APPENDIX I

The following site data forms are designated as "open sites; not sampled." The sites described herein are depicted on the county materials map as a "●".

LEGEND

This symbol on the site data form represents an open site.
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

Site No. 59-1

Date June 1955

Material Limestone

County Marshall

Location NE 1/4, Sec. 35

Twp. 92 S

Range 96 E

Owner John T. and Genevieve Keating

Frankfort, Kansas

Nature of Deposit Dry

Accessibility Good

Status of Site Open site, not sampled

EXPLORATION DATA

<table>
<thead>
<tr>
<th>Test Line</th>
<th>Material of芯</th>
<th>Depth of Hole</th>
<th>Depth Below Surface</th>
<th>Percent Hydrated</th>
<th>S.F.</th>
<th>S.L.</th>
<th>P.L.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CONSOLIDATION DATA

Geological Age Persian

Geological Source Limestone Bedrock

Material Similar to

Specific Gravity (Sat.) DRY

Los Angeles Wear

Absorption Soundness

wt. % Fl. Str. Ball

Remarks This site has some expansion possibilities.
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

Site No. 00-2

Date June, 1965

Material Cheek Gravel

County Marshall

Location NW¼ Sec. 12

Town 53 Range 8E

Owner Albert W. Miller

Frankfort, Kansas

Drainage Dry

Accessibility Good

Nature of Property Open site; not sampled

EXPLORATION DATA

<table>
<thead>
<tr>
<th>Test Hole</th>
<th>Depth</th>
<th>Diameter</th>
<th>Dated</th>
<th>Porous</th>
<th>Percent Soluble</th>
<th>Moisture</th>
<th>S.P.</th>
<th>L.R.</th>
<th>P.R.</th>
</tr>
</thead>
<tbody>
<tr>
<td>00-2</td>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

CORRELATION DATA

Geological Age Quaternary

Geological Group Pre-Kansas Gravel

Material Similar To

Specific Gravity (Std.)

Low Clayway Type

laboratorian

Mr. E. F. Halsey

Remarks

HSE-3
PNC

Date No.:
June, 1969

Limestone

County:
Marshall

Section:
32

Town:
26

Range:
26

Owner:
Leslie F. and Sara V. Harr
t, Beatrice, Kansas

Nature of Deposits:
Dry

Open site, not sampled

EXPLANATION DATA

Permeability:

CUMULATIVE DATA

Geological Age:
Permian

Geological Source:
Morrill and Cottonwood Limestone Members

Material Similar To:

Specific Gravity (dry):

Los Angeles Abrasion:

Abundance:

Wt. Gain:

RemarKs:
**STATE HIGHWAY COMMISSION OF KANSAS**

**MATERIAL SURVEY REPORT**

<table>
<thead>
<tr>
<th>Site No.</th>
<th>June, 1965</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>Limestone</td>
</tr>
<tr>
<td>Location</td>
<td>Sec. 11, Twp. 55, Range 80, Marshall County, Mo.</td>
</tr>
<tr>
<td>Owner</td>
<td>R. H. Waterman, 400 Missouri Pacific Rd., St. Louis, Mo.</td>
</tr>
</tbody>
</table>

**EXPLORATION DATA**

<table>
<thead>
<tr>
<th>Test Date</th>
<th>Material Number of Tests</th>
<th>Depth of Test</th>
<th>Material Nucular</th>
<th>T.C.</th>
<th>U.V.</th>
<th>Q</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
</table>

**CORRELATION DATA**

Geological Age: **Permian**

Geological Source: **Cottonwood Limestone Member**

Material Similar To: 

Specific Gravity (St.): 2.45

Los Angeles Wear: Soundness

Weathering: Str. oste

Remarks: 

[Diagram of site location with coordinates]
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

