APPENDIX IV

The following Site Data Forms are designated as Prospective Sites; Sampled. The sites described herein are depicted on the county materials maps as a "▲".

LEGEND

- Fence
- Trail or lane
- Railroad
- Road
- Hedge or trees
- Major streams
- Intermittent streams
- Pond or lake

[diagram with symbols]

- Farm site
- Open materials site
- Prospective materials site
- Center of section
- Cemetery
- School
- Church
- Town or city
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

Site No. Qal

FS-145

Date April, 1963

Material Fine Sand

County Ellis

Location

Dec. 28

15S

18W

Dry

James P. Dingee

Schoenenchen, Kansas

Nature of Deposit

Good

Status of Site

Prospective site; sampled.

EXPLORATION DATA

<table>
<thead>
<tr>
<th>Soil Code</th>
<th>Material at Section of Site</th>
<th>Depth of Material</th>
<th>Percent Retained</th>
<th>A.F.</th>
<th>L.L.</th>
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<tbody>
<tr>
<td>USGS</td>
<td>3 5</td>
<td>1 3 17</td>
<td>80 15</td>
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<td>3 6</td>
<td>1 3 9 21</td>
<td>67 77 18</td>
<td></td>
<td></td>
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</table>

Date Tested: 2-47

Soil Geology

Recent

Geological Source Alluvium

Material similar to Material reported on SHC Form 619, No. 26-24 and in USGS Ellis County Report Site No. Fa-11

Specific Gravity (dry)

Los Angeles Wear

Absorption

Ntr. 11.1 lbs.

Estimated quantity - 15,000 cubic yards.
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-146

Site No. 06m
Date April 1963

Material Sand and Gravel

Routly Ellis

Location NW 1/4 Sec.17 T24S R155 E

Owner Johanna Wahl

Nature of Soil Dry

Status of Site Pros. site sampled

EXPLORATION DATA

<table>
<thead>
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<th>Soil</th>
</tr>
</thead>
<tbody>
<tr>
<td>USGS</td>
</tr>
<tr>
<td>SHC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Material</th>
<th>% Vol</th>
<th>% Sand</th>
<th>% Silt</th>
<th>% Clay</th>
<th>Dry</th>
<th>Wet</th>
<th>Total</th>
<th>Absorption</th>
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<td>USGS</td>
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Pleistocene

Geological Stage Meade Formation

Material similar to Material reported on SHC Form 216, No. 26-10 and in USGS Ellis Co. Report, Site No. 06m5

Specific Gravity (Dry) 2.62

Los Angeles Abrasion Test 40.2

Estimated quantity 15,000 cu. yds.

Scale: 1" = ¼ Mile

Smoky Hill River

Open Pit

17
# Material Survey Report

**Site No:** LG-147  
**Date:** April 1953

**Material:** Limestone Gravel  
**County:** Ellis

**Location:** NEk, Sec. 35, T. 14S, R. 20W  
**Owner:** Lester V. Irvin  
**Address:** Hays, Kansas

**Nature of Deposit:** Dry  
**Accessibility:** Good

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

---

## Exploration Data

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<thead>
<tr>
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<th>Material below of Date</th>
<th>Depth of Material</th>
<th>Density (g/cc)</th>
<th>GDR</th>
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<tbody>
<tr>
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<td>SHC</td>
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## Correlation Data

**Date Tested:** 1-46

**Geological Age:** Pleistocene  
**Geological Source:** Sanborn Formation

**Material Similar To:** Material reported on SHC Form 216, No. 26-21 and in USGS Ellis Co. Report, Site No. Lg4

**Specific Gravity:** 33.4  
**Grading:** Grading "C"

**Attestation:** B. L. Haro

**Estimated quantity:** 22,000 cu. yds.
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-148

Site No.  Qs

Data  April 1963

Material  Sand and Gravel

County  Ellis

NE1/4 SE1/4

Location

Dec. 16

11S

Range 16E

Owner  A. A. Matheson

Nature of Deposit  Dry

Access  Good

Status of Site  Prospective site; sampled

Exploration Data

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<tr>
<th>Test Hole</th>
<th>Material</th>
<th>Depth of Material</th>
<th>Depth</th>
<th>Diameter of Gravel</th>
<th>Diameter</th>
<th>Amount of Material</th>
<th>N.T.</th>
<th>L.L.</th>
<th>P.L.</th>
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</thead>
<tbody>
<tr>
<td>USGS 2 6</td>
<td>1 12 50 97 3 3.58</td>
<td>SHC 2 6</td>
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Circulation Data

