

Table H. - Engineering Index Properties

James City and York Counties and the City of Williamsburg, Virginia

Absence of an entry indicates that the data were not estimated.

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|-----------------------------|-------|---|----------------------------|-------------------|---------------|----------------|------------------------------|--------|--------|-------|-----------------|---------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 1: | | | | | | | | | | | | |
| Altavista | 0-13 | Sandy Loam Fine Sandy Loam Loam | CL-ML ML SC SC-SM | A-4 | 0 | 0 | 95-100 | 93-100 | 55-95 | 27-75 | 16-29 | 2-9 |
| | 13-53 | Loam Sandy Clay Loam Clay Loam | CL CL-ML SC SC-SM | A-4 A-6 | 0 | 0 | 98-100 | 93-100 | 74-100 | 32-80 | 23-38 | 6-14 |
| | 53-65 | Sand Sandy Loam Fine Sandy Loam Loamy Sand | CL-ML SC-SM | A-4 | 0 | 0 | 93-100 | 78-100 | 38-85 | 4-55 | 9-25 | NP-7 |
| Augusta | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Dragston | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Seabrook | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 2: | | | | | | | | | | | | |
| Augusta | 0-17 | Loam Fine Sandy Loam Sandy Loam | ML SC-SM SM | A-2 A-4 | 0 | 0 | 90-100 | 85-100 | 51-95 | 26-75 | 12-29 | NP-9 |
| | 17-56 | Clay Loam Sandy Clay Loam Loam | CL CL-ML SC | A-2 A-4 A-6 | 0 | 0 | 95-100 | 93-100 | 74-100 | 32-80 | 25-38 | 7-14 |
| | 56-70 | Loamy Sand Loam Sandy Clay Loam Sandy Loam | CL CL-ML SC | A-2 A-4 A-6 | 0 | 0 | 80-100 | 78-100 | 40-90 | 11-55 | 12-34 | NP-12 |

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index | |
|--------------------------|-------|---|----------------------------|--------|------------|-------------|------------------------------|-----|--------|-------|--------------|------------------|-----|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | | |
| | | | | Pct | Pct | | | | | Pct | | | |
| 2: | In | | | | Pct | Pct | | | | | Pct | | |
| Altavista | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Dragston | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Munden | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Nimmo | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Seabrook | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Tomotley | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3: | | | | | | | | | | | | | |
| Axis | 0-14 | Sandy Loam Mucky Very Fine Sandy Loam Very Fine Sandy Loam Silt Loam | CL-ML ML SC-SM SM | A-4 | 0 | 0 | 100 | 100 | 60-100 | 30-90 | 14-25 | 1-7 | |
| | 14-70 | Loam Sandy Loam Very Fine Sandy Loam Fine Sandy Loam | CL-ML SC-SM | A-4 | 0 | 0 | 100 | 100 | 60-95 | 30-75 | 14-20 | 1-4 | |
| Bohicket | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Johnston | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Levy | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Beaches | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- | --- |

