | 468+60 | 468+54 | 383.60 | \$ -250.00 Not Corrected | 0.00 | No |
| <div style="border: 2px solid red; padding: 5px;"> Remarks: 740.3.4.2 Option #2 - leave in place with no pay reduction </div> | | | | | | | |

4. Also check that the contractor has uploaded the required documentation (electronic .ppf files and PDF files). Click “Reference Docs” to view these documents.

Ride Data for Project 1100-45-70 – IH 41 Airport Freeway

Viewing Options: [RUN LIST](#) [REFERENCE DOCS](#) [LANE MASTER DATA](#) Filter: All Records

Reference Docs (Click on a filename to download)

| | | |
|--|----------|------------|
| EB LN 1 RUN 1 T1 to T2.ppf | 1,668 KB | 06/27/2025 |
| EB LN 2 RUN 1 T1 to T2.ppf | 1,666 KB | 06/27/2025 |
| EB LN 3 RUN 1 T1 to T2.ppf | 1,669 KB | 06/27/2025 |
| IH894a EB LN 1 IRI.pdf | 59 KB | 06/27/2025 |
| IH894a EB LN 1 IRI.txt | 1 KB | 06/27/2025 |
| IH894a EB LN 2 IRI.pdf | 59 KB | 06/27/2025 |
| IH894a EB LN 2 IRI.txt | 1 KB | 06/27/2025 |
| IH894a EB LN 2 LWP.txt | 0 KB | 06/27/2025 |
| IH894a EB LN 2 RWP.txt | 0 KB | 06/27/2025 |
| IH894a EB LN 3 IRI.pdf | 60 KB | 06/27/2025 |

5. Lastly, check that the equipment matches the QC plan and is on the approved products list. Also check that the operator is HTCP certified. To do this, click “Equipment Data”.

| Description | Run Date | Type | Pay Spec | Station Start – End | Pay Adjustment / Review |
|-------------------------------------|-------------------|------|-----------|---------------------|--|
| HIDE IH43 SB LANE 1 | 09/25/24 11:10 | HMA | RIDE 2.01 | 759+72 – 468+43 | ADJUST PAY (Click "Details" to View Pay Adjustment Dollars) Reviewed By: ISABELLE HOLCOMB on 10/23/24 (Lane last uploaded on 09/25/24) |

| | RIDE DATA | LOCALIZED ROUGHNESS | EQUIPMENT DATA | SUMMARY ADJUSTMENTS | DETAILS ADJUSTMENTS |
|-----------------------------------|--|---------------------|--|-----------------------|-----------------------|
| Equipment Operator/Tester | Operator: JAKE AMUNDSON | | HTCP Certification Number: 103866 | | |
| Equipment | Manufacturer: SSI Model: CS9100 MID-MOUNT Collection Software Version: 4.6.2.5 | | Serial Number: CS9100-0163 Certification No.: 103866 Analysis Software Version: PROVAL 3.4 | | |
| Equipment Settings | Bump Height: 200.00 | | Bump Length: 25.00 | | |
| Bump Identification Method | > 200 inches per mile IRI based on a 25 foot moving average IRI using the ProVAL Smoothness Assuranc | | | | |
| Other Settings: | | | | | |

- a. Check the Approved Profilers List on the WisDOT Approved Products list website.