Site No. LS-7 Date June, 1965

Material Limestone

County Marshall

Section 12, Tg 5S, Rg 82

Owner R. R. 2, Elsie Rapids, Kansas

Surface Deposits Dry

Accessibility Good

Status of Site Open site; not sampled

EXPLOSION DATA

<table>
<thead>
<tr>
<th>Test No.</th>
<th>Material Sampled</th>
<th>Weight</th>
<th>Bulk Density (lb/ft³)</th>
<th>Actual Density (lb/ft³)</th>
<th>G.F.</th>
<th>L.T.</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

CONSULTATION DATA

Geological Form Cottonwood Limestone Member

Material Limestone

Specific Gravity (rel.) [Not recorded]

Los Angeles Abrasion

Absorption

Wt. Gain

Remarks

[Map of Farm Site with state line, scale 1"= 1 mile]
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

Site No. 18-10

Date June, 1965

Material Limestone

County Marshall

Location Sec. 9, Twp. 55, Rng. 52, East

Owner V. C. Lesehwer

Frankfort, Kansas

Nature of Deposit

Mineralization: Not present

Open pit; not sampled

EXPLORATION DATA

Depth at Bottom of Hole

Depth of Material

Percuss No. 12

Permeability

Stability

B.T.

J.T.

H.S.

Inches

Inches

Sec. Line Rd.

Pond

Sec. Line Rd.

Pond

Geological Age

Permian

Geological Source

Cottongwood Limestone Member

Material: Similar to

Specific Gravity (dry) (lb.)

Los Angeles (dry)

Durability

M. Grt./Fl.

Remarks
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

Site No. 18-11
Pno. 

Date June, 1965

Material Limestone

County Marshall

Location SE1/4 Sec. 9 T55 R35 Range GG

Owner V. C. Leinweber

Frankfort, Kansas

Nature of Deposit 

Dry

Accessibility Good

Status of Site Open site; not sampled

EXPLORATION DATA

<table>
<thead>
<tr>
<th>Test Hole</th>
<th>Material of Deposit</th>
<th>Depth of Hole</th>
<th>Material</th>
<th>Breakdown</th>
<th>1150</th>
<th>1151</th>
<th>1152</th>
<th>1153</th>
<th>1154</th>
<th>1155</th>
<th>1156</th>
<th>1157</th>
<th>1158</th>
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</thead>
</table>

COMPLETION DATA

Geological Age Cretaceous

Geological Source Cottonwood Limestone Member

Material Similar to 

Depicts Granite (Cal.) (Dry)

Los Angeles Wear

Absorption Soundness

Mt. Gruft

Str. Britin

Remarks
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SUPPLY REPORT

Site No. 18-13
Date June, 1965

Material Limestone
County Marshall
Locality Sec. 22 Twp. 53 Range 3E
Owner Garfield Y. and Ellen Shineman
Address Frankfort, Kansas
Type Dry
Accessibility Good

Status of Site: Open site; not sampled

EXCAVATION DATA

|-----------|---------------------------|---------------|----------|------|------|------|---|---|---|---|---|------|------|------|------|

PERMIAN

Cottonwood Limestone Member

Geological Data

Depositional Sequence

Geological Framework

Material Similar To

Specific Gravity (Int.)

Los Angeles Hardness

Absorption

Wt. Gt./t.

Remarks

Scale: 1/4 mile

6.3
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

Site No. 18+29
Date June, 1965

Limestone
Marshall

Material
County
36
SE
SW
Lot 25
Lot 25
Town
SE

Owner:
Lewis A. and Islas C. Harby
Frankfort, Kansas

Nature of soil:
Dry
Locomotory

Status of site:
Open site; not sampled

EXPLANATION DATA

Tonnage per acre

<table>
<thead>
<tr>
<th>Material Type</th>
<th>0-1 in</th>
<th>1-4 in</th>
<th>4-8 in</th>
<th>8-16 in</th>
<th>&gt;16 in</th>
<th>Percent Material</th>
</tr>
</thead>
<tbody>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

