APPENDIX II

The following site data forms are designated as "open site; sampled." The sites described herein are depicted on the county materials maps as a " ■ ".

LEGEND

This symbol on the site data form represents an open site.
Limestone

\\

Location: Sec. 22, Twp. 36, Range 72

Owner: Louis Wassenberg

Nature of Deposit: Dry

Accessibility: Good

Status of Site: Open site; sampled

EXPLORATION DATA

Favorable Tests

<table>
<thead>
<tr>
<th>Test of Material</th>
<th>Unit</th>
<th>Ps</th>
<th>Vs</th>
<th>n</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit of Test</td>
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</tbody>
</table>

It has been reported that the material in this pit away from the original exposure is badly weathered and unfit for construction use.
MATERIAL SURVEY REPORT

Site No. TA-65  
Date June 1965

Material Limestone
County Marshall

Location Township 28
Range 92
Sec. 17

Ruble Waester  
Home City, Kansas

Nature of Deposit Gray;  
compactness Good;  
open site; sampled

EXPLORATION DATA

<table>
<thead>
<tr>
<th>Test Date</th>
<th>Material</th>
<th>Method of Test</th>
<th>Density</th>
<th>Permeability</th>
<th>Depth</th>
<th>Width</th>
<th>L.L.</th>
<th>P.I.</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

CONSOLIDATION DATA

Geological Age  Permian
Geological Group Morrill and Cottonwood Limestone Member
Material sampled Material reported on SUC form 610, 28-65 and
Lab. No. 21369, 21368, 28378

Specific Gravity (g/cc) 2.90, 2.96, 2.96  2.95
Average  2.96, 2.98, 2.98

Loss on Ignition 10.9%  9.9%

Absorption (g/cc) 6.08, 5.86, 5.77  0.75, 0.82

State of Test Air, Back
Remarks
**State Highway Commission of Kansas**

**Material Survey Report**

**Site No.:** 13-67
**Date:** June, 1965

**Material:** Limestone
**County:** Marshall

**Location:** Sec. 1
**Twp.:** 35
**Range:** 98

**Owner:** Long

**Nature of Surface:** Dry
**Accessibility:** Good

**Status of Site:** Open site; sampled

### Exploration Data

<table>
<thead>
<tr>
<th>Test Hole</th>
<th>Material Below Horizon</th>
<th>Depth of Horizon</th>
<th>Percent Minerals</th>
<th>Percent BTEX</th>
<th>B.T.</th>
<th>L.L.</th>
<th>F.T.</th>
</tr>
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<tbody>
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</tr>
</tbody>
</table>

### Correlation Data

**Geological Age:** Pennian

**Geological Source:**owa Limestone Member

**Material Source:** Material reported on SHC Form 619, 6-58-13 and Lab No. 150993

**Specific Gravity (Int.)** 2.32
**Shrink:** 2.15

**Los Angeles Abrasion** (B) 16, 6

**Coefficient:** 7.60

**Coefficient Diaphragm:** 0.05

**Authors:**
- Mabel Larkin and Paula Killion - 516 Mariwyn Dr.
- Henry F. Deerkotte, Beatie, KS, Manhattan, Kansas
**STATE HIGHWAY COMMISSION OF KANSAS**

**MATERIAL SURVEY REPORT**

**Site No.:** 15-68  
**Date:** June, 1965  
**Township:**  
**Range:**  
**Section:** 3  
**County:** Marshall  
**Material:** Limestone

**Location:**  
**Accessibility:** Good  
**Date:**  
**Owner:** Henry F. and Regina B. Dearlock  
**Address:** Beattie, Kansas

**Description:** Open site; sampled

---

**TEST DATA**

<table>
<thead>
<tr>
<th>Test Date</th>
<th>Unit of Measure</th>
<th>Depth Below</th>
<th>Water Level</th>
<th>U</th>
<th>L</th>
<th>W</th>
<th>K</th>
<th>B</th>
<th>G</th>
<th>CA</th>
<th>HC</th>
<th>VP</th>
<th>S.F.</th>
<th>L.L.</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