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<th>Diameter</th>
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<th>P.L.</th>
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<tbody>
<tr>
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<td>1 4 11 2752 7952 96 3</td>
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<td></td>
<td></td>
<td></td>
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</table>

Circulation Data

Date Tested: 1-46

Geological Age  Pleistocene

Geological Source  Sanborn Formation

Material similar to Material reported on SHC Form 216, No. 26-1 and in USGS Ellis Co. Report, Site No. Mal

Specific Gravity (Sat.)  2.60

Los Angeles Abrasion  Grading "B" 43.4, Grading "C" 40.8, Grading "D" 0.91 41.2

Absorption  Soundness  108 lbs.

1-day 1.12, 3-days 1.12

Remarks

Note: 1" = 1/4 Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

Site No. SG-149
Date April 1963

Material Sand and Gravel
County Ellis
Section 18
Town 11S
Range 17W

Owner Camilla W. Austin, et al
Nature of Deposit Dry
Accessibility Good
Status of Site Prospective site; sampled

EXPLORATION DATA

<table>
<thead>
<tr>
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<th>Material</th>
<th>Depth of horizon</th>
<th>Per cent fill</th>
<th>R.P.</th>
<th>P.S.</th>
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</thead>
<tbody>
<tr>
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<td>4 9 33</td>
<td>96</td>
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<td>SHC</td>
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<td>1 4 10 1735 6092</td>
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<td>3</td>
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Correlation Data

Geological Age Pleistocene
Geological Source Meade Formation
Material Similar To Material reported on SHC Form 216, No. 26-2 and in USGS Ellis Co. Report, Site No. Ma3
Specific Gravity (Est.) 2.56 (Dry)
Los Angeles Abrasion 49.6
Absorption 0.87
Wt. l. ft. 109 lbs.
Dry Basis
Remarks Estimated quantity 10,000 cu. yds.

Date Tested: 1-46

1" = 1/4 Mile

Saline River
**STATE HIGHWAY COMMISSION OF KANSAS**

**MATERIAL SURVEY REPORT**

**LG-150**

**Site No.**  Q8  **Date** April 1963

**Material** Limestone Gravel  **County** Ellis

**Location** Sec. 36  T. 12S  R. 19W

**Owner** Maria Bittel  **Hays, Kansas**

**Status of Site** Prospective site; sampled

**EXPLORATORY DATA**

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<th>Test Site</th>
<th>Material or Bulk</th>
<th>Depth of Material</th>
<th>Percent Moisture</th>
<th>Silt</th>
<th>Clay</th>
<th>S</th>
<th>O</th>
<th>M</th>
<th>L</th>
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<td>2 12</td>
<td>2 15 27 37 46 62 77 82</td>
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**CORRELATION DATA**

Date Tested: 1-46

**Geological Age** Pleistocene

**Geological Source** Sanborn Formation

Material similar to Material reported on SHC Form 216, No. 24-12 and in USGS Ellis Co. Report Site No. LG-1

**Specific Gravity** (Dry)

**Los Angeles Break**

**Absorption**

**Wt. Ex. Ft.**

**Estimated quantity 12,000 cu. yds.**
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL QUALITY REPORT

Site No. LS+151

t Date April 1963

Knf

Ft. Hays Limestone

Ellis

Material SH4

Location Sec. 3

Township 11S

Range 18W

Owner Lenora Matthews

Type Unknown

Nature of Deposit Dry

Accessibility Good

Status of Site Prospective site; sampled

EXPLANATION DATA

| Test Date | Material at Site | Depth on Site | Net Perforated | Percent Return
<table>
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<tr>
<th></th>
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<tr>
<td>USGS</td>
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Date Tested: 1954

Geological Age Cretaceous

Geological Source Ft. Hays Limestone

Material Similar to Material reported on SHC Form 216, No. 26-25 and in USGS Ellis Co. Report Site No. LS-1