CORRELATION DATA

Geological age:
Permian

Geological Group:
Morrill and Cottonwood Limestone

Material Similar to:

Specific Gravity [SG.]:

Los Angeles Hardness:

Adhesiveness:

Wt. loss:

Removal:

Remarks: May have expansion possibilities to the south and west.
MATERIAL SURVEY REPORT

Site No.: 18-15
Date: June, 1965

Limestone

Marshall

Marshall

No. 10

Sec. 32

Twp. 43 N

Range 2 E

Lyle & Helen O. Jones

Frankfort, Kansas

Dry

Open site; not sampled

EXPLANATION DATA

Table: Not provided

CORELATION DATA

Geological Age: Permian

Geological Source: Cottonwood Limestone Member

Material Similar To:

Specific Gravity (specific gravity)

Los Angeles Wear

Absorption

M. Co. Ft.

Impurities

Farm Site

Scale: 1" = 1 mile
State Highway Commission of Kansas

Water Survey Report

Site No. SK16  
Date June, 1965

Material Sand and Gravel  
County Marshall

Location Sec 8 T33  
Township L3 Range 10E

Owner Carl E. and Harriett A. Wixust  
Address Viota, Kansas

Nature of Site Dry  
Accessibility Good

Status of Site Open site; not sampled

Exploration Data

<table>
<thead>
<tr>
<th>Test No.</th>
<th>Material Below</th>
<th>Depth of Material</th>
<th>Depth of Water</th>
<th>Percent Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Correlation Data

Geological age Quaternary  
Geological Form Grand Island Formation

Specific Gravity (D.1.5) (dry)
Loss on Ignition
Absorption
Moisture Content
Remarks Pit contains clay-bound sand and gravel.
SITE INVESTIGATION COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

Site No. 342

Date: June, 1965

Material: Limestone

County: Marshall

Located in Sec. 22, T65S, R67E

Owner: Cran and Ola A. Hull

Dry - Suitability: Fair

Nature of Report: Open site; not sampled

EXPLORATION DATA

<table>
<thead>
<tr>
<th>Material</th>
<th>Depth</th>
<th>Material Sampled</th>
<th>Resultant Relation</th>
<th>revolver</th>
<th>gun</th>
<th>load</th>
<th>fag</th>
<th>0</th>
<th>10</th>
<th>20</th>
<th>50</th>
<th>100</th>
<th>per</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Geological Age</th>
<th>Material</th>
<th>Geological Source</th>
<th>Material Similar To</th>
<th>Specific Gravity (Int.)</th>
<th>Los Angeles Penetration</th>
<th>Abrasion</th>
<th>Wt. % Fm.</th>
<th>Remarks</th>
</tr>
</thead>
</table>

OBSERVATION DATA

- Attention to detail is crucial in the interpretation of site exploration data.
- The material sampled indicates a potential for construction with specific gravity and Los Angeles Penetration values.
**STATE HIGHWAY COMMISSION OF KANSAS**

**MATERIAL SURVEY REPORT**

<table>
<thead>
<tr>
<th>Date</th>
<th>June, 1965</th>
</tr>
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<tbody>
<tr>
<td>Site No.</td>
<td>73-10125</td>
</tr>
<tr>
<td>County</td>
<td>Marshall</td>
</tr>
<tr>
<td>Location</td>
<td>N24° W26'</td>
</tr>
<tr>
<td>Owner</td>
<td>Raymond and Margaret Burts</td>
</tr>
<tr>
<td>Address</td>
<td>1425 S. Park, Frankfort, Kansas</td>
</tr>
<tr>
<td>Nature of Deposit</td>
<td>Dry</td>
</tr>
<tr>
<td>Accessibility</td>
<td>Open site; not sampled</td>
</tr>
</tbody>
</table>