**GEOLGICAL AGE:** Persian

**GEOLOGICAL ZONE:** Cottonwood Limestone Member

**MATERIAL:** Material reported on SHC Form 619, No. 58-L-3

**Specific Gravity (18°C):** 2.41  
**(Dry):**

**Los Angeles Abrasion:** 5.51  
**(B) 16.8**

**Soil Test:**

**Results:**

---

*Diagram showing the location of the site with coordinates.*

**Scale:** 1" = 1 mile
Material Survey Report

Site No. ID-69

Date June, 1965

Material Limestone

County Marshall

Location Sec. 9 Twp. 38 Range 26

Owner Arthur Samuelson

Frankfort, Kansas

Nature of Deposit Bedded

Accessibility Good

Status of Site Open site; sampled

Exploration Data

<table>
<thead>
<tr>
<th>Layer</th>
<th>Material</th>
<th>Depth</th>
<th>Percent Limestone</th>
<th>Moisture</th>
<th>Grain Size</th>
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<tbody>
<tr>
<td>1</td>
<td></td>
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</table>

<table>
<thead>
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<th>Layer</th>
<th>Material</th>
<th>Depth</th>
<th>Percent Limestone</th>
<th>Moisture</th>
<th>Grain Size</th>
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<tbody>
<tr>
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</table>

Explosive Material

<table>
<thead>
<tr>
<th>Material</th>
<th>Other Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Geological Age Pennian

Geological Form Nova Limestone Member

Material Similar to Material reported on SEC Form 612, # 58-12 and Lab. No. 1396, 4110

Specific Gravity (SG) 2.42, 2.52

Specific Gravity (SG) 2.42, 2.52

Specific Gravity (SG) 2.42, 2.52

Specific Gravity (SG) 2.42, 2.52

Specific Gravity (SG) 2.42, 2.52

Notes: This site has no expansion possibilities.
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

Site No. LS-71
County: Marshall
Location: NE 1/4 SW 1/4 Sec. 7 Tp. 58 Rng. 29
Owner: Albert W. Miller, Frankfort, Kansas
Nature of Deposit: Limestone
Accessibility: Good
Status of Site: Open; site sampled

EXPLORATION DATA

<table>
<thead>
<tr>
<th>Test Hole</th>
<th>Material of Bottom</th>
<th>Depth of Hole</th>
<th>Percent Retained</th>
<th>Unit Weight</th>
<th>Ind. Lbs.</th>
<th>V.F.</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

CUMULATIVE DATA

Geological Age: Pennsylvanian
Geological Source: Coltonwood, Limestone Member
Material similar to Material reported on SMC Core 616, and Lab. No. 307185

Specific Gravity (dry): 2.32
Los Angeles Abrasion: 2.26
AC Bendon Test: 3.75
AC Brittleness: 0.91
Remarks:
STATE HIGHWAY COMMISSION OF KANSAS

MINERAL SURVEY REPORT

Site No. 15-72

Date June, 1965

Material Limestone

County Marshall

Location Sec. 15 Tp. 51 Rng. 93

Leonard Wassenberg c/o August Wassenberg Sumaca, Kansas

Remarks Dry

Accessibility Good

Status of Site Does site sampled

Explanation Data

<table>
<thead>
<tr>
<th>Material of Deposit</th>
<th>Depth</th>
<th>Percent Soluble</th>
<th>Wash Clay</th>
<th>Gr.f.</th>
<th>L.b.</th>
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<tbody>
<tr>
<td>Limestone</td>
<td>0.34</td>
<td>0.06</td>
<td>0.01</td>
<td>0.01</td>
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</table>

Correlation Data

Geological Age Permian

Geological Group Cottonwood Limestone Member

Material reported on SRC form No. 615 and Lab. No. 13668

Specific Gravity (Moist, 2.36) 2.26

Los Angeles Test (Driz) 4.3

Absorption 6.18

Remarks:

Dirt, Toil, Silt, Clay
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

Site No. 1577
Date June, 1966

Material Limestone
County Marshall

Location Sec. 6 Twp. 13N Rd. SE

Owner R. D. Pribyl
Address Cornhusker Court 42nd and O St. Lincoln, Nebr.