2024 WisDOT Approved Profiler Listing
 Note: Profiler Approvals Expire on May 31, in the year following approval.

| | | | |
|--|--|---|-----------------------------------|
| Contractor: | Rock Road Companies, Inc. 301 W.B.R. Townline Rd. Beloit , Wi. 53511 | Approved IRI Settings | |
| Date Approved: | Certified 05/01/2024 | Collection Software Version: | Dual Laser Collection Version 4.5 |
| Approved for Testing: | HMA and PCC | Data Collection Interval: | 1 Inch |
| Manufacturer: | SSI | Filters: | None |
| Device Type: | High Speed Profiler Dual Laser | Other Selectable Settings: | None |
| Model: | CS9100 Mid Mount | Profile Initiation on/off | Auto |
| Serial Number: | 103 | Reference Point Locator: | Auto |
| Host Vehicle: | 2017 GMC | Analysis Software Version: | ProVal 3.61.50 |
| Host Vehicle Model: | Sierra 1500 | 250 mm Filter: | Yes |
| Host Vehicle Serial: | 1GTV2MEC7H2199341 | IRI Filter: | Yes |
| Contact Person: | Jake Amundson | Other Selectable Settings | None |
| Cell Number: | 608-752-8944 | ProVAL Training Video and Input Import: | |
| E-mail Address | 608-225-3568 | http://roadwaystandards.dot.wi.gov/standards/gmp/index.htm | |
| Profiler Operator: | jamundson@rockroads.com | IRI and Localized Roughness Areas Are Determined Using ProVAL: http://www.roadprofile.com/ | |
|  | | IRI and Localized Roughness Data Reported In MRS: http://www.atwoodsystems.com/mrs | |
| | |  | |

- b. Check the UW Platteville HTCP Website for the operator’s certification. The operator must have a current Profiler certification.

Certifications for:

Jake Amundson (103866)

Rock Road Co Inc

Certification list is current as of Tue Mar 18 13:36:36 GMT 2025

7 Certification(s)

| Certification | Cert. Date (ACT Only) | Expiration Date | Status | Main Instructor and Mentor (ACT Only) |
|---------------|-----------------------|-----------------|--------|---------------------------------------|
| AGGTEC-I | | 7/31/2028 | Active | |
| HMA-IPT | | 7/31/2028 | Active | |
| HMA-MD | | 7/31/2028 | Active | |
| HMA-TPC | | 7/31/2028 | Active | |
| Nucdensity | | 7/31/2027 | Active | |
| Profiler | | 7/31/2025 | Active | |
| TMS | | 7/31/2028 | Active | |

Soils and Aggregate Review

1. All QC aggregate tests are entered in MRS for project review. These do not need to be approved, but it's important to review them for completion and accuracy.
 - a. Examples of aggregates that are entered – Class I & Class II concrete aggregates, base aggregate, MSE backfill, etc.
2. To review aggregate tests, hover over [Project ID] Data and select “Soils & Agg”

HQMS™ HIGHWAY QUALITY Management System **ATWOODSYSTEMS**
Contact Us: (608) 848-6085

HOME PROJECTS REVIEW AUTHORITY **1090-09-76 DATA** LINKS

Project 1090-09-76 – IH 43 Rock Freeway
Contract ID: 20240109008

FIELD OFFICE DETAILS
Office: (414)750-1403
Cell: Phone Number Not Available
Fax: Fax Number Not Available
Address: W18957777 Racine Ave, Muskego, WI 53150 (414)750-7490
[VIEW ON GOOGLE MAPS](#)
Directions:

PROJECT LEADER
Brian Perz
brian.perz@dot.wi.gov
Office: (414)750-1403
Cell: 414-750-1403

MANAGER
Alex Grasse
alex.grasse@dot.wi.gov
Office: 414-750-1404
Cell: Phone Number Not Available

WisDOT MATERIALS PERSON
Email Not Available
Office: Phone Number Not Available
Cell: Phone Number Not Available

CONTRACTOR MATERIALS PERSON
Mike Jacobs
mjacobs@rockroads.com
Office: Phone Number Not Available
Cell: (608)931-2965

TRAFFIC COMPANY
Mega Rentals
Office: (262)786-6900

PROJECT INFO
VERIFIED REPORTS ✓ DATA FOUND
STRUCTURES ✓ DATA FOUND
PAVEMENT ✗ NO DATA
PCC THICKNESS (MITSCAN - CONTRACTS 2018 AND LATER) ✗ NO DATA
PCC THICKNESS (OLD PROBING METHOD - CONTRACTS PRIOR TO 2018) ✗ NO DATA
HMA ✓ DATA FOUND
RIDE ✓ DATA FOUND
SOILS & AGG ✓ DATA FOUND
AGG SOURCES ✗ NO DATA