**EXPLORATION DATA**

<table>
<thead>
<tr>
<th>Depth of Bed</th>
<th>Material of Bottom of Hole</th>
<th>Dense Matter</th>
<th>Limestone</th>
<th>Silt</th>
<th>Sand</th>
<th>Water</th>
<th>R.I.</th>
<th>L.I.</th>
<th>P.I.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 10 ft</td>
<td>Limestone</td>
<td>DRY</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10 - 20 ft</td>
<td>Permian</td>
<td>DRY</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**COALITION DATA**

- Geological Age: Permian
- Geological Score: Cottonwood Limestone Member
- Material Similar To: Limestone

- Specific Gravity (Dry): 2.65
- Los Angeles Wear: 5
- Free Swell: 5
- Moisture: 5

**Notes:**
State Highway Commission of Kansas

Material Survey Report

Site No.: 1S-21  
Date: June, 1965  
Limestone  
County: Marshall  
Material: NE1/4 SW1/4  
Location  
Owner: Leonard L. and Mary Lou Bockman  
Address: Frankfort, Kansas  
Nature of Deposit: Open  
Accessibility: Poor  
Status of Site: Open site, not sampled

Exploration Data

<table>
<thead>
<tr>
<th>Test No.</th>
<th>Material of Section</th>
<th>Depth of Material</th>
<th>Percent Open</th>
<th>Initial F.D.</th>
<th>Unit Weight</th>
<th>Gr.</th>
<th>L.L.</th>
<th>P.I.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Investigation Data

Geological Age: Cottonwood Limestone Member

Material Stability:

Specific Gravity (Dry): (dry)

Los Angeles Wear:

Absorption:

Mo. Con. Fr.:

Remain:  

Scale: 1" = 1/2 mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

30-27
SITE No. 2K7

Date June, 1966

Materials Saxe and Gravel

County Marshall

Location Sec. 1 Twp. 18 S Range 18E

Owner Mr. F. and Irene F. Koch

Artell, Kansas

Nature of Deposit: Dry

Accessibility: Good

Status of Site: Open site; not sampled

EXPLORATION DATA

<table>
<thead>
<tr>
<th>East</th>
<th>Nort</th>
<th>Material of Deposit</th>
<th>Depth of Deposit</th>
<th>Percent Retained</th>
<th>Density</th>
<th>D.K.</th>
<th>B.K.</th>
<th>B.F.</th>
<th>L.B.</th>
<th>P.F.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

CARRELATION DATA

Geological Age: Quaternary

Geological Form: Kansas Till

Material Similar To:

<table>
<thead>
<tr>
<th>Deposits Gravity (Opt.1)</th>
<th>(Dry)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Angeles Hardness</td>
<td></td>
</tr>
<tr>
<td>Absorption</td>
<td></td>
</tr>
<tr>
<td>Wil. Co. F.</td>
<td></td>
</tr>
</tbody>
</table>

Remarks

Scale: 1" = \( \frac{1}{4} \) mile
**MATERIAL SURVEY REPORT**

**Site No:** 12-32

**Material:** Limestone

**County:** Marshall

**Location:** Sec. 26 T., 26 R., 7B

**Owner:** M. W. Kinkade

**Address:** Maryville, Kansas

**Remarks:** Open site, not sampled

---

### EXPLORATION DATA

<table>
<thead>
<tr>
<th>Material</th>
<th>Depth (Ft.)</th>
<th>Unit Material</th>
<th>0-12</th>
<th>12-18</th>
<th>18-24</th>
<th>24-30</th>
<th>30-36</th>
<th>36-42</th>
<th>42-48</th>
<th>48-54</th>
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</thead>
<tbody>
<tr>
<td>Limestone</td>
<td>0-12</td>
<td>12-18</td>
<td>18-24</td>
<td>24-30</td>
<td>30-36</td>
<td>36-42</td>
<td>42-48</td>
<td>48-54</td>
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<td></td>
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</tbody>
</table>