Nature of Deposits Dry
Accessibility Good

Status of Site Open site; sampled

EXPLORATION DATA

| Test Area | Material Density 
<table>
<thead>
<tr>
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</tbody>
</table>

CONSOLATION DATA

Geological Unit - Fort Riley Limestone Member

Material Stability - Material reported on SHO form 019, # 20-1

Loc No. 12786, 05555

Specific Gravity (Dry), 2.25, 2.23

Los Angeles Wear 

- (a) 86.8, (b) 64.7

Absorption 10.10, 2.80

Soundness 0.50, 0.63
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

Site No. "EG+79" Date: June, 1965

Location: NE

County: Pawnee

Section: 12

Township: 15

Range: 7E

Owner: John Pringle c/o Mrs. George Sible Odell, Nebraska

Nature of Deposit: Dry

Accessibility: Fair

Status of Site: Open Site; canceled

EXPLORATION DATA

Depth of water: 10

Depth of testing: 1

Formation Tested: 1/2

Permeability: 0

Porosity: 0

Permeability: 0

Porous: 0

HIGRATION DATA

Geological Age: Permian

Florence Limestone Member

Material Tested: NaCl, brine (1:3), 2.10, 2.14, 5.21

Material reported as: SHC form 629, # 59-27 and Lab. No. 7782, 7783, 7845, 7946, 1777

Specific Gravity (Brine, 70°F), 2.10, 2.14, 5.21 (Dry) 0.99, 0.99, 1.56

Los Angeles Abrasion 3.56, 5.00, 8.83, 8.37 Durability 0.93, 0.99, 0.78, 0.96

Wt. CaF2: --

Note: --
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

Site No. 18-77
Para.
Limestone
County
Marshall
Location
Sec. 13
Twp. 18
Range 7E
Owner
Marvin and Nada Argo (7)
Oketo, Kansas
Nature of Deposit
Dry Accessibility
Good
State of Site
Open site; sampled

EXPLANATION DATA

<table>
<thead>
<tr>
<th>Test Hole</th>
<th>Material No.</th>
<th>Material of Hole</th>
<th>Height of Material</th>
<th>General Position</th>
<th>Depth Dr.</th>
<th>L.H.</th>
<th>F.L.</th>
</tr>
</thead>
</table>

CORRELATION DATA

Geological age
Permian
Geological Form
Fort Riley Limestone Member
Material similar to: Material reported on SHC form 619, # 58-39 and Lab. No. 14785

Specific Gravity (Tds.) 2.23 (Top) 1.28
Los Angeles Abrasion (8) 12.0
Solubility 0.93

Scale: 1"=1 mile
MATERIAL SURVEY REPORT

Site No. 32-01  
Date June, 1965  

Material Sand and Gravel  
County Marshall  

Location Sec. 16  
Town 25  
Range 7E  

Owner Elmer J. and Oladys Anderson  
Address Marysville, Kansas  

Nature of Report Core  
Accessibility Easy  

Status of Site Open site;采-1-a

EXPLORATION DATA

<table>
<thead>
<tr>
<th>Depth</th>
<th>Material at Bottom (in feet)</th>
<th>Depth to Mason Border</th>
<th>Depth on Mason Border</th>
<th>Hi</th>
<th>LO</th>
<th>AV</th>
<th>5%</th>
<th>10%</th>
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<tbody>
<tr>
<td>20</td>
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</table>

CONSOLIDATION DATA

Geological age Quaternary  
Geological Form Alluvium  

Material Source: Material reported on SWC Form 633 and Lab. No. 25511  

Specific Gravity (Stat.) 2.60  
Los Angeles Wear (8) 94.8  

Drainage Soundness 111,666  
Dr. Wells 1 day 1.0, 3 day 1.49  
Results Going sampled from Big Man River.
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