Specific Gravity (Lab), 2.39, 2.02, 1.98 (Dry)

Los Angeles Abrasion 56.7, 66.8, 75.3

Moisture 0.28, 0.75, 0.44

Wt. Per. Drt. Basis

Estimated Quantity 150,000 cu. yds.
**State Highway Commission of Kansas**

**Material Survey Report**

**SG-152**

**Qm**

**Site No.**

**SG-152**

**Date**

**April 1963**

**Material**

**Sand and Gravel**

**County**

**Ellis**

**Location**

**NW¼ SW¼**

**Sec. 32**

**Twp. 15S**

**Rng. 17W**

**Owner**

**Henry M. Husser**

**Victoria, Kansas**

**Dry**

**Good**

**Nature of Deposit**

**Prospective site; sampled**

**Distances of Site**

**Exploration Data**

<table>
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<tr>
<th>Test Date</th>
<th>Number of Boreholes</th>
<th>Depth of Material</th>
<th>Density</th>
<th>L.D.</th>
<th>M.D.</th>
<th>V</th>
<th>K</th>
<th>Factor of Safety</th>
<th>G.R.</th>
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**Core Test Data**

**Material**

**Pleistocene**

**Meade Formation**

**Geological Age**

**Pleistocene**

**Geological Source**

**Material reported in USGS Ellis Co. Report Site No. Ma-12**

**Specific Gravity (dry)**

**La Verne Britt**

**Soil Drivability**

**Estimated quantity 2,000 cu. yds.**

**Scale:**

1" = ½ Mile
FS+153
Qal

Site No. Date
FS+153 April 1963

Material: Fine Sand
County: Ellis

Location: N 50 W 15 S 16 E 18 W

Owner: Felix Roth
Prospective site sampled

Nature of deposit: Dry
Accessibility: Fair

EXPLORATION DATA

<table>
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<tr>
<th>Sample</th>
<th>Material Below 1/4&quot;</th>
<th>Material Between 1/4&quot; and 1&quot;</th>
<th>Material Between 1&quot; and 2&quot;</th>
<th>Material Between 2&quot; and 4&quot;</th>
<th>Material Between 4&quot; and 8&quot;</th>
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<th>Material Between 16&quot; and 32&quot;</th>
<th>Material Between 32&quot; and 64&quot;</th>
<th>Material Between 64&quot; and 128&quot;</th>
<th>Material Between 128&quot; and 256&quot;</th>
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</table>

ESRI RELATIVE DATA

Recent

Geological Age: Ailuvium

Material similar to: Material reported on SPC Lab. Sheet No. 43615

Specific Gravity (Dry): undefined

User Report: In 4 to 8" Spout

Remarks: Estimated quantity 30,000 cu. yds.

SPOOKY HILL

River

FS+153
Qal

Scale: 1" = 1/4 Mile
FS 154
Qal

Material Quality Report

Site No. Qal
Material Fine Sand
Location
County Ellis
Owner William H. Gottschalk
Nature of Deposit Dry
Nature of Site Prospective site; sampled

EPA Data

| Depth of 
| Material 
<table>
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<th>No.</th>
<th>(ft)</th>
<th>No.</th>
<th>(ft)</th>
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<td>2</td>
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Geological Age Recent
Geological Source Alluvium
Material Similar To Material reported in USGS Ellis Co.

Report Site No. PA-10

Consistency Data

Date Tested: 1-46

Block: 27

Scale: 1" = 4 Mile

Estimated quantity 30,000 cu. yds.
**Material Survey Report**

**LG1155**

<table>
<thead>
<tr>
<th>Site No.</th>
<th>April 1963</th>
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<tr>
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<tr>
<td>County</td>
<td>Ellis</td>
</tr>
<tr>
<td>Location</td>
<td>T27 R13S S27</td>
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<tr>
<td>Owner</td>
<td>Leo &amp; Lawrence Sack</td>
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<tr>
<td>Date</td>
<td>Rte. 1 Hays, Kansas</td>
</tr>
<tr>
<td>Nature of Deposit</td>
<td>Dry</td>
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<tr>
<td>Accessibility</td>
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<tr>
<td>Prospective Site</td>
<td>Sampled</td>
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### Exploration Data

