TO:     W. V. McLaughlin
        Testing and Research Engineer

SUBJECT: Condition Survey of Bituminous Concrete Projects
         Containing Wallace Stone
         Research Project 51 A-12: Report No. 186

This report covers a field survey of six bituminous surfacing projects in which Wallace Stone from Depart was the aggregate used in the surface course. The work is a continuation of the study requested by Mr. C. J. Given, Materials Engineer, to determine the service performance of different limestone in bituminous concrete resurfacing projects.

The previous report (No. 179), concerning Lincoln Stone, was presented on July 3, 1952; also report (No. 182) concerning Frankie Stone was presented on Sept. 30, 1952.

The survey includes five projects constructed under 1951 specifications and one project constructed by Saginaw County. The survey was made on August 20 and 21 by William C. Broughton and T. C. Holmes.

Table 1 attached contains a summary of data pertaining to the several projects surveyed, and a series of pictures, also attached, shows the present condition of the various surfaces.

Nothing unusual was disclosed by the survey to indicate that the aggregate involved was not doing a satisfactory job.

S. J. Finney
Asst. Testing & Research Engineer
in charge of Research
encl.
### TABLE I

**SUMMARY OF DATA PERTAINING TO WALLACE STONE SURVEY**

<table>
<thead>
<tr>
<th>Fig. No.</th>
<th>Project No.</th>
<th>Year Consr</th>
<th>Length Miles</th>
<th>Source of Aggregate</th>
<th>Specifications</th>
<th>Location</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>F 25-4-0 11</td>
<td>1948</td>
<td>5.384</td>
<td>Wallace</td>
<td>26 A Mod.</td>
<td>US-10 ( Dort Hwy, Flint) str. 2 lanes of 4 lane highway</td>
<td>No Pitting</td>
</tr>
<tr>
<td>2</td>
<td>S 25-9-02</td>
<td>1948</td>
<td>3.937</td>
<td>Wallace</td>
<td>26 A</td>
<td>M-21A West of M-15</td>
<td>No Pitting</td>
</tr>
<tr>
<td>3</td>
<td>N 25-38-03</td>
<td>1948</td>
<td></td>
<td>Wallace</td>
<td>26 A Mod.</td>
<td>Intersection US-10 &amp; M-121 in Flint</td>
<td>Slight Abrasion</td>
</tr>
<tr>
<td>4</td>
<td>N 25-36-61</td>
<td>1949</td>
<td>0.63</td>
<td>Wallace</td>
<td>26 A Mod.</td>
<td>On US-23 So. of M-21 (Court St. Intersection)</td>
<td>No Pitting</td>
</tr>
<tr>
<td>5</td>
<td>Co. Project</td>
<td>1922</td>
<td>3.00</td>
<td>Wallace</td>
<td>County Specifications</td>
<td>On Janes Rd. between Outer Drive &amp; No. Portsmouth Rd.</td>
<td>No Pitting</td>
</tr>
<tr>
<td>6</td>
<td>State Reward 4145</td>
<td>1920</td>
<td>1.00</td>
<td>Wallace</td>
<td>State Specifications</td>
<td>On M-47 from 2 Mi. So. of M-46, So. 1 Mi. (Resealed in 1940 with Wallace</td>
<td>No Pitting</td>
</tr>
</tbody>
</table>
A. Typical condition of surface - No pitting

B. View of surface showing typical condition of aggregate
Wallace stone 26A modified R-25-4,011, 1948, US-10 Fort
Highway Flint just No. of Carpenter Rd., Center two lanes
of a four lane highway.

Fig. 1
A. Typical condition of surface - No pitting


Fig. 1
A. Typical condition of surface. No pitting

B. View of surface showing typical condition of aggregate
Wallace stone 26A modified S 25-9, 02, 1948, M-21A (Belsay Road) West of M-15.
A. Typical condition of surface. No pitting. Shows signs of slight abrasion due to material brought onto intersection by traffic.

A. Typical condition of surface. No pitting.

A. Typical condition of surface. No pitting.

B. View of surface showing typical condition of aggregate. Wallace stone Co. Spec. Note large size of aggregate on James Road between Outer drive and N. Portsmouth Rd., Saginaw Co. This road has carried heavy traffic from local coal mine for years and also was used as detour for trunk line Constr. Still a good riding surface. County job 1922.
A. Typical condition of surface. No pitting.

B. View of surface showing typical condition of aggregate. Resealed Wallace stone in 1940 (from Maintenance Engr.) State Road 4145 1920 N. 47 2 miles S. of N. 46, So. 1 Mile.