Site No. 13-42
Date June 1962
Material Limestone
County Marshall
Location Sec. 1
T. 36 R. 76
Loyd Jones P. and Loretta M. Longs
Marysville, Kansas
Field notes
Date of Survey 7-30-62
Accessibility Fair
Status of Site Sampled

EXPLORATION DATA

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</table>

CONSOLIDATION DATA

Geological Age
Pennsylvanian
Material Source Farm Site Limestone Member
Material Factor: Material reported on SHC Form 619, No. 58,47 and Lab. No. 1897
Specific gravity (Dry): 2.30
Specific gravity (wet): 2.47
Specific gravity (unsub): 2.1
Specific gravity (wet high): 2.1
Specific gravity (wet low): 2.1
Saturated density (wet): 0.47
Wt. % Cl: 0
Sulfur: 0
Remarks:
**MATERIAL SURVEY REPORT**

**Site No.** 18-83  
**Date** June, 1966

**Material** Limestone  
**County** Marshall

**Location** Sec. 6 Tnp. 18 Range 8E

**Owner** J. E. McMillan  
**Address** Marysville, Kansas

**Nature of Deposit** Dry  
**Annotatability** Good

**Status of Site** Open site; sampled

### EXPLORATION DATA

<table>
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<tr>
<th>Sample</th>
<th>Material</th>
<th>Bottom of Sample</th>
<th>Depth of Material</th>
<th>Percent Relations</th>
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<tbody>
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</table>

### CONSOLIDATION DATA

- **Geological Age**: Permian
- **Geological Group**: Fort Riley Limestone Member
- **Material Similar to**: Material reported on SHO Form 612, 8-79-36, and Lab. No. 14780
- **Sample Gravity (bbl.)**: 2.29 (avg.)
- **Loss Angled Base**: (b) 72.5
- **Absorption**: 2.26 (sec.)

**Notes**
Site No. 1
Location: Sec. 16

Material: Sandy Gravel
County: Marshall

Owner: George Stichemath
Address: Maryville, Kansas

Nature of Deposit: Dry
Accountability: Good

Status of Site: Open site, sampled

EXPLORATION DATA

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Material</th>
<th>South of northern boundary</th>
<th>North of northern boundary</th>
<th>Reported Deposited</th>
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<tbody>
<tr>
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</tbody>
</table>

CORRELATION DATA

Geological age: Cenozoic
Geological Form: Kansas Till

Material Source: Material reported on SHR form 619, # 58-11 and Lab, No. 23163

Reporting agency (Sec.) (Str.)

Los Angeles Mean (D) 28, 0

Absorption:

Wt. of slurry:

Recovery:

Comments: This site has expansion possibilities to the north.
### State Highway Commission of Kansas

**MATERIAL SURVEY REPORT**

- **Site No.**: 50-85
- **Date**: June, 1965
- **Material**: Sand and Gravel
- **County**: Marshall
- **Location**: Sec. 27, T. 38 S., R. 7E
- **Date**: Alta Hammett Bt. Al.
- **City**: Maryville, Kansas
- **Nature of Deposit**: Bedrock
- **Accessibility**: Good
- **Status of Site**: Open site; sampled

### Exploration Data

<table>
<thead>
<tr>
<th>Test Date</th>
<th>Material depth at test</th>
<th>Depth of screen</th>
<th>Percent Material</th>
<th>Number of depth</th>
<th>G.F.</th>
<th>L.L.</th>
<th>P.L.</th>
</tr>
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<tbody>
<tr>
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</tr>
</tbody>
</table>

### Correlation Data

- **Geological Age**: Quaternary
- **Geological Source**: Alluvium
- **Material**: Material reported on SHE form 619, # 58-38 and Lab. No. 557
- **Specific Gravity (Test)**: 2.57
- **Los Angeles Wear (g)**: (0) 37
- **Soil Type**: clay
- **Moisture**: 10%
- **Silt Test**: 119.3 O. D., 1 day 168, 3 day 150