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### Correlation Data

**Geological Age:** Pleistocene-Recent

**Undifferentiated**

**Material:** Material reported in USGS Ellis Co.

**Report Site No.:** LG2

**Specific Gravity (Sat.)**

**Los Angeles Abrasion**

**Residue**

**Wt. Cu.Ft.**

**Specific**

**Scale:** 1" = 1/4 Mile
Material Survey Report

Site No.: LG-156
Date: April 1963

Limestone Gravel
County: Ellis

N9° 27' 13" W
Two Ranges

A. A. Wiesner

Hays, Kansas

Dry

Nature of Deposit: Accessibility: Fair

Status of Site: Prospective site; sampled

Exploration Data

<table>
<thead>
<tr>
<th>Test Date</th>
<th>Material</th>
<th>Percent</th>
<th>Density</th>
<th>L1/E1/L2</th>
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</table>

Corelation Data

Geological Age: Pleistocene-Recent
Geological Source: Undifferentiated

Material Similar To: Material reported on SHC Lab. Sheet No. 39345

Specific Gravity (dry): (dry)

Los Angeles Wear: Soundness: No
Wt. Loss: Def. Ratio: No

Remarks:
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

LG2157

<table>
<thead>
<tr>
<th>Site No.</th>
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<tbody>
<tr>
<td>Date</td>
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Limestone Gravel

<table>
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<table>
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<tr>
<td>Range</td>
<td>20W</td>
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</table>

Owner: Mary Armuster

304 E. 14th St., Ellis, Kansas

Nature of Deposit: Dry

Accessibility: Good

Status of Site: Prospective site; sampled

EXPLANATION DATA

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<tr>
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<th>S/2</th>
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Pleistocene-Recent

Undifferentiated

Material Listed: Material reported in USGS Ellis Co.

Report Site No. LG3

Specific Gravity (Dry): 

Loss on Ignition: 

Soil Texture: 

MT. CO. FT.: 

Remarks:

Scale: 1" = 1/2 Mile
SC-158
Fr
Date April 1963

**Material:** Sand and Gravel
**County:** Ellis

**Location:**
- NW 1/4, SW 1/4, NE 1/4
- 14S
- Range 17W
- Township 145
- Range 17W
- Section 39
- Town 14S
- Range 17W

**Owner:** Don E. Pratt
**Address:** Hays, Kansas

**Nature of Deposit:** Dry
**Accessibility:** Good

**Status of Site:** Prospective site, sampled

### Exploration Data

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<tr>
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<th>Material</th>
<th>Depth of Material</th>
<th>Depth After Material</th>
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**Correlation Data:**
- Date Tested: 2-47

**Geological Age:** Pleistocene-Recent

**Geological Source:** Undifferentiated

**Material Details:**
- Material reported in USGS Ellis Co. Report Site No. Ma8

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

**Los Angeles Wear:**
- Abrasion: Sandmass
- Wet Test: No wear

**Estimated Quantity:** 1,000 cu. yds.
MATERIAL SURVEY REPORT

SG-159

Pr

Pr

Date __April 1963

Material __Sand and Gravel

County __Ellis

Location __SW1/4 SW1/4 Sec. 10 Twp. 13S Range 17W

Owner __Leo Dorgoiler

Catherine, Kansas

Dry

Material of Deposit __Good

Accessibility Prospective site sampled

Exploration Data

<table>
<thead>
<tr>
<th>Test Hole</th>
<th>Material of Section of Mtl.</th>
<th>Depth of Material in Feet</th>
<th>Percent Material</th>
<th>Material</th>
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<tbody>
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<th>Percent Material</th>
<th>Material</th>
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<tbody>
<tr>
<td>USGS</td>
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<table>
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<th>Depth of Material in Feet</th>
<th>Percent Material</th>
<th>Material</th>
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<tbody>
<tr>
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</tbody>
</table>

Coring Data

Date Tested: 1-46

Geological Age __Pleistocene-Recent

Geological Source __Undifferentiated

Material Similar To __Material reported in USGS Ellis County

Report Site No. Ma6

Specific Gravity (Dr.) __(Dry)

