20SP-500A-01

MICHIGAN DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION FOR MATERIALS AND WORKMANSHIP PAVEMENT WARRANTY



CFS:DJW

20SP-500B-02

a. Description. The warranty bond, the terms included in the contract. applied to pavement proj Warranty warrants the De

b. Definitions.

Acceptance Date of Conceptance Date of Conceptance in writing compliance with the conceptance and const one acceptance date

MICHIGAN DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION FOR PAVEMENT PERFORMANCE WARRANTY

1 of 7 APF

APPR:KPK:DBP:12-03-21 FHWA:APPR:12-09-21

a. Description. The pavement performance warranty consists of satisfying the warranty requirements of the work contained in the Special Provision for Warranty Work Requirements. This special provision establishes the common terms and definitions applied to the pavement requiring warranted work. The pavement performance warranty assures and protects the Department from specific defects found in the pavement.

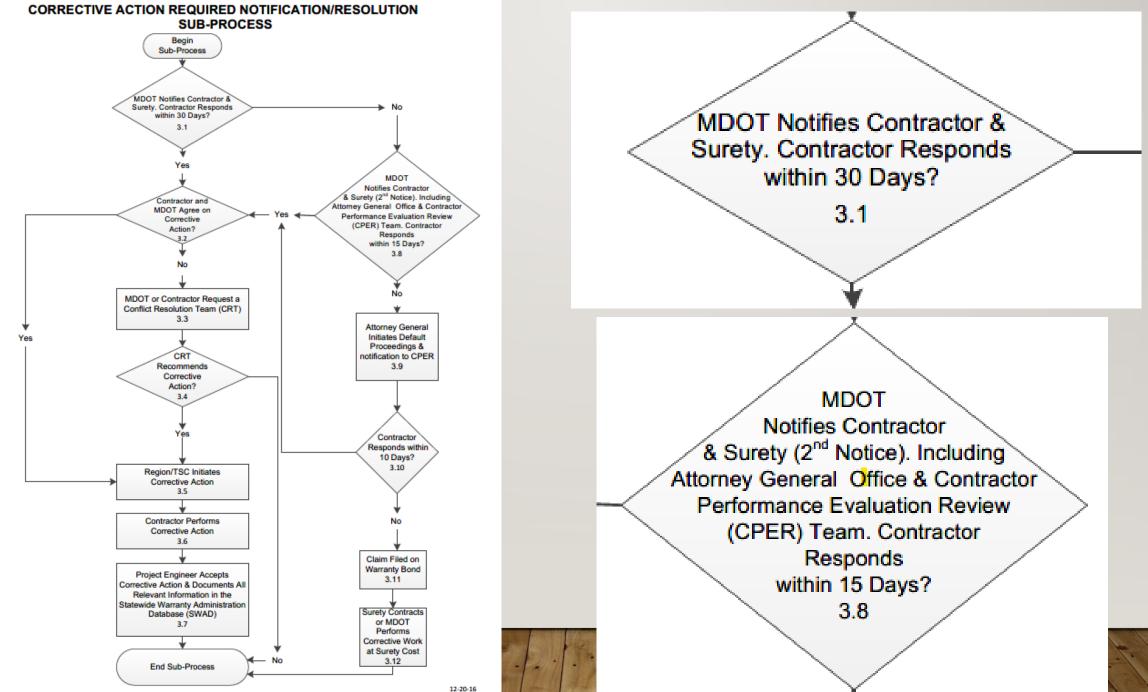
b. Definitions.

