

MEMORANDUM

DEPARTMENT OF TRANSPORTATION
Region 3

222 South Sixth Street, Room 317
Grand Junction, Colorado 81501-2769
(970) 683-6202 FAX# (970) 683-6205



DATE: August 5, 2013

TO: Transportation Commissioners

FROM: David A. Eller, Region 3 Director

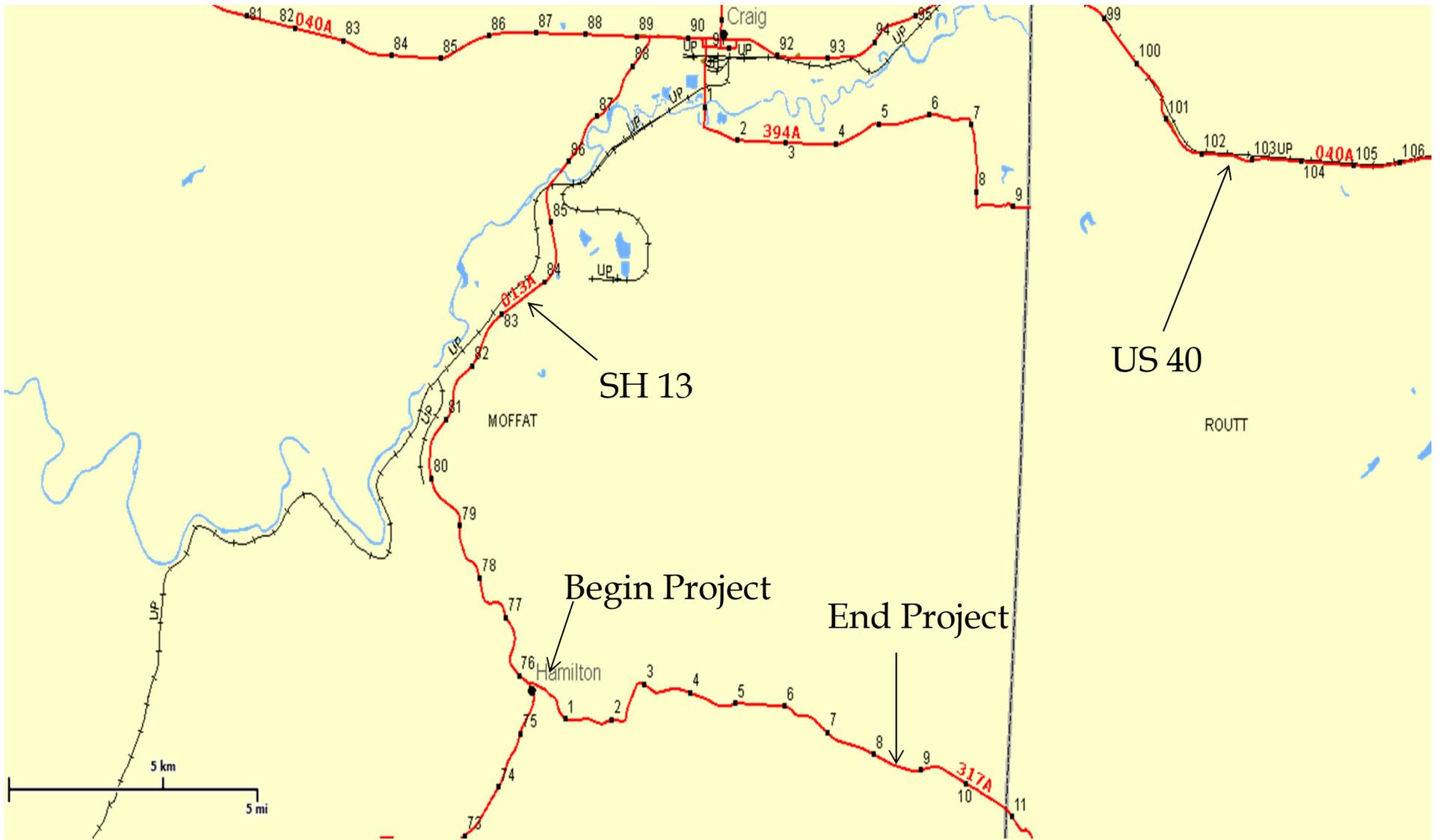
A handwritten signature in blue ink that reads "David A. Eller". The signature is written in a cursive style with a long horizontal stroke at the end.

SUBJECT: State Highway 317 Presentation

Region 3 has requested an Agenda Item Request for the August Transportation Commission meeting to update the Commission on our partnership with Shell Oil, Moffat County and CDOT for State Highway 317.

Specifically Commissioner Kathy Connell requested Region 3 to provide an update on how the project and partnership was created and the status to date of this unique partnership and how this could lead to potential future types of partnerships and or policies with similar type situations.

A PowerPoint presentation will be presented to highlight this successful partnership showcasing the benefit for all parties involved with this project.