Los Angeles Wear __Soundness

ML: 0.9, ML: 0.9

Estimated quantity 2,000 cu. yds.
SG-160
Qal

Site No. 1304336
Cal. April 1963
County Ellis
Material Sand and Gravel
Section NE4 NW4
Lot 15
Town 11S
Range 18W
Center 5.7 Peavy Rte 2 Ft Morgan Colorado
Note: Wet Fair
Rate of Deposition
State of site: Prospective site; sampled

<table>
<thead>
<tr>
<th>Depth of Material</th>
<th>Permeability</th>
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</thead>
<tbody>
<tr>
<td>USGS 2 9</td>
<td>4 8 5 5 2 5 9 2 5</td>
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</table>

Date Tested: 1-46

Geological Age Recent
Geological Source Alluvium
Material Similar To Material reported in USGS Ellis Co.
Report Site No. Ma4
Specific Gravity (dry) 2.60
Los Angeles wear 42.1
Depth to Gravel 0.87
Wt. Cacl2 113 lbs
Mile, Rate Estimated quantity 4,300 cu. yds

Scale 1" = 1/4 Mile
STATE HIGHWAY COMMISSION OF KANSAS

MINERAL SURVEY REPORT

FS-161
Qm

Site No.  Date
Fine Sand  April 1963  Ellis
County

Location  Description
SE1  Sec. 7  Twp. 116  Range 20

Owner  Nature of Deposit  Accessibility
Mary Wolz  Dry  Good

Status of Site  Prospective site; sampled

EXPLORATION DATA

<table>
<thead>
<tr>
<th>Test</th>
<th>Material</th>
<th>Depth of Site</th>
<th>Material of Site</th>
<th>Material of Site</th>
<th>L.L.</th>
<th>P.I.</th>
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<tbody>
<tr>
<td>USGS</td>
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<td>3</td>
<td>95</td>
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</table>

Correlation Data

Date Tested: 2-47

Material: Mead Formation
Geological Data: Mead Formation
Material Similar to: Material reported in USGS Ellis Co.
Report Site No. Pa3
Depositional Gravity (foot): (dry)
Lost Sample Data
Abnormality

Estimated quantity 3,000 cu. yds.
Site No. 162  
Date April 1963  
County Ellis  
Section NW 1/4 NW 1/4  
Twp. 11S  
Rng. 20W  
Martin B. Vance, et al  
Box 221, Macon, Mo.  
Cover Dry  
Accessibility Good  
Status of Site Prospective site; sampled

Exploration Data

<table>
<thead>
<tr>
<th>Task Mile</th>
<th>Material of Section at Site</th>
<th>Depth of Material</th>
<th>Percent Material</th>
<th>Water 200</th>
<th>B.F.</th>
<th>CO.</th>
<th>L.L.</th>
<th>P.L.</th>
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<tbody>
<tr>
<td>USGS</td>
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</table>

Simulation Data

Date Tested: 2-47

Geological Age Pliocene

Material reported in USGS Ellis Co. Report Site No. Fa4

Specific Gravity (Dry):  
Los Angeles (Dry):  
Consistency:  
Mo. Crft:  
Estimated quantity 3,000 cu. yds.
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

PS-163

To

Date: April 1963

Site No. Material

Fine Sand

Geology Ellis

Location NW ¼ NE ¼ Sec. 33 Tp. 11E Rng. 20W

Gerhard E. Keller Ellis, Kansas

Nature of Deposit Dry

Suitability Good

Status of Site: Prospective site; sampled

EXPLORATION DATA

Depth to Material

Percent Material

North 2006

GSR

Lat. P.M.

25' 50' 75' 100' 125'

USGS 1-5 4 22 97

Geological Age

Pliocene

Geological Source

Ogalala Formation

Material Similar To

Material reported in USGS Ellis Co.
Report, Site No. Fa6

Specific Gravity (Sat.)

(fy) 2.6

Loss on Ignition

Soundness

Estimate Quanity 2,000 cu. yds.