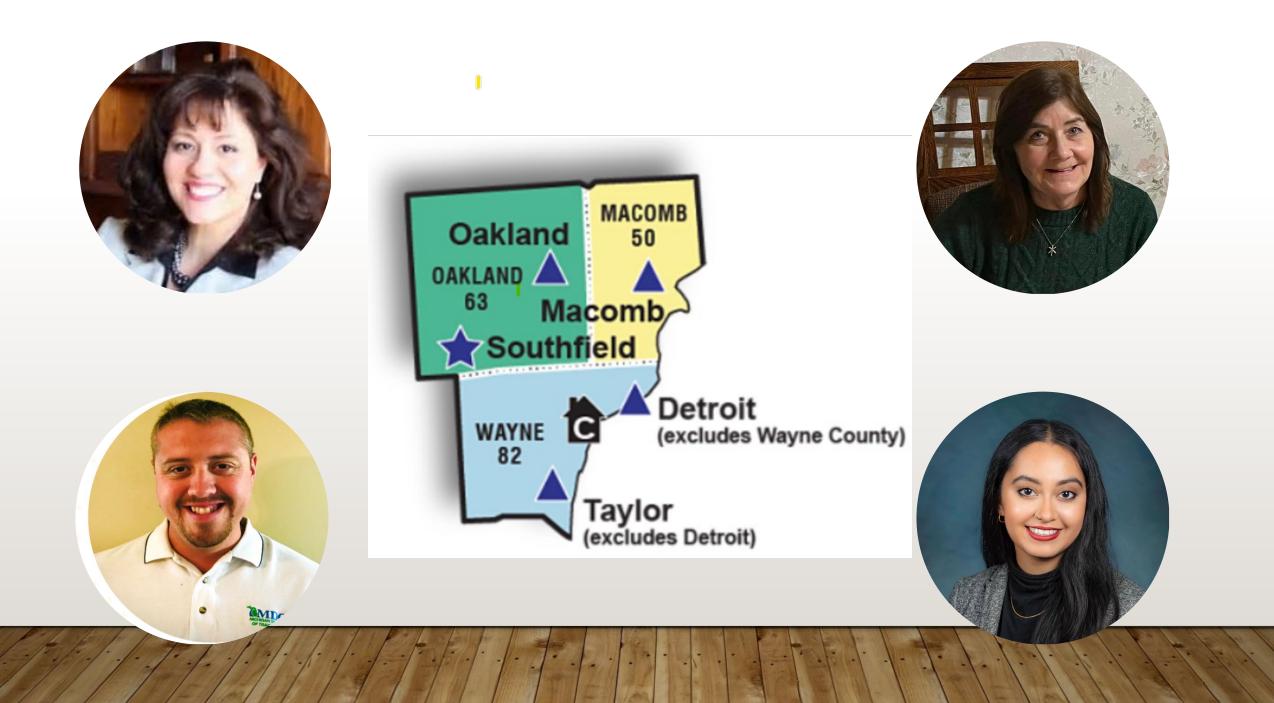
CFS:DJW

CONSTRUC

Warranty Process

| | | | Required | | | | | |
|-----|--|-------------|---|--|--|--|---|--|
| | | Next action | Documentation/ Forms | Required SWAD Action | Required ProjectWise Action | Required Notifications | Additional comments | |
| 1.1 | Contract Services Notifies Engineer of Awarded Project with Warranty | 1.2 | Email received notifying contract documents are in ProjectWise. | Enter Contract information and check for multiple warranties | Copy Warranty SP and Warranty Bond info to folder 107 | | Include comments that reference any additional warranties on the project | |
| 1.2 | Contractor Completes Construction of Warranted Items. | 1.3 |)= | | _ | | | |
| 1.3 | Initial Acceptance Form Completed and Signed by Engineer and Contractor. Initial Acceptance Date Entered into Statewide Warranty Administration Database (SWAD). | 1.4 | imme day in | ds to be en diately to e spections a | nsure 120 | Signed copy sent to Contractor, Surety and Contract Services | A needs to be entered immediately to ensure 120 day inspections are not missed. Enter comments including any areas that were excluded from the warranty | |
| 1.4 | Warranty Begins | 1.5 | missed | | - | | Ensure all warranties are for the contract are entered | |
| 1.5 | Monitor/Administrative Warranty Sub-Process | 2.1 | | | | | | |
| 1.6 | Engineer Provides Notification to Contractor, Surety and Contract Services. Final Inspection Date & All Relevant Warranty Information Entered in SWAD | End Process | Final inspection Forms and Notification letter | Final inspection Date Entered | Final Inspection forms and notification letter in ProjectWise folder 107 | Contractor, Surety, Contract Services notified of acceptance | | |









QuADS-SWAD Inventory and Schedule (2024-2026 Contract)