STATE HIGHWAY 317, HAMILTON TO PAGODA MAJOR REHABILITATION

Approximately 13 miles South of Craig, CO

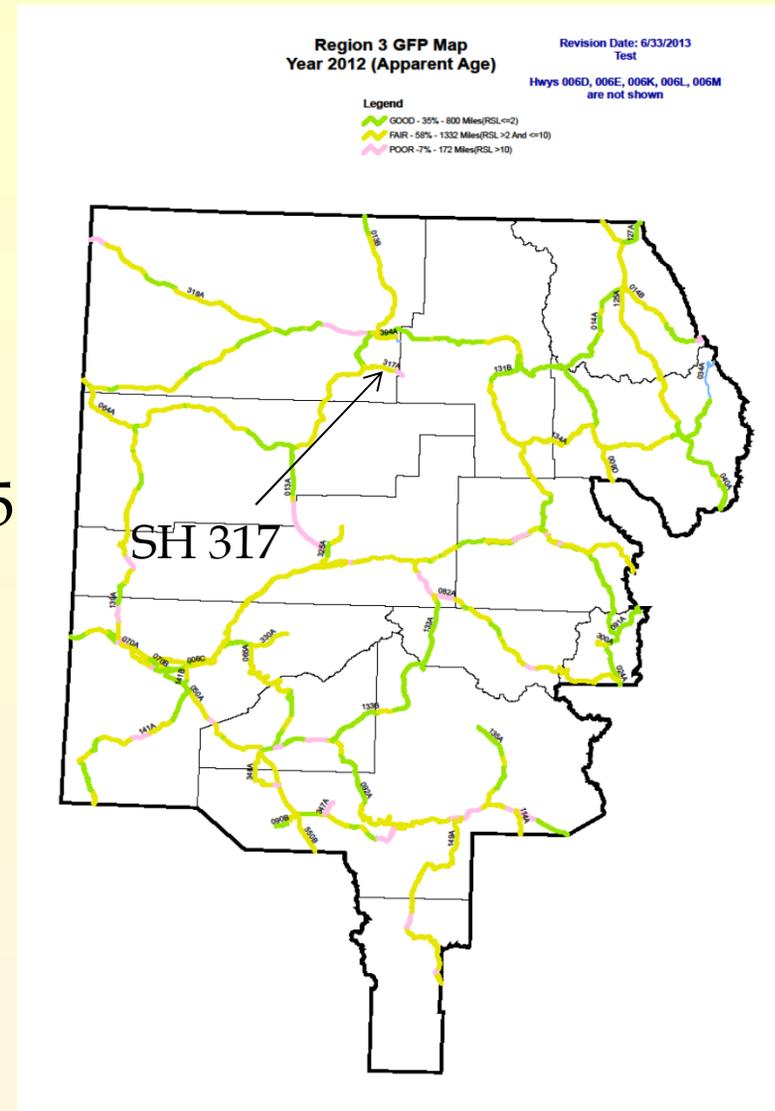
Project Origination

- Older Road not built for today's loadings
- Weight/Size Restrictions
- Moffat Cty/Shell Oil and How We Got Here
 - Projected Traffic
 - Benefit to Moffat County
 - Geotechnical/Materials Investigation by Stantec

Current Conditions

The Road is Poor on the Good, Fair, Poor Scale but is listed as Moderate Drivability Life(3-10 Years) on the Drivability Scale.

- 4" of Asphalt and was constructed in 1950. Last treatment was a Double Penetration Chipseal in 1995
- Rutting >1", Numerous Potholes
- Unstable Shoulders
- Spring Thaw Blowouts



Current Condition Examples



Blowout from
2013 Spring Thaw

Typical Existing
Roadway



Possible Policies

- Do We Need More Weight Restrictions
 - Some Possible R3 Candidates: SH 318A, SH 125A, SH 141
- Do We Need Frost Restrictions
 - Highest Risk of Damage is from Spring Thaw
 - Rio Blanco County advanced Frost Restriction Program
 - Does CDOT Need Similar Policies?

Roadway Design

- Initial Investigation
 - Current AADT is 230 with an additional 20 trucks per day. It takes approximately 160,000 cars to cause as much damage as 20 Trucks.
 - Existing Pavement Section, 4" of Asphalt & 6" ABC.
 - 10 Year Design Period with an increase in Truck Traffic from Shell Oil for 5 years.
 - Existing Subgrade is Silt Clays, Rvalue 5. Rvalue 5 soils or low strength soils such as silts and clays.



Treatment Options

- Options-1
 - Overlay: 4" HMA Overlay
 - HIP: 2" HIP with a 3" HMA Overlay
 - Chipseal: Would not fix any of the deformations or provide structural value, therefore, Shell Oil would not consider this option for the added traffic
 - Full Depth Recycle: Shell Oil and their consultants decided that FDR would be the best solution



Construction

- The Road
 - The existing 4" of Asphalt was pulverized and mixed with the existing base material.
 - The reclaimed asphalt mixture was overlaid with 4" of new HMA.
 - Cleared and regraded roadside ditches. Cleaned culverts.



The New Road

- Project Cost
 - Design Cost: \$100,000
 - Drainage Repairs: \$100,000
 - Slope Repair-Connell Resources: \$400,000
 - Culvert Replacements-Connell Resources: \$150,000
 - Road Construction-Connell Resources: \$5,000,000