CONSULTATION DATA

Date Tested: 2-47

CONTRACT DATA

Dimensions

Scale: 1" = ¼ Mile

216
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG+165
Qm

Site No. 403

Date April 1963

Material Sand and Gravel

County Ellis

SE\n\n6

Locality Sec. 36, Tp. 15S, Range 16E

Edward Boxberger

Rte. 1 Otis, Kansas

Dry

Nature of Deposit Anticipated: Good

Nature of Site: Prospective site; sampled

EXPLORATION DATA

<table>
<thead>
<tr>
<th>Test</th>
<th>Material below test level</th>
<th>Depth of section</th>
<th>Sand</th>
<th>Gravel</th>
<th>Clay</th>
<th>Silt</th>
<th>L.F.</th>
<th>L.L.</th>
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</table>

CORRELATION DATA

Geological Age Pleistocene

Material similar to Meade Formation

Reported on SHC Lab. Sheet No. 18091

Specific Gravity (Enol) 2.60
Loss on ignition 32.0
Absorption 0.96
Mo. Ca/lb. 114.4 lbs.

Remarks
SG+166

Material Survey Report

Site No.  Gm

Date  April 1963

Material  Sand and Gravel

County  Ellis

Location  NW 1/4 SE 1/4

Sec.  27  Township  15S  Range  17W

Owner  Peter Breit

Status of Site  Prospective site; sampled

Exploration Data

<table>
<thead>
<tr>
<th>Depth</th>
<th>Material</th>
<th>% fines</th>
<th>% silt</th>
<th>% clay</th>
<th>% sand</th>
<th>% gravel</th>
<th>% cohesion</th>
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<td>10</td>
<td>14</td>
<td>51</td>
<td>9</td>
<td>4</td>
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<td>10</td>
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Date Tested: 2-62

Geological age  Pleistocene

Geological Source  Meade Formation

Material similar to  Material reported on SHC Lab. Sheet No. 22481

Spec. Gravity (Dry)  2.65

Loss on ignition (Dry)  Grading "D" 31.8

Remarks

scale: 1" = 1/4 Mile

120.90 lbs. - 6th, 8th, 1-day 1.34, 1-days 1.35
SG-167
Qm

Site No.  

Material: Sand and Gravel
County: Billie

Location: Sec. 27 T. 158 R. 19W
Owner: Clarence Dinkel

McCracken, Kansas

Return of Deposit: Accessible

Status of Site: Prospective site; sampled

EXPLORATION DATA

<table>
<thead>
<tr>
<th>Date</th>
<th>Material Name</th>
<th>Depth of Hole</th>
<th>Gravel of Material</th>
<th>Permeability</th>
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<tbody>
<tr>
<td>Test Date</td>
<td>SHC 5&quot; 3258</td>
<td>3585 897 47</td>
<td>3.83</td>
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</table>

Date Tested: 5-62

DECONCEAL DATA

Geological Age: Pleistocene
Geological Source: Meade Formation
Material Similar To: Material reported on SHC Lab. Sheet No. 24250

Specific Gravity (sett.): 2.62 (Dry)
Grading "p": 32.2

Los Angeles Number: 114.16 lbs.

Absorption: 0.98

Remarks: 1-day 1.32, 3-days 1.42

Scale: 1" = ¼ Mile
SG-168

Site No.: 15m
Date: April 1963

Material: Sand and Gravel
County: Ellis

Location: NE 1/4 NE 1/4 Sec. 14, T. 11S., R. 18W
Owner: Nellie G. Devine
Status of Site: Prospective site; sampled

Exploration Data

<table>
<thead>
<tr>
<th>Task Date</th>
<th>Material</th>
<th>Depth of Probe</th>
<th>Weight of Material</th>
<th>Percent Retained</th>
<th>G.F.</th>
<th>L.L.</th>
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<td>7 28 98</td>
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Correlation Data

Geological Age: Pleistocene
Geological Source: Nessie Formation
Material Similar To: Material reported in USGS Ellis Co.
Report Site No. No.
Specific Gravity (Sp. Gr.)
Los Angeles Abrasion
Sedimentation
Wt. Cft.
Note: Estimated quantity 1,000 cu. yds.
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-169