**Scale**: 1" = 1 mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

Site No. 419
Date June, 1966
Material Gravel and Gavel
County Marshall
Location Sec. 5 T. 38 R. 72
Owner Archie B. Dexter
Tenant Alice Cottrell
Nature of Soils Good
Accessibility Good
Status of Site Open site; sampled

EXPLANATION DATA

<table>
<thead>
<tr>
<th>Test Soil</th>
<th>Material</th>
<th>Depth of Material</th>
<th>Depth of Water</th>
<th>Percent Material</th>
<th>U. S.</th>
<th>A. H.</th>
<th>M. S.</th>
<th>% S</th>
<th>% E</th>
<th>% H</th>
<th>% A</th>
<th>% M</th>
<th>% L</th>
<th>% I</th>
<th>% E</th>
<th>% P</th>
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<table>
<thead>
<tr>
<th>CONCLUSION DATA</th>
</tr>
</thead>
</table>

Geological Age Quaternary
Geological Form Alluvial
Material Similar to Material reported on SHC Form 533 and Job. No. 99262
Specific Gravity (Dry): 2.61
Los Angeles Wear: 13.2
Absorption: 0.05

Analysis

<table>
<thead>
<tr>
<th>Wt. %</th>
<th>Gravel</th>
<th>Water</th>
<th>1 Day</th>
<th>3 Day</th>
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<tr>
<td>116.4</td>
<td>0.00</td>
<td>1.52</td>
<td>1.12</td>
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</table>
# MATERIAL SURVEY REPORT

**Site No.:** LS+88  
**Date:** June, 1975

**Material:** Limestone  
**County:** Nodaway

**Location:** Sec. 20  
**Top. 3S  
**Range 7E**

**Owner:** Henry and Frederick Nieburger  
**Address:** Marysville, Kansas

**Nature of Survey:** Open site; sampled

**Status of Site:**

<table>
<thead>
<tr>
<th>Type of Data</th>
<th>Material of Surface</th>
<th>Depth of Surficial</th>
<th>N.T.</th>
<th>N.E.</th>
<th>R.W.</th>
<th>A.</th>
<th>B.</th>
<th>C.</th>
<th>D.</th>
<th>E.</th>
<th>F.</th>
<th>G.</th>
<th>H.</th>
<th>I.</th>
<th>J.</th>
<th>K.</th>
<th>L.</th>
<th>M.</th>
</tr>
</thead>
</table>

**REGRESSION DATA**

- **Florence Limestone Member**

**Material Similar to:** Material reported on SHC Form 512, 58-16 and Lab. No. 15386, 11320, 11365, 11831.

- **Specific Gravity:** 2.37, 2.50, 2.37, 2.56  
- **Density:** 2.39, 2.37, 2.20, 2.16

- **Los Angeles Abrasion Test:** 43.8, 59.3, 19.2, 16.4

- **Absorption:** 8.52, 5.40, 7.87

**WT & CO:**

- **No. Samples:**

**Remarks:**
### State Highway Commission of Kansas

#### Material Survey Report

**Site No.:** 30-89  
**Quadrant:** NE

**Date:** June, 1965

**Material:** Sand and Gravel

**County:** Marshall

**Location:** Sec. 22, Tp. 35, R. 72

**Owner:** Maria Nietsfeld

**Location:** Marysville, Kansas

**Type:** Dry

**Accessibility:** Fair

**Status of Site:** Own site; sampled

#### Exploration Data

<table>
<thead>
<tr>
<th>Test No.</th>
<th>Material Below Surface</th>
<th>Depth from Surface</th>
<th>Percent</th>
<th>Layer</th>
<th>U.F.</th>
<th>S.T.</th>
<th>S.D.</th>
<th>B.S.</th>
<th>Base Line</th>
<th>Survey</th>
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<td>Lab. No. 65-2745</td>
<td>0 20 31 41</td>
<td>50 70 81 90</td>
<td>92 7</td>
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</tbody>
</table>

#### Correlation Data

- **Geological Age:** Quaternary
- **Geological Form:** Fausen Till
- **Material Similar To:** material report on Lab. No. 65-2745