**CONSIDERATION DATA**

**Geological Age:** Permian

**Geological Source:** Fort Riley Limestone Member

**Material Similar To:**

**Specific Gravity (dry):**

**Gas Analysis:**

**Absorption:**

**MT. Co.:** Salt

**Remarks:**

---

**Diagram:**

- **Road:**
- **Farm Site:**
- **Limestone:**
- **Line:**

**Legend:**

- **Big Blue River:**
- **1st+1 mile:**

---
**STATE HIGHWAY COMMISSION OF KANSAS**

**MATERIAL SURVEY REPORT**

<table>
<thead>
<tr>
<th>Site No.</th>
<th>FF</th>
<th>Date</th>
<th>Limestone</th>
<th>County</th>
<th>Marshall</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>June, 1965</td>
<td></td>
<td></td>
<td></td>
</tr>
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</table>

**Material**

<table>
<thead>
<tr>
<th>Site</th>
<th>Depth</th>
<th>Location</th>
<th>Top.</th>
<th>Size</th>
<th>Owner</th>
<th>Remarks</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>NE 1 sq</td>
<td>20</td>
<td>2E</td>
<td>L. J. and F. J. Bernardt</td>
<td>Marysville, Kansas</td>
</tr>
</tbody>
</table>

**Accessibility**

<table>
<thead>
<tr>
<th>Owner</th>
<th>Name</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Marysville, Kansas</td>
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</tbody>
</table>

**Nature of Deposit**

<table>
<thead>
<tr>
<th>Owner</th>
<th>Name</th>
<th>Remarks</th>
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</thead>
<tbody>
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**Status of Site**

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<th>Owner</th>
<th>Name</th>
<th>Remarks</th>
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<tr>
<td></td>
<td>Marysville, Kansas</td>
<td></td>
</tr>
</tbody>
</table>

**Open site: not sampled**

**EXPLORATION DATA**

<table>
<thead>
<tr>
<th>Test Block</th>
<th>Material</th>
<th>HH %</th>
<th>Degree of Weathering</th>
<th>Degree of Weathered</th>
<th>U.S.</th>
<th>A.B.</th>
<th>A.</th>
<th>E.</th>
<th>S.</th>
<th>M.</th>
<th>30%</th>
<th>50%</th>
<th>100</th>
<th>C.F.</th>
<th>I.L.</th>
<th>P.L.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

**CORRELATION DATA**

**Geological Age**

- *Permian*

**Geological Source**

- *Fort Riley Limestone Member*

**Material Similar To**

- *[Text]*

**Specific Gravity (Soft.)*

- *(Text)*

**Los Angeles Wear**

- *(Text)*

**Absorption**

- *(Text)*

**M. Conc.**

- *(Text)*

**Other Remarks**

- *(Text)*
# MATERIAL SURVEY REPORT

**Site No.:** 15-36  
**Pfr:**  
**Date:** June 1965  
**Material:** Limestone  
**County:** Marshall  
**Section:** 29  
**Twp.:** 28  
**Range:** 7E  
**Owner:** R. L. Ellenboker  
**Address:** Marysville, Kansas  
**Nature of Exposure:** Dry  
**Accessibility:** Fair  
**Status of Site:** Open site; not sampled

### EXPLORATION DATA

<table>
<thead>
<tr>
<th>Depth of Material</th>
<th>Material Below</th>
<th>Material</th>
<th>Percent Relation</th>
<th>Description</th>
<th>Color</th>
<th>Index</th>
<th>P.H.</th>
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<tbody>
<tr>
<td>1 FT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 FT</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3 FT</td>
<td></td>
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<td></td>
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<tr>
<td>4 FT</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>5 FT</td>
<td></td>
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<tr>
<td>6 FT</td>
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### CORRELATION DATA

**Geological Age:** Persian  
**Geological Source:** Fort Riley Limestone Member

**Material Similar To:**

- Aquifer Capacity (Gac.)  (Hrs.)
- Los Angeles Read
- Absorption
- Sr. Co.Fl.
- Remarks

---

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

MATERIAL SURVEY REPORT

15-61

Fr.