Qm

Date: April 1963

Material: Sand and Gravel

County: Ellis

Location: N4 SE4, 26, T., 15S, R., 19E

Owner: Paul Werth McCracken, Kansas

Nature of Deposit: Dry

Accessibility: Good

Description of Site: Prospective site; sampled

EXEMPLARY DATA

<table>
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<th>Test</th>
<th>Soil #</th>
<th>Particle Size</th>
<th>Color</th>
<th>Plastic Limit</th>
<th>Liquid Limit</th>
<th>Plastic Index</th>
<th>Index Density</th>
<th>K.P.</th>
<th>L.L.</th>
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</table>

CANCELLATION DATA

Geological Age: Pleistocene

Geological Source: Meade Formation

Material Similar: Material reported on SHC Lab. Sheet No. 169358

Specific Gravity (Dry): 2.60

Los Angeles Abrasion: Grading "D" 38.5

Observation: Bond Test 0.94

Net Lo.of Grav. = 114.39 lbs.

Remarks:

Scale: 1" = 1/4 Mile
MATERIAL SURVEY REPORT

SG+170  Qm
Site No.  Date  April 1963
Location  SW 1/4  15  Twp.  11S  Range  16W
Description  Due 2 Ft. Morgan, Colorado
Owner  S. J. Peavy
Material  Sand and Gravel  County  Ellis
Status of Site  Prospective site; sampled

EXPLANATION DATA

Material  Material similar to SHC
Noted  2 5 12 2545  7491  95 3.49
Stress Test  300  600  900
Form. Relation

Date Tested: 4-62

Geological Age  Pleistocene
Geological Source  Moade Formation
Material reported on SHC Lab. Sheet No. 21970

Specific Gravity (Test.)  2.60
Los Angeles Wear  32.8
Absorption  0.93
Unit Weight  189.92 lbs.
Moist. Unit  1-day 1.02, 3-days 1.24

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

MATERIAL SURVEY REPORT

LG-171
Pr

Site No.  Data April 1963

Material Limestone Gravel
County Ellis

SE#  Sec. 10  Twp. 13S  Range 20W

Owner Hilarius F. Dinkel  R.R., Ellis, Kansas

Nature of Source DRY

Status of Site Prospective site sampled

EXPLORATION DATA

<table>
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CONSIDERATION DATA

Date Tested: 1-46

Geological Age Pleistocene-Racont

Geological Source Undifferentiated

Material Deposited in USGS Ellis County Site No. Ma7

Density (g/cm³) 2.5 (dry)

Los Angeles Wear 46

Abrasion 109 lbs.

Estimated quantity 6,000 cu. yds.
ELLIS COUNTY MATERIALS MAP

LEGEND

EXPLANATION OF MATERIALS SITE DESIGNATIONS

- Open site: not sampled (See Appendix I)
- Prospective Site: not sampled (See Appendix II)
- Open Site: sampled (See Appendix III)
- Prospective Site: sampled (See Appendix IV)

Material Type

- SG Sand & Gravel
- FS Fine Sand
- VA Volcanic Ash
- MF Mineral Filler
- LS Limestone
- LG Limestone Gravel
- MB Mortar Bed

Estimated Quantity
+ indicates more than 20,000 cubic yards
- indicates less than 20,000 cubic yards

Site Data Form Number

Geologic Age and Unit

EXPLANATION OF MAP SYMBOLS

- Qal Alluvium
- Qm Meade Formation
- Os Sanborn Formation
- Pr Pleistocene-Recent Undifferentiated
- Knf Fort Hays Limestone Member
- To Exposed Ogallala Formation (Mortar Bed)
- areal extent of buried Ogallala Formation

Scale:

preparing by the

STATE HIGHWAY COMMISSION OF KANSAS
in cooperation with the

U.S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
ELLIS COUNTY MATERIALS MAP

LEGEND

EXPLANATION OF MATERIALS SITE DESIGNATIONS

• Open site; not sampled (See Appendix I)

■ Prospective Site; not sampled (See Appendix II)

○ Open Site; sampled (See Appendix III)

▲ Prospective Site; sampled (See Appendix IV)