25251 Northline Road, Taylor, MI 48180 734.947.9700 FAX: 734.947.9726

| PROJECT: MDOT QuADS/SWAD Inventory (2024-2026 Contract) LOCATION: MDOT Metro Region | | | | | | | | | | | | Revised By: Monthly Update: | MTL MTL | Date: | 02-01-2024 02-01-2024 | - |
|--|----------------------|--------|---------|---|--------------|--------------------|--------------------------|----------|-------------------------------|-----------------------|-----------------|--------------------------------|---|--|---------------------------|--|
| | | | | | | | | | | | | Revised Cost By: | MTL | Date: | 01-03-2024 | Budget Reporting Dates: 01-03-24 through XX-XX-24 |
| Warr # | Contract ID | Region | TSC | Warr Type Desc | Warr Type | Warr Cat | Warranty Contractor | Constr Y | r Road Route # | Warr Exp Date | Next Insp Due | Cost of Inspection | Date Inspected (Anticipated dates in blue) | Date Submitted (Anticipated dates in red) | Warranty Work Required | Comments |
| 4851 | 50022-111361 | Metro | Macomb | M&WPW for New/Reconstructed HMA Pavem | PAV | M&W | Cadillac Asphalt, L.L.C. | 2018 | M-59 (M-53 to Romeo | 06/01/2024 | 12/01/2023 | \$- | 12/6/23, 1/3/24 | 01/12/2024 | yes | Final. C.A. required for LCOJ (some of which have been prev. sealed). |
| 4939-3 | 82194-113717 | Metro | Detroit | M&WPW for Jointed Plain Concrete Pavement | PAV | M&W | Ajax Paving Industries, | 2018 | NB I-75 (113+99 to 143+75) | 07/01/2024 | 01/01/2024 | \$- | 01/08/2024 | 01/25/2024 | yes | Final. I.A. of 7/1/2019. C.A. required for corner cracking. |
| 4939-4 | 82194-113717 | Metro | Detroit | M&WPW for Jointed Plain Concrete Pavement | PAV | M&W | Ajax Paving Industries, | 2018 | SB 1-75 (168+96 to 214+90) | 07/01/2024 | 01/01/2024 | \$ - | 01/08/2024 | 01/25/2024 | yes | Final. I.A. of 7/1/2019. C.A. required for corner cracking & 3 shattered slabs. A shattered slat |
| 6625-2 | 82293-111073-2 | Metro | Taylor | Bridge Coating | BRG | Perf | C. A. Hull Co., Inc. | 2022 | I-275 (B07, B08) | 05/09/2024 | 01/09/2024 | (SME total below) | 01/11/2024 | 01/22/2024 | yes | Final, no Interim required. C.A. required. Multiple I.A. dates. |
| 6589 | 82252-126864 | Metro | Detroit | Warranty on Concrete Surface Coating | BRG | Perf | Civil Coatings and Cons | 2021 | I-75 (10 bridges) | 06/09/2024 | 02/09/2024 | \$- | 02/13/24, 02/15/24 | | | Final, no Interim required. |
| 5113-1 | 50061-117578 | Metro | Macomb | M&WPW for New/Reconstructed Jointed Plair | PAV | M&W | Interstate Highway Cor | 2018 | EB I-696 and Ramps | 08/25/2024 | 02/25/2024 | \$- | 02/27, 02/28, 02/29 | | | Final. Review in depth for JSF and for scaling on the Gratiot Ramp. |
| 6627-1 | 82293-111073-2 | Metro | Taylor | Warranty on Concrete Surface Coating | BRG | Perf | Progress Company, Inc | 2021 | I-275 (11 structures) | 07/12/2024 | 03/12/2024 | (SME total below) | SME to perform | | | Final, no Interim required. Multiple I.A. dates. See 1029A form for structure numbers/descrip |
| 6047-1 | 82024-113125 | Metro | Detroit | M&WPW for Multiple Course HMA Overlays o | PAV | M&W | Cadillac Asphalt, L.L.C. | 2020 | I-94 at Brush | 09/14/2024 | 03/14/2024 | \$- | | | | Final. Interim performed by WT in 2022. |
| 5125 | 50061-117578 | Metro | Macomb | M&WPW for Jointed Plain Concrete Pavement | PAV | M&W | Interstate Highway Cor | 2019 | I-696 WB SD (Ryan to Milto | 09/19/2024 | 03/19/2024 | \$- | | | | Final. |
| 6627-2 | 82293-111073-2 | Metro | Taylor | Warranty on Concrete Surface Coating | BRG | Perf | Progress Company, Inc | 2021 | I-275 (5 structures) | 08/01/2024 | 04/01/2024 | (SME total below) | SME to perform | | | Final, no Interim required. Multiple I.A. dates. Structures partially completed in 2022. See 10: |
| 6254 | 82102-204902 | Metro | Taylor | PW, High Friction Thin Epoxy Polymer Bridge D | BRG | Perf | Progress Company, Inc | 2019 | M-14 WB over Sheldo | 10/06/2024 | 04/06/2024 | \$ - | | | | Final. Friction Thin Epoxy Polymer Deck Overlay. |
| 6208 | 82023-79788 | Metro | Detroit | M&WPW for Multiple Course HMA Overlays o | PAV | M&W | Ajax Paving Industries, | 2019 | I-94 (24th to RR's) | 10/27/2024 | 04/27/2024 | \$ - | | | | Final. |
| 6045-1 | 82024-113125 | Metro | Detroit | M&WPW for New/Reconstructed Jointed Plair | PAV | M&W | Z Contractors, Inc. | 2020 | I-94 at Brush | 11/01/2024 | 05/01/2024 | \$ - | | | | Final. Interim performed by WT in 2022. |
| 6203 | 63174-124864 | Metro | Oakland | M&WPW for New/Reconstructed Jointed Plair | PAV | M&W | C. A. Hull Co., Inc. | 2019 | I-75 Bridge Approache | 11/02/2024 | 05/02/2024 | \$ - | | | | Final. I-75 bridge approaches (S01-1 & S01-2). |
| 6205 | 63174-124864 | Metro | Oakland | M&WPW for Multiple Course HMA Overlays o | PAV | M&W | Ajax Paving Industries, | 2019 | I-75 ramps at Chrysler | 11/07/2024 | 05/07/2024 | \$ - | | | | Final. |
| 6111 | 63022-119805 | Metro | Oakland | M&WPW for Multiple Course HMA Overlays o | PAV | M&W | Cadillac Asphalt, L.L.C. | 2019 | M-5 under I-96 BL (Gr | 11/15/2024 | 05/15/2024 | \$- | | | | Final. |
| 6625-3 | 82293-111073-2 | Metro | Taylor | Bridge Coating | BRG | Perf | C. A. Hull Co., Inc. | 2022 | I-275 (S06) | 09/20/2024 | 05/20/2024 | (SME total below) | SME to perform | | | Final, no Interim required. Multiple I.A. dates. Note: only portions of S06 (ref. 1029A form) |
| 6061 | 82025-113127 | Metro | Detroit | M&WPW for New/Reconstructed Jointed Plair | PAV | M&W | GM & Sons, Inc. | 2019 | French, Concord over | 11/27/2024 | 05/27/2024 | \$ - | | | | Final. |
| 6224 | 82053-128774 | Metro | Taylor | M&WPW for New/Reconstructed Jointed Plair | PAV | M&W | Z Contractors, Inc. | 2019 | US-24 over Rouge Rive | 11/29/2024 | 05/29/2024 | \$ - | | | | Final. Two segments 6224-1 and 6224-2 have the same Initial Acceptance Date. |
| 6762 | 82252-209666 | Metro | Detroit | Bridge Coating | BRG | Perf | C. A. Hull Co., Inc. | 2022 | I-75/M-8 (8 structures) | 10/11/2024 | 06/11/2024 | (SME total below) | SME to perform | | | Final, no Interim required. |
| 6765 | 63043-212366 | Metro | Oakland | Warranty on Concrete Surface Coating | BRG | Perf | Progress Company, Inc | 2022 | Squirrel Rd. over M-59 | 10/21/2024 | 06/21/2024 | \$ - | | | | Final, no Interim required. |
| 4939-1 | 82194 113717 | Metro | Detroit | M&WPW for Jointed Plain Concrete Pavement | PAV | M&W | Ajax Paving Industries, | 2018 | I-75 Inlay, Clark to Springwo | 12/23/2024 | 06/23/2024 | \$ - | N/A | N/A | N/A | Final. MDOT confirmed this segment does not represent any I.A. date. |
| 6025-1 | 63174-201437 | Metro | Oakland | M&WPW for New/Reconstructed Jointed Plair | PAV | M&W | Walsh Construction Co | 2020 | NB I-75 (Seg. 2) | 12/27/2024 | 06/27/2024 | \$ - | | | | Final. Interim performed by WT in 2023. Send reports to Macomb TSC, CC Oakland. |
| 6750 | 82081-205017 | Metro | Taylor | Warranty on Concrete Surface Coating | BRG | Perf | Pneumatic Restoration | 2022 | M-153 over Hines Dr. | 10/28/2024 | 06/28/2024 | \$ - | | | | Final, no Interim required. Email Hickman to confirm 1 or 2 I.A.'s. |
| 6763 | 82252-209666 | Metro | Detroit | Warranty on Concrete Surface Coating | BRG | Perf | Pneumatic Restoration | 2022 | I-75/M-8 (8 structures) | 10/31/2024 | 06/30/2024 | (SME total below) | SME to perform | | | Final, no Interim required. |
| 6744 | 82194-200646-2 | Metro | Detroit | Warranty on Concrete Surface Coating | BRG | Perf | Progress Company, Inc | 2022 | I-75 over Fort St. | 11/01/2024 | 07/01/2024 | \$- | | | | Final, no Interim required. Request 1029 Form from Taylor TSC. |
| 6609 | 63052-208615 | Metro | Oakland | M&WPW for Cold Milling & One Course HMA | СРМ | M&W | Ajax Paving Industries, | 2021 | US-24 | 11/02/2024 | 07/02/2024 | \$- | | | | Final, no Interim required. |
| 6623 | 82293-111073-2 | Metro | Taylor | M&WPW for Cold Milling & One Course HMA | СРМ | M&W | Ajax Paving Industries, | 2021 | I-275 | 11/17/2024 | 07/17/2024 | \$ - | | | | Final, no Interim required. |
| **Red indica | ates inspection prep | needed | | *Blue indicates SME to perform | | | | | Budget Rep | orting Dates: 0 | 1-03-24 through | XX-XX-24 | | | | 2024 Inspection Schedule |

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Project:

CS 82122 JN 89095, 106952

Observations JOINT SEALANT FAILURE (THRESHOLD LIMIT = < 2 SLABS, 10% OF SLAB PERIMETER) AMOUNT OF ESTIMATED TOTAL SEGMENTS COMMENTS LANE DESCRIPTION SEGMENT NUMBER PHOTO # NUMBER OF SLABS EXCEEDIN Minor amounts 22, 50, 52, 53, 54, EB I-96 - lane #1 9 3 or more At least 5.3' of joint sealant failure per slab > 10% (> 5.2'), ETL 56, 57, 58, 63 observed but do 11, 29, 52, 53, 54, 9 EB I-96 - lane #2 3 or more At least 5.3' of joint sealant failure per slab > 10% (> 5.2'), ETL 56, 57, 58, 63 4, 17, 48, 49, 51, 2 0 52 Transverse cra not exceed the Warra Joint sealant fa threshold limits be necessary to _____ EB/V 1-9 1-9 Ram SHAT SEGM NO I-9 Ram Segm Proje Photo # Date Segment Station Description EB I-96 - lane #3, 4 - 12' of joint sealant failure (lane #3), 14 3/26/2019 52 1883+79

Direction

EB facing

north

4' of joint sealant failure (lane #4)



Warranty Number 3992 82122 - 89095, 106952

X segment exceeds the threshold limits for joint sealant failure

| | | | - | Eastbound I-96 | | | | | | _ | Approximate | | |
|---------|---------|---------|---|----------------|------|------|------|-------------------|------|------|-------------|------|-----------|
| Segment | Plan S | Station | | Lane | Lane | Lane | Lane | | Lane | Lane | Lane | Lane | Road |
| Number | From | То | | 4 | 3 | 2 | 1 | | 1 | 2 | 3 | 4 | Crossings |
| 1 | 1612+00 | 1617+28 | | X | X | X | X | | | | X | | |
| 2 | 1617+28 | 1622+56 | | X | X | X | X | | | | X | X | Newburgh |
| 3 | 1622+56 | 1627+84 | | X | X | | | | | | | | |
| 4 | 1627+84 | 1633+12 | | X | | | | | | | | | |
| 5 | 1633+12 | 1638+40 | | X | | | | | | | | | |
| 6 | 1638+40 | 1643+68 | | | | | |] | | | | X | 1 |
| 7 | 1643+68 | 1648+96 | | X | X | X | X | | | | X | X | Levan |
| 8 | 1648+96 | 1654+24 | | X | | | | | | | | | |
| 9 | 1654+24 | 1659+52 | | X | | | | | | | | | |
| 10 | 1659+52 | 1664+80 | | | | | | Median Barrier | | | | | |
| 11 | 1664+80 | 1670+08 | | | | | | Wall | | | | | 1 |
| 12 | 1670+08 | 1675+36 | | | | | |] | | | | | |
| 13 | 1675+36 | 1680+64 | | | | | | | | | | | |
| 14 | 1680+64 | 1685+92 | | X | | X | | | | | | | |
| 15 | 1685+92 | 1691+20 | | | | | | | | | | |] |
| 16 | 1691+20 | 1696+48 | | | | | | | | | | |] |
| 17 | 1696+48 | 1701+76 | | X | X | X | | | | | | |] |
| 18 | 1701+76 | 1707+04 | | X | | | | | | | | | |

5/12/2020 FIELD INVESTIGATION



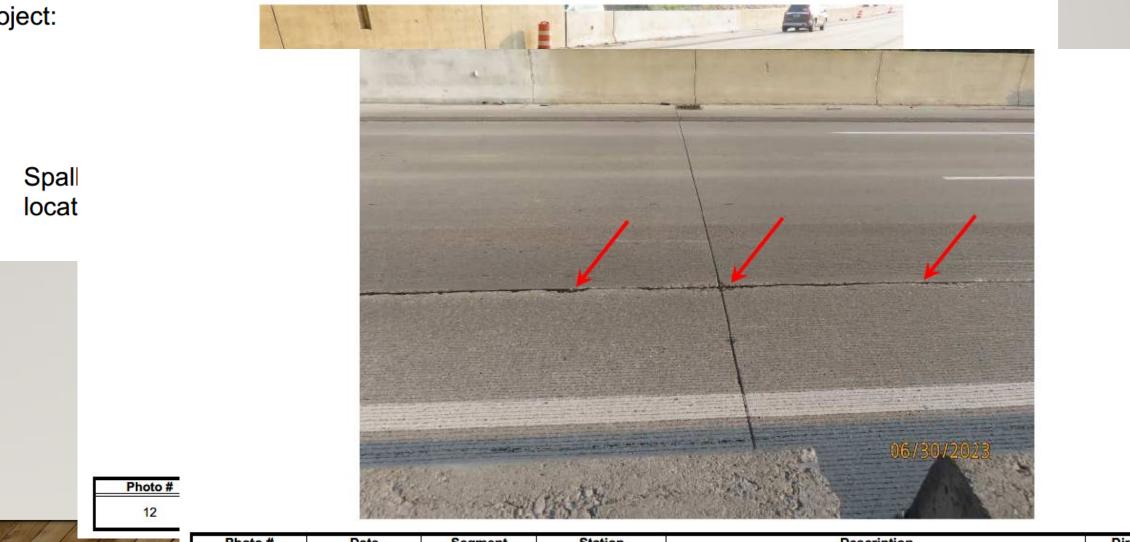
Packed slurry below backer rod.

Notes from Andy Bennett:

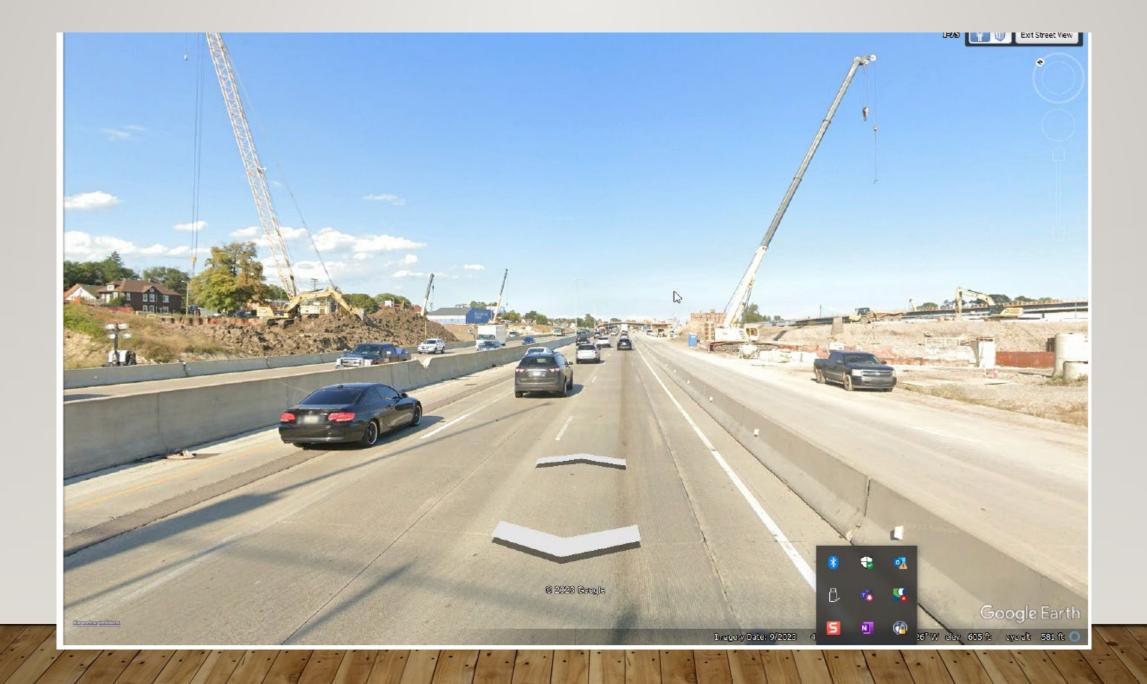
- Sealant showed adhesion failure from reservoir faces with presence of dirt on both sides of sealant.
- Compacted silty material was present below the backer rod.
- Crack development around bigger coarse aggregate indicates the crack developed early as intended.
- Closure examination showed the packed silty material was slurry from the sawing operation that did not get removed from the joint prior to sealing. Approximately 2" of the saw slurry material was present.
- Pitting of the concrete was also noticeable below the backer rod at all core locations. Pitting is an indication of deicer scaling in the mortar portion of the concrete core.

Metro Region Warranty Inspections Contract 2021-0243 Contract:

Project:

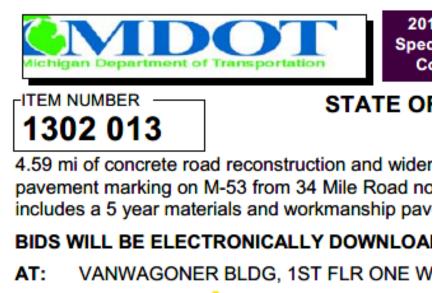


| 2 | Photo # | Date | Segment | Station | Description | Direction |
|---|---------|--------------|---------|---------|--|-----------|
| 2 | 13 | 6/30/2023 | 5 | 169+72 | NB I-75 - Iane #2, 3 - 12' of longitudinal joint spalling distresses | NB facing |
| 1 | 15 | 13 0/30/2023 | | 103+72 | The 1-10 - Tane #2, 0 - 12 of forgitudinal joint spanning distresses | northwest |

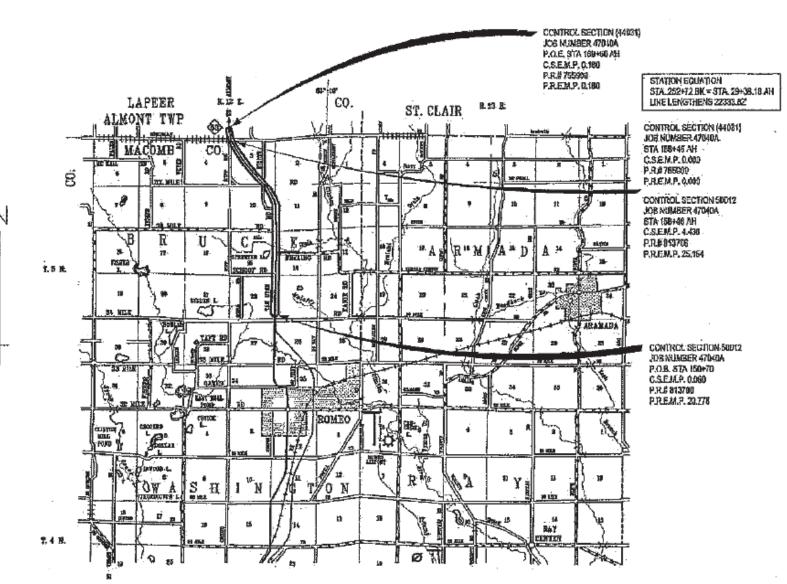


IN 47040 M-53 34 MILE RD. TO BOARDMAN RD.

C



| CONTRACT ID | <u>CONTROL</u> | SECTION |
|-------------|----------------|---------|
| 50012-47040 | NH | 50012 |



WARRANTY INSPECTION REPORT

Observations

Mainline

No map cracking or shattered slab distresses were observed.

Minor amounts of transverse cracking, scaling, spalling, and joint sealant failure distresses were observed but do not exceed the allowable threshold limits.

Significant amounts of corner cracking and longitudinal cracking distresses were observed on both NB and SB M-53 (lane #1). Corner cracking distresses exceed the allowable threshold limits on both NB M-53 (lane #1) and SB M-53 (lane #1). Longitudinal cracking distresses exceed the allowable threshold limits on NB M-53 (lane #1).

PROPOSAL RECOMMENDED CORRECTIVE ACTION

| Table 2: Recommended Corrective Action | | | | | | | | |
|---|--|--|--|--|--|--|--|--|
| Condition Parameter (g) | Recommended Action (a) | | | | | | | |
| Longitudinal Cracking (b) | Retrofit load transfer | | | | | | | |
| Transverse Cracking (b) | Retrofit load transfer | | | | | | | |
| Corner Cracking | Full-depth, tied, concrete patch | | | | | | | |
| Map Cracking | Remove and replace (c) | | | | | | | |
| Spalling | Repair with epoxy or cement mortar (d) | | | | | | | |
| Scaling | Diamond grind surface (e) | | | | | | | |
| Joint Sealant Failure | Remove and replace seal material (f) | | | | | | | |
| a. If multiple condition parameters are present, the recommended action may be revised. Removal and replacement is required if multiple crack types are present. b. The appropriate corrective treatment is dependent on the crack's location and depth. Full-depth T cracks require retrofit load transfer (> 90% load transfer efficiency) as a minimum. Full-depth/full-length L cracks require slab removal and replacement, if outside influence of lane ties. | | | | | | | | |

c. Dependent on cause. If cracking is entirely from "drying shrinkage", no corrective action is required.

d. Repair dependent on area and depth of spall. Use most current procedures and material mixtures recommended by Material's Technology Section, in the Construction and Technology Division.

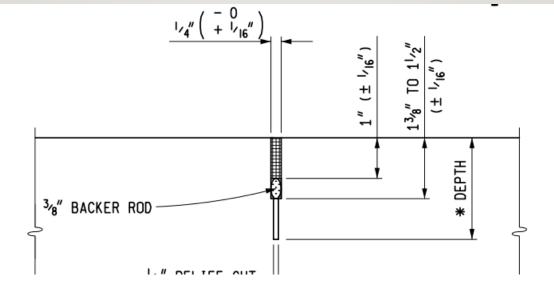
e. Diamond grinding applies to entire slab surface area where cracking exists.

f. Replace with existing material type. Neoprene seals are removed and replaced full-width.

g. Shattered slabs must be removed and replaced as directed by the Engineer.

THICKNESS FOR PAVEMENTS LESS THAN OR EQUAL TO ("IN THICKNESS AND 1/3 THE SLAB THICKNESS FOR PAVEMENTS GREATER THAN 7" THICK.

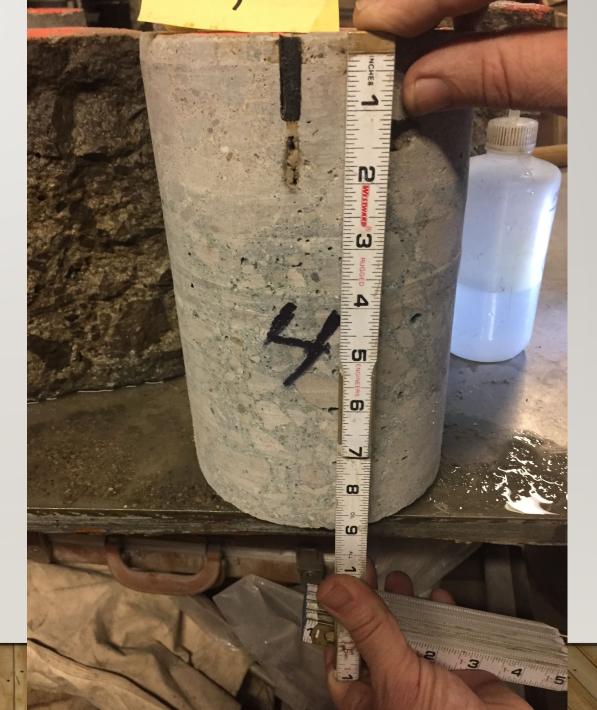
* DEPTH OF RELIEF CUT FOR JOINT (Cp) AND (C3p) SHALL BE 1/4 THE SLAB THICKNESS FOR PAVEMENTS LESS THAN OR EQUAL TO 7" IN THICKNESS AND 1/3 THE SLAB THICKNESS FOR PAVEMENTS GREATER THAN 7" THICK.



STANDARD PLAN R-39-K







PROJECT TIMELINE

- Letting 2/1/13
- Original OTT 10/13/13
- Initial Acceptance 11/13/13
- Final Warranty Inspection Report 6/19/18
- Warranty Expiration 11/13/18
- CRT begin date?
- CRT Findings Report 11/15/21
- Corrective Action Completed 8/26/23

QUESTIONS?