PRINT

3. Per Standard Spec 710.5.6.2.1 (Concrete Aggregates) and 730.3.2.4 (Base Aggregates), appropriate test results and control charts must be provided to the engineer within 1 business day of sampling (small quantity base aggregates covered by 730.3.4 are allowed 2 business days). Per Standard Spec 730.3.2.1, stockpile (or production if small quantity covered under 730.3.4.1.1) shall be provided prior to placement. QC reports (including source documents) and entry into MRS are both required. Timely submission and review of aggregate data is crucial to ensure conformance and to determine whether corrective action is needed. Close communication with the QC testing company is the best way to accomplish this!
4. To review aggregate test results, click “Details” for the sample you want to review. Then click “Summary Report” to view the entire entry.

▲ HIDE COR01.636-162-7-2024 06/26/24 Le'Var Lofton / 203861 07/18/24 CHRISTIAN CAPE QC FINE AGG, COURSE AGG A AND B 556.00 CUBIC YARDS Yes

This says "details" before you click it

Summary Report For COR01.636-162-7-2024

Date Sampled: 06/25/2024
 Date Received: 06/26/2024
 Date Tested: 06/26/2024
 Material Tested: FINE AGG, COURSE AGG A
 Manufacturer Name: GENESEE
 Prime Contractor:

Placement Station:
 Placement Offset:
 Placement Lift ID:
 Quantity & Units: 556.00 CUBIC YARDS
 Item Number:
 Measurement System: English

Sampled By: Bradley Schmidt / 101011
 Received By:
 Tested By: Le'Var Lofton / 203861
 MSE Wall Structure ID:
 Test Type: QC
 Sampled During:

Verified By: CHRISTIAN CAPE Date Verified: 07/18/2024 Satisfactory?: Yes

Remarks:

Multiple Gradation

| #2 Course | | #1 Course | | Fine Gradation | |
|-----------------------------|-------------------|-----------------------------|-------------------|-----------------------------|-------------------|
| Weight of Sample (Moist): | 16765.30 | Weight of Sample (Moist): | 5857.70 | Weight of Sample (Moist): | 520.90 |
| Weight of Sample (Dry): | 16654.60 | Weight of Sample (Dry): | 5743.20 | Weight of Sample (Dry): | 495.20 |
| Sieve Size Metric (English) | Cumulative Weight | Sieve Size Metric (English) | Cumulative Weight | Sieve Size Metric (English) | Cumulative Weight |
| 50.0 (2") | 0.0 | 25.0 (1") | | 9.5 (3/8") | |
| 37.5 (1 1/2") | 1603.0 | 19.0 (3/4") | 376.0 | 4.75 (#4) | |
| 31.5 (1 1/4") | 0.0 | 12.5 (1/2") | 3094.0 | 2.36 (#8) | 46.6 |
| 25.0 (1") | 11901.0 | 9.5 (3/8") | 4279.0 | 1.18 (#16) | 137.4 |
| 19.0 (3/4") | 15946.8 | 4.75 (#4) | 5399.8 | 0.600 (#30) | 235.2 |
| 12.5 (1/2") | 16234.8 | 2.36 (#8) | 5613.7 | 0.425 (#40) | |
| 9.5 (3/8") | 16234.8 | 75µm (#200) | 5634.0 | 0.300 (#50) | 386.8 |
| 75µm (#200) | 16255.6 | In Pan | 5638.6 | 0.150 (#100) | 467.7 |
| In Pan | 16266.8 | | | 75µm (#200) | 485.2 |
| | | | | In Pan | 485.6 |

Reviewed By: _____
 Printed Name: _____

5. Check that the following information matches the QC test report.
 - a. Date sampled & date tested
 - b. Sampler and tester
 - c. Materials source(s)
 - d. Individual gradations
 - e. Satisfactory?
6. Even though these tests don't need to be approved/finalized, it is good practice to note on a quantity tracking sheet that a test has been entered and reviewed. It's helpful for final reviewers if the test number is recorded on the tracking sheet.