**Specific Gravity (Dr.):**

**Los Angeles Wear:**

**Attenuation:**

**Weight Coefficient:**

**Soil Balls:**

**Test data not available when this report was published.**

---

Scale: 1" = 1/2 mile
NATURAL SURVEY REPORT

Site No. 261
Date June 1966
Material Sand and Gravel
County Marshall
Location Sec. 31 Top. 39 Range 78
Owner Dewy and Stella Baumett
Blue Rapids, Kansas
Water of Support None
Accessibility Quoit
Status of Site Open site; unsealed

EXPLORATION DATA

<table>
<thead>
<tr>
<th>Test</th>
<th>Material</th>
<th>Depth of Sample</th>
<th>Weight Before</th>
<th>Weight After</th>
<th>B.F.</th>
<th>L.L.</th>
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</thead>
<tbody>
<tr>
<td>243</td>
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<td>0.11</td>
<td>0.05</td>
<td>1</td>
<td>1.89</td>
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</tbody>
</table>

CONSOLATION DATA

Geological age Quaternary
Geological Form Alluvium
Material similar to Material reported on KBC form 519, # 58-59 and Lab. No. 15075
Specific Gravity (dry) 2.60
Los Angeles Wear 37.3
Adsorption 0.60
Moist. Eq. Fl. 113.47
Devi. Ratio 1.78, 1.55

Remarks

Scale 1" = 1 mile
**MATERIAL SURVEY REPORT**

**Site No.:** QA1  
**Date:** June, 1965

**Material:** Sand and Gravel  
**County:** Marshall

**Location:** Sec. 27  
**Twp.:** 18  
**Rge.:** 7E  

**Federal Government**  
**Ownership:**  
**Accessibility:** Fair

**Return of Deposit:** Open site; sampled  
**Status of Site:**

---

### Exploration Data

<table>
<thead>
<tr>
<th>Soil Unit</th>
<th>Material Code</th>
<th>Depth of Material</th>
<th>Material Undivided</th>
<th>Percent Total</th>
<th>Silt</th>
<th>Sand</th>
<th>Clay</th>
<th>OC</th>
<th>OD</th>
<th>IU</th>
<th>ID</th>
<th>US</th>
<th>SU</th>
<th>DP</th>
<th>LL</th>
<th>PL</th>
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</tbody>
</table>

---

### Interpretation Data

**Geological age:** Quaternary  
**Geological Source:** Alluvium

**Material Reported on SHC form 639, #50-50 and Lab. No. 15711, 27237**

<table>
<thead>
<tr>
<th>Specific Gravity (Sol.)</th>
<th>2.60</th>
<th>2.60</th>
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</thead>
<tbody>
<tr>
<td>Los Angeles Brittleness</td>
<td>(C) 38.3</td>
<td>(D) 33.3</td>
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<tr>
<td>Absorption</td>
<td>1.09</td>
<td>0.8</td>
</tr>
<tr>
<td>Soundness</td>
<td>0.93</td>
<td>0.98</td>
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<tr>
<td>Wt. Co. (%)</td>
<td>119.85</td>
<td>114.51</td>
</tr>
</tbody>
</table>

---

**Notes:**

- 1 day: 1.66, 3 day: 1.68
- Strength: 1 day: 1.68, 3 day: 1.58
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

Site No. 51-94
Sand and Gravel
Marshall
Marshall
Fed. Gov.
Open site sampled

EXCAVATION DATA

<table>
<thead>
<tr>
<th>Lab. No.</th>
<th>5513</th>
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</thead>
<tbody>
<tr>
<td>0.5</td>
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</table>

COHESION DATA

Geological Age
Alluvium
Material Similar to - Material reported on SHC Form 619, # 59-95
Lab. No. 5513, 90916
Specific Gravity (Sat.,) 2.58
Los Angeles (C) 96, (C) 15.0
Plastic Limit 0.25, 0.26
M. C. 119.3, 119.3
Rocks 1 day 1.3, 3 day 1.32