Material Type

SG Sand & Gravel

PS Fine Sand

VA Volcanic Ash

MF Mineral Filler

LS Limestone

LG Limestone Gravel

MB Mortar Bed

Estimated Quantity

+ indicates more than 20,000 cubic yards

− indicates less than 20,000 cubic yards

Site Data Form Number

Geologic Age and Unit

EXPLANATION OF MAP SYMBOLS

Qal Alluvium

Pr Pleistocene-Recent

Undifferentiated

Qh Neade Formation

Knf Port Hays Limestone

Member

Qs Sanborn Formation

Exposed Ogallala Formation (Mortar Bed)

areal extent of buried Ogallala Formation

Scale:

prepared by the

STATE HIGHWAY COMMISSION OF KANSAS

in cooperation with the

U. S. DEPARTMENT OF COMMERCE

BUREAU OF PUBLIC ROADS
ELLIS COUNTY MATERIALS MAP

LEGEND

EXPLANATION OF MATERIALS SITE DESIGNATIONS

- Open site; not sampled (See Appendix I)
- Prospective Site; not sampled (See Appendix II)
- Open Site; sampled (See Appendix III)
- Prospective Site; sampled (See Appendix IV)

Material Type

- SG Sand & Gravel
- PS Pine Sand
- VA Volcanic Ash
- MF Mineral Filler
- LS Limestone
- LG Limestone Gravel
- MB Mortar Bed

Estimated Quantity

+ indicates more than 20,000 cubic yards
- indicates less than 20,000 cubic yards

Site Data Form Number

Geologic Age and Unit

EXPLANATION OF MAP SYMBOLS

- Qal Alluvium
- Qm Meade Formation
- Qs Sanborn Formation
- Pr Pleistocene-Recent
- Knf Port Hays Limestone Member

Exposed Ogallala Formation (Mortar Bed)
areal extent of burial Ogallala Formation

Scale:

0 1 2 3 4 Miles

prepared by the
STATE HIGHWAY COMMISSION OF KANSAS
in cooperation with the
U. S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
ELLIS COUNTY MATERIALS MAP

LEGEND

EXPLANATION OF MATERIALS SITE DESIGNATIONS
- Open site; not sampled (See Appendix I)
- Prospective Site; not sampled (See Appendix II)
- Open Site; sampled (See Appendix III)
- Prospective Site; sampled (See Appendix IV)

Material Type
- SG Sand & Gravel
- FS Fine Sand
- VA Volcanic Ash
- MP Mineral Filler
- LS Limestone
- LG Limestone Gravel
- MB Mortar Bed

Estimated Quantity
- FS+13 + indicates more than 20,000 cubic yards
- Qm - indicates less than 20,000 cubic yards

Site Data Form Number

Geologic Age and Unit

EXPLANATION OF MAP SYMBOLS
- Qal Alluvium
- Qm Meade Formation
- Qs Sanborn Formation
- Pr Pleistocene-Recent
- Undifferentiated
- Knf Fort Hays Limestone
- Member
- To Exposed Ogallala
- Formation (Mortar Bed)
- area extent of
- buried Ogallala
- Formation

Scale: 0 1 2 3 4 Miles

pre pared by the
STATE HIGHWAY COMMISSION OF KANSAS
in cooperation with the
U. S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
ELLIS COUNTY MATERIALS MAP

LEGEND

EXPLANATION OF MATERIALS SITE DESIGNATIONS

- Open Site; not sampled (See Appendix I)
- Prospective Site; not sampled (See Appendix II)
- Open Site; sampled (See Appendix III)
- Prospective Site; sampled (See Appendix IV)

Material Type:
- SG Sand & Gravel
- FS Fine Sand
- VA Volcanic Ash
- MF Mineral Filler
- LS Limestone
- LG Limestone Gravel
- MB Mortar Bed

Estimated Quantity:
+ indicates more than 20,000 cubic yards
- indicates less than 20,000 cubic yards

Site Data Form Number

Geologic Age and Unit

EXPLANATION OF MAP SYMBOLS

Qa1 Alluvium
Qm Meade Formation
Qs Sanborn Formation

Pr Pleistocene-Recent
Undifferentiated
Knf Fort Hays Limestone
Member
Exposed Ogallala
Formation (Mortar Bed)
areal extent of
buried Ogallala
Formation

Scale: 1 0 1 2 3 4 Miles

pre pared by the

STATE HIGHWAY COMMISSION OF KANSAS
in cooperation with the
U. S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS