

**REPORT NUMBER TWO**  
**FINAL REPORT FOR SPECIAL EXPERIMENTAL**  
**PROJECT 14 (SEP-14)**

**EVALUATION REPORT OF CONTRACTOR SELECTION USING BEST**  
**VALUE PRACTICES**

For

**HIGHWAYS FOR LIFE**

On M-115 from Lake Station north to Clare/Osceola County Line and M-115 over  
the Doc & Tom Creek (B01 of 18011) and M-115 over Norway Creek (B02 of  
18011) in Freeman Township, Clare County, Michigan  
Michigan JN 84169 & 85241

Proposed by the

**MICHIGAN DEPARTMENT OF TRANSPORTATION**

June 12, 2009

Contact Person:  
Jack Hofweber, P.E.  
Mt Pleasant Development Engineer  
Phone: (989) 775-6104 ext 302  
Email: hofweberj@michigan.gov

## **I. Introduction & Background**

This Final Work Plan Report will consist of the results of the Contractor's work versus the proposed Contractor's work plan and summaries of lessons learned on this performance contracting method.

As detailed in the SEP-14 Initial report, this contract was awarded to Central Asphalt out of Mt Pleasant, Michigan not solely on price, but awarded to the Contractor whose proposal represents the best value to MDOT considering price, goals, plans and innovations.

## **II. Project Location**

This 5.5 mile rural two lane project is located on M-115 from Lake Station Avenue to the Osceola/Clare County Line, Freeman Township, Clare County Michigan.

## **III. Goal Outcomes**

1. Open to Traffic
  - a. Original contract open to traffic date submitted, July 2, 2008.
  - b. Adjusted open to traffic date after late reward, November 3, 2008.
  - c. Actual open to traffic date, October 14, 2008 (20 days early). Incentive \$7,000/day.
  - d. Total incentive granted to Central Asphalt Incorporated is \$98,000 (maximum 14 days allowed per contract).
2. Construction and Cleanup Completion
  - a. Punch list issued and completed October 16, 2008.
  - b. Incentive granted 14 days at \$2,650/day is \$37,100.
3. Pavement Performance (See Attachment A)
  - a. Ride Quality Index (RQI), 0 to less than 20, measured 20 units at \$5,000/unit is \$100,000.
  - b. RQI, 20 to less than 30, measured 2 units at \$2,500/unit is \$5,000.
  - c. Entire project less than 30, bonus of \$25,000.
  - d. Total pavement incentive granted to Central Asphalt \$130,000.

Note – RQI of 30 is about IRI of 56

4. Workers Safety During Construction
  - a. No workers injured.
  - b. Total incentive granted to Central Asphalt Incorporated \$5,000 (maximum allowed).

5. Work Zone Crashes (See Attachment B)
  - a. Two animal crashes over the entire project duration.
  - b. Total incentive granted to Central Asphalt Incorporated, \$20,000 (maximum allowed).
6. Motorist Delay (See Attachment C)
  - a. 52 measurements under 5 minutes at \$1000 incentive per measurements (\$50,000 maximum incentive).
  - b. One measurement on 10/6/08 over 15 minutes, this is cause for the Bonus Overall Incentive **not** to apply. Based on a mutual group agreement, there was no factual evidence provided demonstrating the delay was completely outside of the Contractor's control.
  - c. Total incentive granted to Central Asphalt Incorporated, \$50,000.

Central Asphalt requested a Region Claim meeting on the overall incentive decision by the Mt Pleasant TSC. The Region's decision was to support the TSC's outcome. See Attachment D for letter dated April 2, 2009.

Bonus Summary:

|                          | Maximum Possible per Contract | Awarded      |
|--------------------------|-------------------------------|--------------|
| Open to Traffic          | \$98,000                      | \$98,000     |
| Construction and Cleanup | \$37,100                      | \$37,100     |
| Pavement Performance     | \$135,000                     | \$130,000    |
| Workers Safety           | \$5,000                       | \$5,000      |
| Work Zone Crashes        | \$20,000                      | \$20,000     |
| Motorist Delay           | \$100,000                     | \$50,000     |
|                          |                               |              |
| Totals:                  | \$395,100.00                  | \$340,100.00 |

#### IV. Lessons Learned

Pavement Warranty – Original selected Contractor had submitted a 6-year pavement warranty that they could not obtain. Long term warranties are very difficult to obtain for smaller companies in today's economy. The possible outcome could be to allow multi-term bonds.

HfL Contract Needs Clear Provisions for Site Change - Under the development of the project it was assumed that the Contractor would follow MDOT's normal process for site changes by the claim procedures. The Contractors did not make these same assumptions. One example of this happening is the existing bridge "As Built" plans had inaccurate dimensions and caused additional work. This additional work was eventually paid by MDOT through the claim process. However the

Contractor was not always sure if these site changes were warranted for payment due to the project being paid as one lump sum. The Contractor recommended that MDOT provide clearer direction on future projects.

Proposed Innovations in Violation - Bidding Contractor proposed narrow design bridge width of 40'. Although this width met AASHTO minimum width it did not meet MDOT's minimum width of 44' (additional 2' beyond the shoulders). This Contractor was not selected for other reasons. Future contracts need to state that design standards must meet not only AASHTO, but MDOT's Standards as well.

Bidding Contractor proposed to eliminate slope restoration adjacent to the aggregate shoulder. This proposal was in clear violation of project requirements for slope seeding. Contract did not address how to handle situations such as this. Future contract should allow conditions of acceptances.

Commercial Driveways – The original log of plans had setup a few business drives where residents had businesses out of their homes or their garage or barns. Two years later the project was under construction and the business were no longer there. The driveways were constructed as a commercial drive with a width too narrow. Under a normal contract our inspector would have checked back with the designer to see why such design was setup.

User Survey – Pre and Post survey results were inconclusive. This survey was difficult to sample because the users were seasonal tourist traffic and MDOT had to substitute the major stakeholders to include businesses and homeowners. The pre-construction results showed a majority of the sample was totally dissatisfied on the pre-pavement ride quality and were satisfied on the post ride quality of the pavement. The post survey showed that the majority was totally dissatisfied on the work zone delay. This was surprising; due to the average measured delays were 2 minutes and 16 seconds beyond the normal travel time and only one delay beyond 10 minutes. See Appendix A and B.

## **V. Successes**

Self Adjusting Temporary Signals – The use of these signals was a complete success and is being implemented state wide where possible.

Temporary Object Markers - These devices were setup along the edge of the temporary lane just outside the two foot shoulder. The markers help eliminate runoffs. Traditionally this roadway experiences high recreational vehicle (RV) runoffs. Providing these markers helped eliminate runoffs.

Pre-cast Bridge Construction – The two smaller bridges were constructed utilizing Hy-Span Type Design. This allowed the Contractor to expedite the time of construction by about half and reduce the time traffic was operating under part-width construction.

Rubblizing Existing Underlying Concrete Pavement – The Contractor chose to substitute all the joints repairs with rubblizing the underlying concrete pavement. The method reduced the Contractor's risk on the 5 year pavement warrantee, and at the same time, provided a superior pavement design over the joint repairs.

24 Roadside Patrol – The Contractor provided 24 roadside services within the construction zone. The helped eliminate any delays caused by brake downs.

Temporary Traffic Lane – During the major construction stages, an 11 foot wide temporary traffic lane was used. This provided two-way traffic, which reduced the delays; flag control type crashes, and increased speed of construction.

## **VI. MDOT's Conclusions:**

MDOT's overall conclusion on this project was that it was successful and if the opportunity presents, MDOT would enter into a project that involves contract performances. Currently MDOT is working on similar projects that are design builds. MDOT and the industry are incorporating the lessons learned from this project into the design build projects under development.

| Michigan Department of Transportation               |                           |       |       |   |           |        |        |
|---|---------------------------|-------|-------|---|-----------|--------|--------|
| RIDE QUALITY SUMMARY                                |                           |       |       |   |           |        |        |
| Dated: January 14, 2009                             |                           |       |       |   |           |        |        |
| Physical Road Name                                  | Physical Reference Number | BMP   | EMP   | State Route name                                  | Direction | Ramp   | County |
| M-115   | 1042308                   | 0     | 5.709 | M-115   | E/W       | NA     | Clare  |
| 18011-84169A NB Results Overall RQI 11.73           |                           |       |       | 18011-84169A SB Results Overall RQI - 20.28       |           |        |        |
| Averages of Left and Right Wheel Paths - Northbound |                           |       |       | Average of Left and Right Wheel Paths - Eastbound |           |        |        |
|   | AVG RQI                   | RQI   |       |   | AVG RQI   | RQI    |        |
| Mile  |                           |       |       | Mile  |           |        |        |
| 0.1   | 14.089                    | 19.69 |       | 0.1   | 19        | 41.48  |        |
| 0.2   |                           | 12.88 |       | 0.2   |           | 10.64  |        |
| 0.3   |                           | 10.71 |       | 0.3   |           | 15.5   |        |
| 0.4   |                           | 16.5  |       | 0.4   |           | 14.93  |        |
| 0.5   | 13.266                    | 10.62 |       | 0.5   | 6.442     | 12.45  |        |
| 0.6   |                           | 12.27 |       | 0.6   |           | 5.29   |        |
| 0.7   |                           | 11.78 |       | 0.7   |           | 6.64   |        |
| 0.8   |                           | 13.84 |       | 0.8   |           | 6.02   |        |
| 0.9   | 11.092                    | 13.13 |       | 0.9   | 14.24     | 9.84   |        |
| 1   |                           | 15.31 |       | 1   |           | 4.97   |        |
| 1.1   |                           | 14.27 |       | 1.1   |           | 7.53   |        |
| 1.2   |                           | 13.87 |       | 1.2   | 7.152     | 8.29   |        |
| 1.3   | 15.648                    | 12.49 |       | 1.3   |           | 30.64  |        |
| 1.4   |                           | 8.06  |       | 1.4   |           | 8.93   |        |
| 1.5   |                           | 6.77  |       | 1.5   | 11.806    | 15.81  |        |
| 1.6   | 20.91                     | 10.7  |       | 1.6   |           | 6.41   |        |
| 1.7   |                           | 6.52  |       | 1.7   |           | 0.09   |        |
| 1.8   |                           | 11.41 |       | 1.8   | 11.918    | 9.97   |        |
| 1.9   | 17.286                    | 24.47 |       | 1.9   |           | 8.64   |        |
| 2   |                           | 25.14 |       | 2   |           | 12.84  |        |
| 2.1   |                           | 29.92 |       | 2.1   | 8.932     | 10.79  |        |
| 2.2   | 9.984                     | 24.52 |       | 2.2   |           | 14.59  |        |
| 2.3   |                           | 21.88 |       | 2.3   |           | 9.55   |        |
| 2.4   |                           | 11.92 |       | 2.4   | 15.534    | 11.3   |        |
| 2.5   | 7.898                     | 15.31 |       | 2.5   |           | 12.8   |        |
| 2.6   |                           | 17.82 |       | 2.6   |           | 12.72  |        |
| 2.7   |                           | 20.51 |       | 2.7   | 21.636    | 13.47  |        |
| 2.8   | 17.212                    | 15.2  |       | 2.8   |           | 9.39   |        |
| 2.9   |                           | 16.62 |       | 2.9   |           | 8.99   |        |
| 3   |                           | 16.28 |       | 3   | 15.3      | 15.02  |        |
| 3.1   | 14.02                     | 16.81 |       | 3.1   |           | 6.37   |        |
| 3.2   |                           | 8.14  |       | 3.2   | 14.892    | 4.91   |        |
| 3.3   |                           | 8.71  |       | 3.3   |           | 4.1    |        |
| 3.4   | 14.125                    | 8.2   |       | 3.4   |           | 8.54   |        |
| 3.5   |                           | 8.06  |       | 3.5   | 11.25     | 20.74  |        |
| 3.6   |                           | 4.57  |       | 3.6   |           | 26.93  |        |
| 3.7   | 14.02                     | 11.29 |       | 3.7   |           | 14.892 | 13.73  |
| 3.8   |                           | 7.99  |       | 3.8   | 12.81     |        |        |
| 3.9   |                           | 9.33  |       | 3.9   | 14.55     |        |        |
| 4   |                           | 6.31  |       | 4   | 14.892    | 9.65   |        |
| 4.1   | 17.212                    | 14.35 |       | 4.1   |           | 21.35  |        |
| 4.2   |                           | 8.81  |       | 4.2   |           | 13.76  |        |
| 4.3   |                           | 28.1  |       | 4.3   |           | 17.09  |        |
| 4.4   |                           | 25.06 |       | 4.4   |           | 34.25  |        |
| 4.5   | 14.02                     | 9.74  |       | 4.5   |           | 21.73  |        |
| 4.6   |                           | 9.62  |       | 4.6   | 15.58     |        |        |
| 4.7   |                           | 23.61 |       | 4.7   | 14.85     |        |        |
| 4.8   |                           | 20.7  |       | 4.8   | 8.8       |        |        |
| 4.9   | 14.125                    | 5.44  |       | 4.9   | 19.29     |        |        |
| 5   |                           | 10.73 |       | 5   | 17.98     |        |        |
| 5.1   |                           | 6.64  |       | 5.1   | 14.04     |        |        |
| 5.2   |                           | 11.23 |       | 5.2   | 15.32     |        |        |
| 5.3   | 14.125                    | 13.49 |       | 5.3   | 12.73     |        |        |
| 5.4   |                           | 25.14 |       | 5.4   | 17.12     |        |        |
|   |                           |       |       | 5.5   | 11.25     |        |        |

20 units 0<20 RQI  
20 x \$5,000.00 = \$100,000.00

2 units 20 to 30 RQI  
2 x \$2,500.00 = \$5,000.00

Entire Project < 30  
**Total: \$130,000.00**

25,000.00

Tom Nelson  
Construction Tech  
1-14-09

**CRASH SUMMARY REPORT**

Summary Produced from 5/27/2008 to 10/14/2008

| Physical Road Name | Physical Reference Number | BMP   | EMP   | State Route Name | Direction | Ramp | County |
|--------------------|---------------------------|-------|-------|------------------|-----------|------|--------|
| M-115              | 1042308                   | 0.000 | 5.709 | M-115            | E/W       | NA   | Clare  |

| Crash Type                     | Count | Rate | %age |
|--------------------------------|-------|------|------|
| Total                          | 2     |      | 100  |
| Miscellaneous 1 Vehicle        | 0     | 0.00 | 0    |
| Overturn                       | 0     | 0.00 | 0    |
| Hit Train                      | 0     | 0.00 | 0    |
| Hit Parked Vehicle             | 0     | 0.00 | 0    |
| Backing                        | 0     | 0.00 | 0    |
| Parking                        | 0     | 0.00 | 0    |
| Pedestrian                     | 0     | 0.00 | 0    |
| Fixed Object                   | 0     | 0.00 | 0    |
| Other Object                   | 0     | 0.00 | 0    |
| Animal                         | 2     |      | 100  |
| Bicycle                        | 0     | 0.00 | 0    |
| Head-On                        | 0     | 0.00 | 0    |
| Angle Straight                 | 0     | 0.00 | 0    |
| Rear-End Straight              | 0     | 0.00 | 0    |
| Angle Turn                     | 0     | 0.00 | 0    |
| Side Swipe Same                | 0     | 0.00 | 0    |
| Rear-End Left Turn             | 0     | 0.00 | 0    |
| Rear-End Right Turn            | 0     | 0.00 | 0    |
| Other Drive                    | 0     | 0.00 | 0    |
| Angle Drive                    | 0     | 0.00 | 0    |
| Rear-End Drive                 | 0     | 0.00 | 0    |
| Side-Swipe Opposite            | 0     | 0.00 | 0    |
| Head-On Left-Turn              | 0     | 0.00 | 0    |
| Dual Left Turn                 | 0     | 0.00 | 0    |
| Dual Right Turn                | 0     | 0.00 | 0    |
| Miscellaneous Multiple Vehicle | 0     | 0.00 | 0    |
| Angle Right Turn               | 0     | 0.00 | 0    |

| Crash Type | Rate | Count | %age  |
|------------|------|-------|-------|
| ICY        | 0.00 | 0     | 0.00  |
| DARK       |      | 1     | 50.00 |
| WET        | 0.00 | 0     | 0.00  |
| FATAL      | 0.00 | 0     | 0.00  |
| INJURY     | 0.00 | 0     | 0.00  |

| Severity    | Count | Rate |
|-------------|-------|------|
| Fatalities: | 0     |      |
| Injuries A: | 0     |      |
| Injuries B: | 0     |      |
| Injuries C: | 0     |      |
| Injuries:   | 0     |      |

Disclaimers: Crash information is conditioned upon your agreement to comply with the requirements of federal law.. MDOT provides access to this information with the understanding that it will be used strictly for scientific research purposes and/or for governmental purposes by governmental units. MDOT authorizes no other use of this privileged information. MDOT does not waive any privilege based on this limited release of information.

18011 - 84169A

## HIGHWAYS FOR LIFE MOTORIST DELAY MEASUREMENT

|                               | DATE       | TIME OF DAY | NORTHBOUND    | SOUTHBOUND    | DELAY             | IN/DISINCENTIVE | COMMENTS   |
|-------------------------------|------------|-------------|---------------|---------------|-------------------|-----------------|--|
| 1                             | 5/30/2008  | 10:50am     | 12 min 53 sec | 12 min 5 sec  | 53 Sec            | 1000            |  |
| 2                             | 5/31/2008  | 5:35pm      | 12 min 34 sec | 12 min 19 sec | 34 sec            | 1000            |  |
| 3                             | 6/2/2008   | 4:45pm      | 12 min 42 sec | 12 min 50 sec | 50 sec            | 1000            |  |
| 4                             | 6/3/2008   | 4:39pm      | 13 min 40 sec | 12 min 38 sec | 1 min 40 sec      | 1000            |  |
| 5                             | 6/7/2008   | 11:35am     | 14 min 25 sec | 12 min 52 sec | 2 min 25 sec      | 1000            |  |
| 6                             | 6/8/2008   | 12:37pm     | 13 min 28 sec | 13 min 58 sec | 1 min 58 sec      | 1000            | SB seeing avg of 12-14 cars at lights.   |
| 7                             | 6/10/2008  | 11:33am     | 13 min 51 sec | 13 min 49 sec | 1 min 51 sec      | 1000            |  |
| 8                             | 6/10/2008  | 5:17pm      | 13 min 50 sec | 13 min 30 sec | 1 min 50 sec      | 1000            |  |
| 9                             | 6/13/2008  | 9:51am      | 13 min 26 sec | 13 min 45 sec | 1 min 45 sec      | 1000            |  |
| 10                            | 6/13/2008  | 5:30pm      | 13 min 38 sec | 13 min 51 sec | 1 min 51 sec      | 1000            |  |
| 11                            | 6/15/2008  | 10:45am     | 13 min 27 sec | 13 min 40 sec | 1 min 40 sec      | 1000            | Traffic is heavier SB-seeing 10 to 15 cars collect at light  |
| 12                            | 6/17/2008  | 11:00am     | 12 min 37 sec | 14 min 14 sec | 2 min 14 sec      | 1000            |  |
| 13                            | 6/19/2008  | 10:20am     | 14 min 4 sec  | 13 min 40 sec | 2 min 4 sec       | 1000            |  |
| 14                            | 6/21/2008  | 3:00pm      | 13 min 13 sec | 13 min 45 sec | 1 min 45 sec      | 1000            |  |
| 15                            | 6/22/2008  | 5:20pm      | 13 min 25 sec | 14 min 2 sec  | 2 min 2 sec       | 1000            |  |
| 16                            | 6/24/2008  | 11:30am     | 12 min 55 sec | 13 min 15 sec | 1 min 15 sec      | 1000            |  |
| 17                            | 6/25/2008  | 4:30pm      | 12 min 53 sec | 14 min 14 sec | 2 min 14 sec      | 1000            | SB traffic seems heavier - seeing 8-10 car clusters  |
| 18                            | 6/28/2008  | 3:15pm      | 13 min 10 sec | 13 min 44 sec | 1 min 44 sec      | 1000            |  |
| 19                            | 6/29/2008  | 10:10am     | 12 min 55 sec | 13 min 20 sec | 1 min 20 sec      | 1000            |  |
| 20                            | 7/10/2008  | 10:48am     | 18 min 19 sec | 16 min 9 sec  | 6 min 19 sec      | 800             |  |
| 21                            | 7/11/2008  | 11:23am     | 12 min 30 sec | 12 min 18 sec | 30 sec            | 1000            |  |
| 22                            | 8/13/2008  | 11:30am     | 13 min 40 sec | 13 min 20 sec | 1 min 40 sec      | 1000            | Traffic shifted NB on temp lane on shld SB on old NB   |
| 23                            | 8/13/2008  | 6:15pm      | 13 min 55 sec | 13 min 50 sec | 1 min 55 sec      | 1000            |  |
| 24                            | 8/15/2008  | 4:00pm      | 14 min 5 sec  | 13 min 30 sec | 2 min 5 sec       | 1000            | Traffic is moving well through jobsite.  |
| 25                            | 8/16/2008  | 4:30pm      | 13 min 42 sec | 13 min 15 sec | 1 min 42 sec      | 1000            |  |
| 26                            | 8/18/2008  | 11:30am     | 13 min 38 sec | 13 min 43 sec | 1 min 43 sec      | 1000            |  |
| 27                            | 8/18/2008  | 5:00pm      | 14 min 20sec  | 13 min 59 sec | 2 min 20 sec      | 1000            |  |
| 28                            | 8/22/2008  | 3:05pm      | 13 min 50 sec | 14 min 10sec  | 2 min 10 sec      | 1000            |  |
| 29                            | 8/23/2008  | 12:15pm     | 14 min 5 sec  | 13 min 50 sec | 2 min 5 sec       | 1000            |  |
| 30                            | 8/25/2008  | 2:45pm      | 13 min 35 sec | 14 min 1 sec  | 2 min 1 sec       | 1000            | Traffic consistently moving faster than posted 45mph   |
| 31                            | 8/26/2008  | 10:50am     | 13 min 44 sec | 14 min 10 sec | 2 min 10 sec      | 1000            |  |
| 32                            | 9/3/2008   | 5:00pm      | 13 min 43 sec | 13 min 55 sec | 1 min 55 sec      | 1000            |  |
| 33                            | 9/4/2008   | 4:05pm      | 13 min 38 sec | 13 min 35 sec | 1 min 38 sec      | 1000            |  |
| 34                            | 9/7/2008   | 12:30pm     | 13 min 50 sec | 13 min 45 sec | 1 min 50 sec      | 1000            |  |
| 35                            | 9/7/2008   | 5:40pm      | 13 min 42 sec | 13 min 50 sec | 1 min 50 sec      | 1000            |  |
| 36                            | 9/8/2008   | 3:15pm      | 13 min 30 sec | 13 min 41 sec | 1 min 41 sec      | 1000            |  |
| 37                            | 9/11/2008  | 4:45pm      | 13 min 31 sec | 14 min 6 sec  | 2 min 6 sec       | 1000            |  |
| 38                            | 9/15/2008  | 10:45am     | 13 min 40 sec | 13 min 50 sec | 1 min 50 sec      | 1000            |  |
| 39                            | 9/17/2008  | 11:49am     | 13 min 8 sec  | 12 min 47 sec | 1 min 8 sec       | 1000            |  |
| 40                            | 9/19/2008  | 12:32pm     | 12 min 43 sec | 12 min 55 sec | 0 min 55 sec      | 1000            |  |
| 41                            | 9/20/2008  | 4:30pm      | 13 min 10 sec | 13 min 20 sec | 1 min 20 sec      | 1000            |  |
| 42                            | 9/22/2008  | 12:31pm     | 13 min 30 sec | 13 min 22 sec | 1 min 30 sec      | 1000            |  |
| 43                            | 9/24/2008  | 12:50pm     | 13 min 20 sec | 13 min 48 sec | 1 min 48 sec      | 1000            |  |
| 44                            | 9/26/2008  | 12:20pm     | 13 min 45 sec | 13 min 29 sec | 1 min 45 sec      | 1000            |  |
| 45                            | 9/27/2008  | 3:20pm      | 13 min 22 sec | 13 min 35 sec | 1 min 35 sec      | 1000            |  |
| 46                            | 9/30/2008  | 11:00am     | 13 min 33 sec | 13 min 17 sec | 1 min 33 sec      | 1000            |  |
| 47                            | 9/30/2008  | 6:20pm      | 13 min 15 sec | 13 min 27 sec | 1 min 27 sec      | 1000            |  |
| 48                            | 10/4/2008  | 11:00am     | 13 min 12 sec | 13 min 15 sec | 1 min 15 sec      | 1000            |  |
| 49                            | 10/4/2008  | 4:45pm      | 13 min 18 sec | 13 min 19 sec | 1 min 19 sec      | 1000            |  |
| 50                            | 10/6/2008  | 12:00pm     | 24 min 43 sec | 31 min 38 sec | 19 min 38 sec     | -1000           | 10min* @ NB flagger 17 min* @ SB flagger<br>*The stopwatch was running to accumulate overall time<br>The inspector casually observed the time at each flag location for general information. The 10 and 17 min times are +/- 30 seconds. |
|                               | 10/7/2008  | 11:00am     | 20 min 23 sec | 21 min 6 sec  | 9 min 6 sec delay |                 | <b>THIS IS FOR INFO ONLY - NOT A SCHEDULED DATE</b>  |
| 51                            | 10/9/2008  | 1:00pm      | 15 min 11 sec | 15 min 33 sec | 3 min 33 sec      | 1000            |  |
| 52                            | 10/11/2008 | 12:00pm     | 13 min 50 sec | 13 min 44 sec | 1 min 50 sec      | 1000            |  |
| 53                            | 10/13/2008 | 12:30pm     | 18 min 29 sec | 19 min 1 sec  | 7 min 1 sec       | 1000            |  |
| 54                            | 10/14/2008 | 4:40pm      | 15 min 22 sec | 14 min 35 sec | 3 min 22sec       | 1000            | OPEN TO TRAFFIC 10/14/08 5:30pm  |
|                               |            |             |               |               | 0                 |                 |  |
|                               |            |             |               |               | 51,800.00         |                 | PER CONTRACT, MAX INCENTIVE = \$50,000.00  |
| Total delay = 7336 sec        |            |             |               |               |                   |                 | Disincentive starts at 11 min delay  |
| Total number of measurements  |            |             |               |               |                   |                 | Incentive paid up to 9 min delay   |
| Average Delay 2min 15.852 sec |            |             |               |               |                   |                 | 0 pay at 10 min delay  |
|                               |            |             |               |               |                   |                 |  |
|                               |            |             |               |               |                   |                 | Normal Drive Time @ 55mph = 12 min   |
|                               |            |             |               |               |                   |                 | Delay equals recorded time minus 12 min  |





JENNIFER M. GRANHOLM  
GOVERNOR

STATE OF MICHIGAN  
**DEPARTMENT OF TRANSPORTATION**  
BAY REGION OFFICE

KIRK T. STEUDLE  
DIRECTOR

April 2, 2009

Vance Johnson  
Joe Tomko  
Central Asphalt  
900 S. Bradley  
Box 389  
Mt. Pleasant, MI 48804-0389

Dear Mr. Johnson and Mr. Tomko,

Subject: Region Claim Decision, M-115, Highways for Life; 18011-84169/85241A

A Region Level Claim review was held Tuesday, March 31, 2009 at 9:00 a.m. at the Michigan Department of Transportation, Bay Region Office. Those in attendance were:

|                 |                           |
|-----------------|---------------------------|
| Vance Johnson   | Central Asphalt           |
| Joe Tomko       | Central Asphalt           |
| Gregg Brunner   | MDOT, Panel Member        |
| Mike Hemmingsen | MDOT, Panel Member        |
| Duane Maas      | MDOT, Panel Member        |
| Terry Palmer    | MDOT, Mt. Pleasant TSC    |
| Jack Hofweber   | MDOT, Mt. Pleasant TSC    |
| Bill Mayhew     | MDOT, Mt. Pleasant TSC    |
| Tammy Walderzak | MDOT, Bay Region Delivery |

The project consisted of 5.55 miles of hot mix asphalt cold milling, two course overlay with ASCRL, joint repair, drainage, intersection and guardrail on M-115 from northwest of Lake Station Avenue northwest to the Clare/Osceola County line. This project was selected by the MDOT and U.S. Department of Transportation Federal Highway Administration under the Highways for Life (HFL) Pilot Program for fiscal year 2008.

The intent of this Performance Contracting project was to give the Contractor the freedom to develop their own methods to meet minimum requirements as described in the bidding documents, while not restricting them to comply with the 2003 Standard Specifications for Construction. The contract was awarded to the Contractor whose proposal represented the best value to MDOT considering price, goals and innovations. The project was awarded on April 3, 2008 at the contract amount of \$4,477,777.77.

Your claim total is \$126,147.14. The following breakdown details the claimed amount:

**Claim 1: Motorist Delay Incentive: \$50,000.00**

**Claim 2: Removal of Clay Subbase: \$76,147.14**

**CLAIM #1: MOTORIST DELAY INCENTIVE**

**Contractor's Position:**

The Contractor is claiming that a Bonus Overall Incentive for Motorist Delay should be reconsidered due to circumstances outside of their control. On October 6, 2008, one of the required delay measurements was recorded on southbound M-115 at 19 minutes. During this time, the project was being paved under a 1.75 mile lane closure using flag control. This increased delay measurement could be attributed to a separate construction job located seven miles to the north that was releasing large amounts of traffic. A coordination clause was not included in the proposal and had the Contractor been aware of the project, adjustments could have been made to account for increased traffic flow.

**Mt. Pleasant TSC Position:**

The Mt. Pleasant TSC contended that the delay incentive would be awarded if zero delay measurements came in over 15 minutes. October 6, 2008 was a Monday and historically experienced higher southbound traffic volumes than the following Tuesday. The TSC thought the Contractor should have been aware of the project to the north and could have adjusted their schedule and/or operations to accommodate the increase in traffic.

**Region Claim Panel Decision:**

The Region Office Review (ROR) panel carefully considered all documentation and discussion regarding this claim. Central Asphalt contends they were unaware of the project to the north and had they known of the project, they could have taken corrective measures to account for the higher traffic volumes. Additionally the Contractor stated there was not a coordination clause contained in the proposal. Traffic Information is detailed on page three of the contract's Notice to Bidders and states in part:

**The 200 High Hour Report for 2006 shows peak traffic northwest bound on Fridays and Saturdays, during the summer and fall, and southeast bound on Sundays and Mondays, during summer and fall.**

Appendix A of the Notice to Bidders provided historic hourly traffic volumes for 2005, as recorded by a permanent traffic recorder in this area. These counts verify there was a higher than normal traffic flow for the first Monday of October, 2005 and that the contractor should have reasonably expected to have to accommodate higher volumes if he chose to work at this time.

The Contractor also stated he had no knowledge of the project to the north, MDOT Contract ID 67051-74912, although bid tabulations from the January 11, 2008 letting show he was the second

low bidder. The original progress clause for JN 74912 shows the project being constructed in the spring, which is the same time the bridge portion of this demonstration project would have been completed. It is the Panel's opinion that he should have been aware the project would be constructed at some point during this Highways for Life project and should have verified with the MDOT Cadillac TSC. Although no coordination clause was included in the proposal, page five of the Notice to Bidders states in part:

**The Contractor shall coordinate this work with any other Contractors performing work within the Construction Influence Area (CIA) or adjoining areas to avoid conflicts in the maintenance of traffic, construction signing and the orderly progress of contract work.**

Therefore, the Contractor had a responsibility to be aware of other work in the vicinity of this project that would affect the conditions of their work. The Panel agrees with the TSC's assessment of the Motorist Delay Bonus Overall Incentive and, as a result, denies this portion of the claim.

## **CLAIM #2: REMOVAL OF CLAY SUBBASE**

### **Contractor's Position:**

The Contractor is claiming additional compensation for the removal of a clay layer adjacent to the original concrete pavement. The clay layer was discovered below the proposed pavement area after existing pavement had been removed and the existing base began to rut due to the movement of construction equipment in these areas. As part of the Performance Contracting process, it was the Contractor's understanding that they were responsible to remove and replace sections where this clay was found. Plans supplied by MDOT showed miscellaneous areas of undercutting, but no specific areas were designated. The provided soil borings also did not show the presence of the clay layer. The Contractor contended it was in MDOT's best interest to remove and replace this material as part of the project.

### **Mt. Pleasant TSC Position:**

The TSC acknowledges the Contractor acted quickly to address the situation, and had they not done so, could have put the contract's Pavement Performance Incentive at risk. The design provided in the contract bidding documents did not show these removal areas, and instead only showed a one inch profile cold-milling to the existing pavement. The Notice to Bidders states that the Contractor shares risks and rewards as part of this contract, and the design proposed by MDOT had significantly less risk due to most of the existing pavement remaining in place.

### **Region Claim Panel Decision:**

The Region Office Review (ROR) panel reviewed existing plans and soil borings provided with the proposal, which Central Asphalt stated they had also received prior to bidding the project. Test hole number nine was the only soil boring to verify the presence of firm gray sandy clay at a depth of 0.3'-0.8' along the east edge of metal of M-115.



Existing plans for job numbers R-17-B-2A and 22835A do not vary significantly from the Contractor's findings below the existing pavement. These plans show between 0.9"-2.8" of pulverized bituminous material over the original clay shoulders. The Contractor's decision to remove all existing pavement significantly added to the risk of failure in the clay layer from MDOT's design in this operation. Changes to the original design resulting in additional risk and rewards are part of the Performance Contracting pilot project. Page two of the Notice to Bidders states in part:

**The contract method that MDOT is using for this project is a performance contracting approach to the award. Performance contracting is where a private Contractor is responsible for achieving a defined set of goals, and where performance goals are specified instead of methods. Using a performance contracting approach will allow MDOT to define and communicate to the Contractor, performance goals and allow the Contractor to achieve or exceed those goals based on the initiatives. Using this contracting approach the Contractor will share the risks and rewards as a project partner, and the defined performance goals and measurement methodologies will provide a basis for applying incentives and disincentives.**

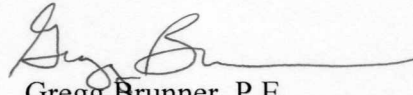
Therefore, the Panel agrees with the TSC's assessment for the clay layer removal extra and as a result, denies this portion of the claim.

#### **CONCLUSION:**

In conclusion, the Region Office Review (ROR) panel carefully considered all contract documents, the claim file, and the claim presentation. For Claim #1, you had sufficient information and per the Notice to Bidders, the responsibility to be reasonably aware of the potential for higher traffic volumes and the presence of the project in the area. For Claim #2, you had sufficient information and per the Notice to Bidders, shared in the risks and rewards of making changes to the original design. Therefore, both of your claims are denied.

This decision represents the Bay Region's final review of this claim. You are advised of your right to reject the Region Panel's decision and to file a written appeal with the Region Engineer for a Central Office Review (COR). Such appeal shall be filed within 15 calendar days of the date of this written decision and shall include your arguments as to why the Panel's decision is in error.

Sincerely,

A handwritten signature in black ink, appearing to read "Gregg Brunner".

Gregg Brunner, P.E.

MDOT - Associate Region Engineer, Delivery

I have reviewed the foregoing and concur with the determination.

A handwritten signature in black ink, appearing to read "Tony Kratofil".

Tony Kratofil, P.E.

Bay Region Engineer

cc: Terry Palmer, Mt. Pleasant TSC  
Jack Hofweber, Mt. Pleasant TSC  
Bill Mayhew, Mt. Pleasant TSC  
Dale Spencley, Lansing C&T Contract Section  
David Calabrese, FHWA  
Carolyn Nelson, FHWA

PRE-CONSTRUCTION SURVEY  
**HIGHWAYS FOR LIFE**

M-115 Construction Project from Lake Station north to Osceola/Clare County Line

| QUESTIONS  | 3                            |                            |   |                            |                        |
|--|------------------------------|----------------------------|---|----------------------------|------------------------|
|  | 1<br>Totally<br>Dissatisfied | 2<br>Somewhat<br>Satisfied | Neither<br>Satisfied<br>nor<br>Dissatisfied | 4<br>Somewhat<br>Satisfied | 5<br>Very<br>Satisfied |
| Construction is expected to take place from April to June and from August to November 2008. How satisfied are you with the timeline for completing this project?   | 10                           | 6                          | 4   | 6                          | 20                     |
| For this project, construction will be completed primarily during daytime hours to maximize work zone safety. How satisfied are you that this approach to constructing the new facility will improve work zone safety? | 8                            | 6                          | 5   | 3                          | 24                     |
| How satisfied are you with current pavement and ride quality condition?  | 42                           | 4                          |   |                            |                        |
| Based on your experiences, traveling through other MDOT construction zones, how satisfied do you think you will be with time delays experienced when traveling thru this construction zone?                            | 12                           | 7                          | 4   | 5                          | 18                     |

| Post Construction Survey  |                              |                            |   |                            |                        |   |
|---|------------------------------|----------------------------|---|----------------------------|------------------------|---|
| HIGHWAYS FOR LIFE   |                              |                            |   |                            |                        |   |
| M-115 Construction Project from Lake Station north to Osceola/Clare County Line   |                              |                            |   |                            |                        |   |
| QUESTIONS   | 1<br>Totally<br>Dissatisfied | 2<br>Somewhat<br>Satisfied | Neither<br>Satisfied<br>nor<br>Dissatisfied | 4<br>Somewhat<br>Satisfied | 5<br>Very<br>Satisfied | Additional<br>Comments  |
| How Satisfied are you with the results of the project, compared with its previous condition?  | 2                            | 2                          | 4   | 12                         | 22                     | "Is there a reason why it is so slippery? The old pavement is not nearly as slipper. I guess I would rather have the holes . Any snow on it at all seems to turn slimmy." |
| For this project, traffic was maintained by alternating traffic, using single lane closures along with flag control and providing a temporary traffic lane. How satisfied are you with the maintenance of traffic during construction in terms of alleviating congestion? | 13                           | 9                          | 2   | 10                         | 9                      |   |
| How satisfied are you with the improvements to pavement and ride quality, when compared to the roadways previous  | 2                            | 2                          | 6   | 18                         | 14                     |   |
| How satisfied are you with the delay time experienced by motorists traveling through this construction zone?  | 19                           | 5                          | 5   | 9                          | 5                      |   |

Total of 43 Responded to Questionnaire