SCALE 1"=1/2 mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

Site No.: 306
Date: June, 1964

Material: Sand and Gravel
County: Marshall
Location: MC 31 SW
Owner: Federal Government
Nature of Deposit: Dry
Accessibility: Poor
Status of Site: Open site; sampled

EXPLORATION DATA

<table>
<thead>
<tr>
<th>Core</th>
<th>Length of Core</th>
<th>Diameter of Core</th>
<th>Depth of Material</th>
<th>Bulk Density</th>
<th>Wet Grav.</th>
<th>Bulk Grav.</th>
<th>Moisture</th>
<th>Loss on Ignition</th>
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<tbody>
<tr>
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<td>65</td>
<td>0.36</td>
<td>0.15</td>
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QUaternary

Geological Age: Quaternary
Geological Form: Alluvium
Material Similar To: Material reported on SWAT Form 633, Lab. No. 22917

Specific Gravity (Sol.) 2.60
Los Angeles Abrasion (1/16 in.) 80
Soil Classification 1.2
Moisture Content 11.5%
Sel. Ratio 1.51, 1.52
Consistency

Circa
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

Site No. 138/96

Date June, 1965

Material Limestone

County Marshall

Sec. 36

Town 15

Range 66

Data

Owner Fred L. Stocks

Location Blue Rapids, Kansas

Nature of Deposit Dry

Accessibility Fair

Open site sampled

States of Site

Explanation Data

<table>
<thead>
<tr>
<th>Test No.</th>
<th>Material</th>
<th>Weight of Sample</th>
<th>Horsepower Material</th>
<th>Percent Reclaimed</th>
<th>A.F.</th>
<th>L.L.</th>
<th>P.I.</th>
</tr>
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<tbody>
<tr>
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</tbody>
</table>

Correlation Data

Geological Age Persian

Geological Form Fort Riley Limestone Member

Material Similar to Material reported on SHA Form 619, #53-59 and Lab. No. 23788

Specific Gravity (Sat.) 2.34 (Dry) 2.19

Los Angeles Durability 6.64

Rutting 0.24

M. C. Mt. 9.8

Drapery

Notes
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

Site No.: 39+23

Date: June, 1966

Material: Sand and Gravel

County: Marshall

Locality: SE1 SW1 NE1

Township: 24

Range: 6E

Owner: Ester M. and Theodore F. Musil

Blue Rapids, Kansas

Type of Deposit: Open Pit

Drainage: Good

Condition of Site: Sampled

Material Table:

<table>
<thead>
<tr>
<th>Test Date</th>
<th>Material tested</th>
<th>Depth of Material</th>
<th>Percent retained</th>
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</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

Geological Age: Quaternary

Geological Form: Grand Island Formation

Material Similar to: Material reported on SEC form 619, 18-35 and

Material tested: Material on site

Lab. No. 934-9

Specific Gravity (SG): 2.57

Los Angeles Abrasion: 3.2

Absorption: 2.4%

Soundness: 0.2

Wt. G: 110.8

Dr. Wt.: 1.15

1 day: 1.05

3 day: 1.10

Remarks:
MATERIAL SURVEY REPORT

Site No.: 18-99
Material: Limestone
Date: June, 1965
County: Marshall
Location: SW1/4, SW1/4 Sec. 30, T24S, R4E, Range 6E
Owner: Calvin and Marion Ann King
Address: Marysville, Kansas
Nature of Deposits: Dry
Accessibility: Good
State of Site: Open site; sampled

EXPLORATION DATA

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Material at Bottom of Hole</th>
<th>Percent Recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
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<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
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</tbody>
</table>

CORRELATION DATA

Geological age: Permian
Geological Form: Fort Riley Limestone Member
Material Similar to: material reported on SHC Form 649, # 58-8 and Lab. No. 49293
Specific Gravity (S.G.): 2.33
Los Angeles Abrasion: Grade (A) 19.8, 39.9 Grade (B) 86.2
Moisture, 5.08, 10.9; Soundness: 0.93, 0.96, 0.90
Material: Coarse
Dr. Ratio: —
Remarks: —

1" = 1/2 mile