Site No.

Date

June, 1966

Limestone

Marshall

Material

County

sgr sgr

Locality

Sec. 2

Twp. 3S

Range 7E

Owner

F. A. and Theresa Overkotte

Marysville, Kansas

Address

Dry

Nature of Deposit

Accessibility

Good

Status of Site

Open site; not sampled

INFORMATION DATA

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<tr>
<th>Test Date</th>
<th>Material at surface of Site</th>
<th>Depth of overburden</th>
<th>Particle size</th>
<th>2%</th>
<th>5%</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
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</table>

RELATION DATA

Geological age

Perryston

Geological Form

Fort Riley Limestone Member

Material Stability

Specific Gravity (Int.)

(fgr)

Los Angeles Wear

Absorption

Soundness

M. Co. Ft.

Shr. Ratio

Remarks

Scale 1" = 1/4 mile
MATERIAL SURVEY REPORT

Date: June, 1965

Site No.: 12-12

F Fr.:

Limestone

WY:

County:

Manual:

Location:

Sec. 32

Twp. 28

Rng. 8E

Owner:

Robert F. and Hedwig Kroeger

Address:

Dry

Acceptability:

Good

Nature of Deposit:

Open site; not sampled

EXPLORATION DATA

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<tr>
<th>Soil Type</th>
<th>Depth of Ultimate Bearing</th>
<th>Depth of Total Bearing</th>
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<th>Total Bearing</th>
<th>M.P.</th>
<th>L.L.</th>
<th>F.C.</th>
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</thead>
</table>

CONCLUSION DATA

Geological Age:
Fort Riley Limestone Member

Consolidation Pressure:

Material Shirley To:

Specific Gravity (Sol.):
(Dry)

Los Angeles Wear

Axial Flow

M. Co. Ft.

Depth:

1" = 1/2 Mile

Farms Site

Site

Site

Site
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

June, 1965

Site No. 15

Limestone

Marshall

County

W1-2-1

Sec. 29

Twp. 18 R. 46

Owner - Mrs. Lee B. Barns

613 Polk

Topeka, Kansas

Nature of report - Open site; not sampled

EXPLORATION DATA

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<tr>
<th>Well No.</th>
<th>Material No.</th>
<th>Date of Test</th>
<th>Age in Myr</th>
<th>S.P.</th>
<th>M.F.</th>
<th>I.R.</th>
<th>2.5</th>
<th>30</th>
<th>50</th>
<th>100</th>
<th>G.R.</th>
<th>I.R.</th>
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CONSPILLATION DATA

Geological Age -

Geological Source -

Material Source -

Specific Gravity (Eng.) -

Los Angeles Wear -

Description -

No. of Test -

Remarks -

Scale: 1" = 1 mile
MATERIAL SURVEY REPORT

Site No.: 15-36
Date: June, 1962

Material: Limestone
County: Marshall
Location: Section 16, Twp. 25 S, Range 74 E
Owner: Edna G. Holly
Blue Rapids, Kansas
Nature of Deposit: Dry
Accessibility: Good
Status of Site: Open site; not sampled.

EXPLANATION DATA

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<tr>
<th>Test Date</th>
<th>Material</th>
<th>Source</th>
<th>Description</th>
<th>Unit</th>
<th>MU</th>
<th>MG</th>
<th>L</th>
<th>K</th>
<th>X</th>
<th>A</th>
<th>No.</th>
<th>MO</th>
<th>BPH</th>
<th>B.F.</th>
<th>L.L.</th>
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CONCLUSION DATA

Geological Age: Permian
Geological Form: "Havensville Reef" and Schroyer Limestone Member
Material Similar To:

Specific Gravity (Sat.): (Dry)
Los Angeles Bear:
Absorption:
Mf. Co.: N/A
Remarks:

Scales: 1" = 4 miles
**MINERAL SURVEY REPORT**

**Site No.:** 18-52

**Date:** June, 1966

**County:** Marshall

**Location:** Sec. 25, Town 18 N., Range 68 E.

**Owner:** Fred L. Stocks

**Address:** Blue Rapids, Kansas

**Nature of Deposit:** Dry

**Accessibility:** Fair

**Status of Site:** Open site; not sampled

### EXPANSION DATA

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<th>Test Date</th>
<th>Material at Bed</th>
<th>Depth of Material</th>
<th>Percent Retained</th>
<th>Water</th>
<th>S.G.</th>
<th>C.F.</th>
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### REFERENCE DATA

**Geological Age:** Pennsylvanian

**Geological Source:** Port Royal Limestone Member

**Material Similar To:**

**Specific Gravity (S.G.):** (37)

**Los Angeles Bear:** Soundness

**Water Softness:**

**Remarks:**

---

**Scale:** 1" = 1/4 mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

Site No. 80+53
Type: Sand and Gravel
County: Marshall
Location: Sec. 10, Tp. 10S, Rge. 72
Owner: Taeo F. Musil
Area: Blue Rapids, Kansas
Condition: Dry
Nature of District: Accessibility: Good
Status of Site: Open site; not sampled

EXPLANATION DATA

Geological Age: Quaternary
Geological Source: Grand Island Formation
Material Similar To:
Specific Breccia (Nat.)
Soil Location:
Aberrations:
Mt. Or Ft.:
Remarks:

CROSS-SECTION DATA

<table>
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<th>Date</th>
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</table>

S.O.C.

Map Scale: 1" = 4 mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

Site No. 30+49

June, 1965

Sand and Gravel

County: Marshall

Material: 303

Location: Sec. 19 T. 56 S. R. 70 E.

Owner: Fred S. and Viola Stryker

Blue Rapids, Kansas

Return of Exposure: Dry

Accessibility: Good

Status of Site: Open site; not sampled

EXPLORATION DATA

<table>
<thead>
<tr>
<th>Date/De</th>
<th>Material % Below Surface</th>
<th>Depth Below Surface</th>
<th>Footing Material</th>
<th>F.P.</th>
<th>L.C.</th>
<th>P.L.</th>
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CONCLUSION DATA

Geological Age: Quaternary

Geological Source: Grand Island Formation

Material Similar To:

Specific Gravity (Dry): 2.65

Los Angeles Notch:

Absorption:

Mo. Co.Fr.:

Sediments:

Scale: 2" = 1/2 mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

Site No. 39-59

Date:

June 1967

Material: Sand and Gravel

County: Marshall

Location: S1/2 S1/2 Sec. 16

Twp. 16

Range 6E

Owner: Hugo F. and Edna Bogler

Waterville, Kansas

Nature of Deposit: Dry

Accessibility: Good

Status of Site: Open site; not sampled

EXPLORATION DATA

<table>
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<tr>
<th>Test Date</th>
<th>Material beneath Surface</th>
<th>Depth to Bearing</th>
<th>South or North</th>
<th>West</th>
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<th>S.</th>
<th>W.</th>
<th>N.</th>
<th>L.L.</th>
<th>F.L.</th>
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CONCLUSION DATA

Geological Age: Quaternary

Geological Source: Grand Island Formation

Material Similar To:

Specific Gravity (Sat.)

Los Angeles Beep

Absorption

Wt. % C.F.

Remarks
Site No. 50-60
Date June, 1965
Material Sand and Gravel
County Marshall
Location Sec. 20
Township 14
Range 76
Owner Arch J. Arganbright
Address Waterville, Kansas
Nature of Deposit Dry
Accessibility Good
Status of Site Open site, not sampled

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<td>Material Similar %</td>
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<td>Specific Gravity (p.k.)</td>
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<td>Los Angeles Wear</td>
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<td>Absorption</td>
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<td>Wt. Co.Ft.</td>
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<td>Remarks</td>
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