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|--------------------------|-------|--|----------------------|------------|------------|-------------|------------------------------|--------|--------|-------|--------------|------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 4: | | | | | | | | | | | | |
| Beaches | 0-60 | Fine Sand Sand Coarse Sand | SP | A-1 A-3 | 0 | 0 | 80-100 | 78-100 | 39-80 | 4-35 | 7-9 | NP |
| Axis | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Bohicket | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 5: | | | | | | | | | | | | |
| Bethera | 0-7 | Fine Sandy Loam Loam Silt Loam | ML | A-4 | 0 | 0 | 98-100 | 95-100 | 70-100 | 40-90 | 16-25 | 2-7 |
| | 7-65 | Silty Clay Silty Clay Loam Sandy Clay Clay Loam Clay | CH CL MH ML | A-6 A-7 | 0 | 0 | 100 | 98-100 | 83-100 | 44-95 | 34-52 | 12-22 |
| Izagora | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Slagle | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Yemassee | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 6: | | | | | | | | | | | | |
| Bohicket | 0-6 | Muck | PT | A-8 | --- | 0 | --- | --- | --- | --- | 7 | NP |
| | 6-80 | Silty Clay Sandy Clay Clay | CH MH ML | A-7 | 0 | 0 | 100 | 98-100 | 83-100 | 44-95 | 38-61 | 14-27 |
| Axis | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|-----------------------------|-------|---|----------------------------|-------------------|---------------|----------------|------------------------------|--------|-------|-------|-----------------|---------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | In | | | | Pct | Pct | | | | | Pct | |
| 6: Johnston | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Levy | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 7: Bojac | 0-18 | Sandy Loam Fine Sandy Loam Loam | CL-ML ML SC-SM SM | A-2 A-4 | 0 | 0 | 95-100 | 93-100 | 55-95 | 27-75 | 12-23 | NP-6 |
| | 18-53 | Sandy Loam Loam Fine Sandy Loam | ML SM | A-2 A-4 | 0 | 0 | 95-100 | 93-100 | 55-85 | 27-55 | 12-25 | NP-7 |
| | 53-71 | Coarse Sand Sand Fine Sand Loamy Sand Loamy Fine Sand | SM SP SW-SM | A-1 A-2 A-3 | 0 | 0 | 95-100 | 93-100 | 46-85 | 4-45 | 8-14 | NP-1 |
| Altavista | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Dragston | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Munden | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Seabrook | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |

8B:

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|--------------------------|-------|--|-------------------------------|-------------------|------------|-------------|------------------------------|--------|--------|-------|--------------|------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 8B: | | | | | | | | | | | | |
| Caroline | 0-13 | Loam Fine Sandy Loam Sandy Loam | CL CL-ML | A-4 | 0 | 0 | 90-100 | 85-100 | 85-100 | 50-90 | 20-30 | 4-10 |
| | 13-47 | Sandy Clay Loam Sandy Clay Clay Loam Clay | CH CL | A-7 | 0 | 0 | 90-100 | 85-100 | 80-100 | 35-95 | 25-61 | 7-27 |
| | 47-72 | Sandy Clay Fine Sandy Loam Clay Clay Loam | CH CL ML SC SC-SM | A-4 A-6 A-7 | 0 | 0 | 90-100 | 85-100 | 60-100 | 30-95 | 20-61 | 4-27 |
| Emporia | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Sagle | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Uchee | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 9: | | | | | | | | | | | | |
| Chickahominy | 0-7 | Loam Silt Loam | CL-ML ML | A-4 | 0 | 0 | 99-100 | 98-100 | 83-100 | 58-90 | 16-30 | 2-10 |
| | 7-85 | Silty Clay Loam Clay Loam Silty Clay Clay | CH CL ML | A-6 A-7 | 0 | 0 | 99-100 | 98-100 | 88-100 | 67-95 | 31-61 | 10-27 |
| Augusta | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Dogue | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Newflat | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|--------------------------|-------|---|----------------------|-------------------|------------|-------------|------------------------------|--------|--------|-------|--------------|------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 9: | | | | | | | | | | | | |
| Peawick | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Tetotum | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 10B: | | | | | | | | | | | | |
| Craven | 0-9 | Loam Silt Loam Fine Sandy Loam | CL ML SC SM | A-4 | 0 | 0 | 100 | 98-100 | 58-100 | 29-90 | 13-31 | NP-10 |
| | 9-53 | Sandy Clay Sandy Clay Loam Clay Loam Silty Clay Loam Silty Clay Clay | CH CL | A-7 | 0 | 0 | 100 | 98-100 | 83-100 | 44-95 | 34-61 | 12-27 |
| | 53-80 | Loamy Sand Sandy Loam Sandy Clay Loam | SC SC-SM SM | A-2 A-4 A-6 | 0 | 0 | 100 | 98-100 | 49-100 | 14-55 | 12-38 | NP-14 |
| Caroline | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Emporia | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Kempsville | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Slagle | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Uchee | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |

10C:

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|-----------------------------|-------|---|----------------------|-------------------|---------------|----------------|------------------------------|--------|--------|-------|-----------------|---------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 10C: Craven | 0-9 | Loam Silt Loam Fine Sandy Loam | CL ML SC SM | A-4 | 0 | 0 | 100 | 98-100 | 58-100 | 29-90 | 13-31 | NP-10 |
| | 9-53 | Silty Clay Loam Sandy Clay Loam Sandy Clay Clay Loam Silty Clay Clay | CH CL | A-7 | 0 | 0 | 100 | 98-100 | 83-100 | 44-95 | 34-61 | 12-27 |
| | 53-80 | Loamy Sand Sandy Loam Sandy Clay Loam | SC SC-SM SM | A-2 A-4 A-6 | 0 | 0 | 100 | 98-100 | 49-100 | 14-55 | 12-38 | NP-14 |
| Caroline | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Emporia | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Kempsville | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Slagle | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Uchee | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |

11B:

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|-----------------------------|-------|---|----------------------|---------------------|---------------|----------------|------------------------------|--------|--------|-------|-----------------|---------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 11B: Craven | 0-9 | Loam Silt Loam Fine Sandy Loam | CL ML SC SM | A-4 | 0 | 0 | 100 | 98-100 | 58-100 | 29-90 | 13-31 | NP-10 |
| | 9-53 | Sandy Clay Clay Loam Sandy Clay Loam Silty Clay Loam Clay Silty Clay | CH CL | A-7 | 0 | 0 | 100 | 98-100 | 83-100 | 44-95 | 34-61 | 12-27 |
| | 53-80 | Loamy Sand Sandy Loam Sandy Clay Loam | SC SC-SM SM | A-2 A-4 A-6 | 0 | 0 | 100 | 98-100 | 49-100 | 14-55 | 12-38 | NP-14 |
| Uchee | 0-24 | Loamy Sand Sand Loamy Fine Sand | SM | A-1-b A-2 | 0 | 0 | 80-100 | 78-100 | 40-70 | 15-30 | 10-16 | NP-2 |
| | 24-56 | Sandy Clay Clay Sandy Clay Loam Sandy Loam | SC SC-SM | A-2 A-4 A-6 | 0 | 0 | 80-100 | 78-100 | 46-100 | 23-95 | 14-52 | 1-22 |
| | 56-65 | Sandy Clay Sandy Clay Loam Sandy Loam | CL SC | A-2-6 A-6 A-7 | 0 | 0 | 80-100 | 78-100 | 46-95 | 23-60 | 18-43 | 3-17 |
| Caroline | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Emporia | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Kempsville | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Kenansville | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|-----------------------------|-------|---|----------------------|---------------------|---------------|----------------|------------------------------|--------|--------|-------|-----------------|---------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 11B: | | | | | | | | | | | | |
| Slagle | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 11C: | | | | | | | | | | | | |
| Craven | 0-9 | Silt Loam Fine Sandy Loam Loam | CL ML SC SM | A-4 | 0 | 0 | 100 | 98-100 | 58-100 | 29-90 | 13-31 | NP-10 |
| | 9-53 | Sandy Clay Sandy Clay Loam Clay Loam Silty Clay Loam Silty Clay Clay | CH CL | A-7 | 0 | 0 | 100 | 98-100 | 83-100 | 44-95 | 34-61 | 12-27 |
| | 53-80 | Loamy Sand Sandy Loam Sandy Clay Loam | SC SC-SM SM | A-2 A-4 A-6 | 0 | 0 | 100 | 98-100 | 49-100 | 14-55 | 12-38 | NP-14 |
| Uchee | 0-24 | Loamy Sand Sand Loamy Fine Sand | SM | A-1-b A-2 | 0 | 0 | 80-100 | 78-100 | 40-70 | 15-30 | 10-16 | NP-2 |
| | 24-56 | Sandy Clay Clay Sandy Clay Loam Sandy Loam | SC SC-SM | A-2 A-4 A-6 | 0 | 0 | 80-100 | 78-100 | 46-100 | 23-95 | 14-52 | 1-22 |
| | 56-65 | Sandy Clay Sandy Clay Loam Sandy Loam | CL SC | A-2-6 A-6 A-7 | 0 | 0 | 80-100 | 78-100 | 46-95 | 23-60 | 18-43 | 3-17 |
| Caroline | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Slagle | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|-----------------------------|-------|--|-------------------------|-------------------|---------------|----------------|------------------------------|--------|--------|-------|-----------------|---------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 11C: | | | | | | | | | | | | |
| Emporia | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Kempsville | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 12: | | | | | | | | | | | | |
| Dogue | 0-11 | Silt Loam Loam | SC SC-SM | A-4 | 0 | 0 | 85-100 | 80-100 | 56-100 | 32-90 | 16-30 | 2-10 |
| | 11-52 | Fine Sandy Loam Clay Loam Sandy Clay Clay | SM CH CL ML | A-6 A-7 | 0 | 0 | 85-100 | 80-100 | 64-100 | 28-95 | 34-61 | 12-27 |
| | 52-60 | Sandy Clay Loam Sand Sandy Clay Loam Sandy Loam Loam | SC CL CL-ML SC | A-2 A-4 A-6 | 0 | 0 | 85-100 | 80-100 | 40-90 | 4-55 | 12-34 | NP-12 |
| Altavista | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Chickahominy | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Newflat | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Pamunkey | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Peawick | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |

13:

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|--------------------------|-------|---|----------------------|--------------------------|------------|-------------|------------------------------|--------|-------|-------|--------------|------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | In | | | | Pct | Pct | | | | | Pct | |
| 13: Dragston | 0-17 | Loamy Fine Sand Fine Sandy Loam | CL-ML SC-SM SM | A-2 A-4 | 0 | 0 | 100 | 98-100 | 68-85 | 27-55 | 11-25 | NP-7 |
| | 17-42 | Loam Sandy Loam Fine Sandy Loam | CL-ML SC-SM SM | A-4 | 0 | 0 | 100 | 98-100 | 68-85 | 39-55 | 16-25 | 2-7 |
| | 42-72 | Fine Sandy Loam Loamy Sand Loamy Fine Sand Sand Sandy Loam Fine Sand | SC-SM SM SP-SM | A-1 A-2 A-3 A-4 | 0 | 0 | 90-100 | 85-100 | 42-85 | 4-55 | 9-25 | NP-7 |
| Altavista | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Augusta | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Nimmo | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Seabrook | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Tomotley | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |

14B:

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|--------------------------|-------|-----------------|----------------|--------|------------|-------------|------------------------------|--------|--------|-------|--------------|------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 14B: | | | | | | | | | | | | |
| Emporia | 0-13 | Sandy Loam | ML | A-4 | 0 | 0-5 | 95-100 | 93-100 | 55-95 | 27-75 | 13-23 | NP-6 |
| | | Loam | SM | | | | | | | | | |
| | | Fine Sandy Loam | | | | | | | | | | |
| | 13-58 | Loam | CL | A-4 | 0 | 0-3 | 95-100 | 93-100 | 55-100 | 27-80 | 23-38 | 6-14 |
| | | Fine Sandy Loam | SC | A-6 | | | | | | | | |
| | | Clay Loam | | | | | | | | | | |
| | | Sandy Loam | | | | | | | | | | |
| | | Sandy Clay Loam | | | | | | | | | | |
| | 58-75 | Sandy Loam | CL | A-4 | 0 | 0-8 | 95-100 | 93-100 | 55-100 | 27-80 | 23-38 | 6-14 |
| | | Loam | CL-ML | A-6 | | | | | | | | |
| | | Sandy Clay Loam | SC | | | | | | | | | |
| | | Clay Loam | SC-SM | | | | | | | | | |
| Caroline | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Izagora | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Kempsville | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Kenansville | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Suffolk | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Uchee | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |

14C:

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|--------------------------|-------|-----------------|----------------|--------|------------|-------------|------------------------------|--------|--------|-------|--------------|------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 14C: | | | | | | | | | | | | |
| Emporia | 0-13 | Fine Sandy Loam | ML | A-4 | 0 | 0-5 | 95-100 | 93-100 | 55-95 | 27-75 | 13-23 | NP-6 |
| | | Loam | SM | | | | | | | | | |
| | 13-58 | Sandy Loam | | | | | | | | | | |
| | | Loam | CL | A-4 | 0 | 0-3 | 95-100 | 93-100 | 55-100 | 27-80 | 23-38 | 6-14 |
| | | Fine Sandy Loam | SC | A-6 | | | | | | | | |
| | | Clay Loam | | | | | | | | | | |
| | | Sandy Loam | | | | | | | | | | |
| | | Sandy Clay Loam | | | | | | | | | | |
| | 58-75 | Loam | CL | A-4 | 0 | 0-8 | 95-100 | 93-100 | 55-100 | 27-80 | 23-38 | 6-14 |
| | | Sandy Loam | CL-ML | A-6 | | | | | | | | |
| | | Clay Loam | SC | | | | | | | | | |
| | | Sandy Clay Loam | SC-SM | | | | | | | | | |
| Caroline | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Kempsville | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Kenansville | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Slagle | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Uchee | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 15D: | | | | | | | | | | | | |

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|-----------------------------|-------|-----------------|----------------|--------|---------------|----------------|------------------------------|--------|--------|-------|-----------------|---------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 15D: | | | | | | | | | | | | |
| Emporia | 0-13 | Loam | ML | A-4 | 0 | 0-5 | 95-100 | 93-100 | 55-95 | 27-75 | 13-23 | NP-6 |
| | | Sandy Loam | SM | | | | | | | | | |
| | | Fine Sandy Loam | | | | | | | | | | |
| | 13-58 | Loam | CL | A-4 | 0 | 0-3 | 95-100 | 93-100 | 55-100 | 27-80 | 23-38 | 6-14 |
| | | Fine Sandy Loam | SC | A-6 | | | | | | | | |
| | | Clay Loam | | | | | | | | | | |
| | | Sandy Loam | | | | | | | | | | |
| | | Sandy Clay Loam | | | | | | | | | | |
| | 58-75 | Sandy Loam | CL | A-4 | 0 | 0-8 | 95-100 | 93-100 | 55-100 | 27-80 | 23-38 | 6-14 |
| | | Loam | CL-ML | A-6 | | | | | | | | |
| | | Sandy Clay Loam | SC | | | | | | | | | |
| | | Clay Loam | SC-SM | | | | | | | | | |
| Caroline | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Craven | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Johnston | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Slagle | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Uchee | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 15E: | | | | | | | | | | | | |

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|--------------------------|-------|---|----------------------------|------------|------------|-------------|------------------------------|--------|--------|-------|--------------|------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 15E: | | | | | | | | | | | | |
| Emporia | 0-13 | Fine Sandy Loam Loam | ML SM | A-4 | 0 | 0-5 | 95-100 | 93-100 | 55-95 | 27-75 | 13-23 | NP-6 |
| | 13-58 | Sandy Loam Loam Fine Sandy Loam Clay Loam Sandy Loam Sandy Clay Loam | CL SC | A-4 A-6 | 0 | 0-3 | 95-100 | 93-100 | 55-100 | 27-80 | 23-38 | 6-14 |
| | 58-75 | Sandy Loam Loam Sandy Clay Loam Clay Loam | CL CL-ML SC SC-SM | A-4 A-6 | 0 | 0-8 | 95-100 | 93-100 | 55-100 | 27-80 | 23-38 | 6-14 |
| Slagle | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Johnston | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 15F: | | | | | | | | | | | | |
| Emporia | 0-13 | Loam Sandy Loam Fine Sandy Loam | ML SM | A-4 | 0 | 0-5 | 95-100 | 93-100 | 55-95 | 27-75 | 13-23 | NP-6 |
| | 13-58 | Sandy Loam Sandy Clay Loam Loam Fine Sandy Loam Clay Loam | CL SC | A-4 A-6 | 0 | 0-3 | 95-100 | 93-100 | 55-100 | 27-80 | 23-38 | 6-14 |
| | 58-75 | Sandy Loam Loam Sandy Clay Loam Clay Loam | CL CL-ML SC SC-SM | A-4 A-6 | 0 | 0-8 | 95-100 | 93-100 | 55-100 | 27-80 | 23-38 | 6-14 |
| Slagle | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|--------------------------|-------|-----------------|----------------|--------|------------|-------------|------------------------------|-----|--------|-------|--------------|------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 15F: | | | | | | | | | | | | |
| Johnston | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 16: | | | | | | | | | | | | |
| Izagora | 0-13 | Loam | ML | A-4 | 0 | 0-3 | 100 | 100 | 70-95 | 40-75 | 12-25 | NP-7 |
| | | Fine Sandy Loam | SM | | | | | | | | | |
| | 13-78 | Loam | CL | A-4 | 0 | 0-2 | 100 | 100 | 90-100 | 70-95 | 18-38 | 3-14 |
| | | Clay | CL-ML | A-6 | | | | | | | | |
| | | Clay Loam | SC-SM | | | | | | | | | |
| Emporia | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Slagle | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Yemassee | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Bethera | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 17: | | | | | | | | | | | | |
| Johnston | 0-34 | Fine Sandy Loam | CL-ML | A-4 | 0 | 0 | 100 | 100 | 70-100 | 40-95 | 13-38 | NP-14 |
| | | Loam | ML | A-6 | | | | | | | | |
| | | Silt Loam | OL | | | | | | | | | |
| | | Silty Clay Loam | | | | | | | | | | |
| | 34-60 | Sand | SC | A-2 | 0 | 0 | 100 | 100 | 50-90 | 5-55 | 7-34 | NP-12 |
| | | Fine Sandy Loam | SM | A-4 | | | | | | | | |
| | | Sandy Clay Loam | | | | | | | | | | |
| | | Sandy Loam | | | | | | | | | | |
| Axis | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Bohicket | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|-----------------------------|-------|--|-------------------------------|------------|---------------|----------------|------------------------------|--------|-------|-------|-----------------|---------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | In | | | | Pct | Pct | | | | | Pct | |
| 17: | | | | | | | | | | | | |
| Levy | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Nimmo | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Tomotley | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 18B: | | | | | | | | | | | | |
| Kempsville | 0-14 | Sandy Loam Fine Sandy Loam | CL-ML ML SC-SM SM | A-2 A-4 | 0 | 0-3 | 90-100 | 85-100 | 51-85 | 26-55 | 12-20 | NP-4 |
| | 14-55 | Sandy Clay Loam Loam Fine Sandy Loam Sandy Loam | CL ML SC SC-SM SM | A-2 A-4 | 0 | 0-3 | 90-100 | 85-100 | 51-90 | 26-55 | 18-38 | 3-14 |
| | 55-68 | Sandy Clay Loam Fine Sand Sandy Loam Fine Sandy Loam Loamy Fine Sand Loamy Sand | ML SM | A-2 | 0 | 0-8 | 85-100 | 80-100 | 40-95 | 12-60 | 9-25 | NP-7 |
| Emporia | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Kenansville | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Slagle | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Suffolk | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |

19B:

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|--------------------------|-------|--|----------------------------|------------|------------|-------------|------------------------------|--------|--------|-------|--------------|------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 19B: Kempsville | 0-14 | Sandy Loam Fine Sandy Loam | CL-ML ML SC-SM | A-2 A-4 | 0 | 0-3 | 90-100 | 85-100 | 51-85 | 26-55 | 12-20 | NP-4 |
| | 14-55 | Sandy Clay Loam Loam Fine Sandy Loam Sandy Loam | CL ML SC SC-SM | A-2 A-4 | 0 | 0-3 | 90-100 | 85-100 | 51-90 | 26-55 | 18-38 | 3-14 |
| | 55-68 | Sandy Clay Loam Sandy Loam Fine Sandy Loam Loamy Fine Sand Loamy Sand Fine Sand | ML SM | A-2 | 0 | 0-8 | 85-100 | 80-100 | 40-95 | 12-60 | 9-25 | NP-7 |
| Emporia | 0-13 | Fine Sandy Loam Loam Sandy Loam | ML SM | A-4 | 0 | 0-5 | 95-100 | 93-100 | 55-95 | 27-75 | 13-23 | NP-6 |
| | 13-58 | Loam Fine Sandy Loam Sandy Loam Sandy Clay Loam Clay Loam | CL SC | A-4 A-6 | 0 | 0-3 | 95-100 | 93-100 | 55-100 | 27-80 | 23-38 | 6-14 |
| | 58-75 | Clay Loam Sandy Clay Loam Loam Sandy Loam | CL CL-ML SC SC-SM | A-4 A-6 | 0 | 0-8 | 95-100 | 93-100 | 55-100 | 27-80 | 23-38 | 6-14 |
| Caroline | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Kenansville | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|--------------------------|-------|-----------------|----------------|--------|------------|-------------|------------------------------|-----|-------|-------|--------------|------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 19B: | | | | | | | | | | | | |
| Slagle | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Suffolk | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Uchee | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 20B: | | | | | | | | | | | | |
| Kenansville | 0-25 | Fine Sand | SM | A-2 | 0 | 0 | 100 | 100 | 50-85 | 15-45 | 10-16 | NP-2 |
| | | Loamy Fine Sand | | | | | | | | | | |
| | | Loamy Sand | | | | | | | | | | |
| | 25-43 | Sandy Loam | SC | A-4 | 0 | 0 | 100 | 100 | 60-90 | 30-55 | 12-38 | NP-14 |
| | | Sandy Clay Loam | SC-SM | | | | | | | | | |
| | | Fine Sandy Loam | SM | | | | | | | | | |
| | 43-78 | Loamy Sand | SM | A-2 | 0 | 0 | 100 | 100 | 50-90 | 5-55 | 8-16 | NP-2 |
| | | Fine Sandy Loam | SP-SM | A-3 | | | | | | | | |
| | | Sandy Loam | | | | | | | | | | |
| | | Sandy Clay Loam | | | | | | | | | | |
| | | Sand | | | | | | | | | | |
| Kempsville | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Slagle | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Suffolk | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Uchee | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 21: | | | | | | | | | | | | |

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|-----------------------------|-------|-----------------|----------------|--------|---------------|----------------|------------------------------|--------|--------|-------|-----------------|---------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 21: | | | | | | | | | | | | |
| Levy | 0-18 | Silty Clay | CH | A-6 | 0 | 0 | 100 | 100 | 95-100 | 90-95 | 38-61 | 14-27 |
| | | | CL | A-7 | | | | | | | | |
| | | | ML | | | | | | | | | |
| | 18-80 | Silty Clay Loam | CH | A-6 | 0 | 0 | 100 | 100 | 95-100 | 85-95 | 38-61 | 14-27 |
| | | Clay | CL | A-7 | | | | | | | | |
| | | Silty Clay | ML | | | | | | | | | |
| Axis | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Bohicket | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Johnston | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 22: | | | | | | | | | | | | |
| Munden | 0-11 | Fine Sandy Loam | SC-SM | A-2 | 0 | 0 | 95-100 | 90-100 | 63-85 | 25-55 | 10-20 | NP-4 |
| | | Loamy Fine Sand | SM | A-4 | | | | | | | | |
| | 11-48 | Fine Sandy Loam | SC-SM | A-2 | 0 | 0 | 95-100 | 90-100 | 60-85 | 30-55 | 14-23 | 1-6 |
| | | Loam | SM | A-4 | | | | | | | | |
| | | Sandy Loam | | | | | | | | | | |
| | 48-80 | Sandy Loam | SC-SM | A-2 | 0 | 0 | 95-100 | 90-100 | 45-85 | 14-55 | 9-23 | NP-6 |
| | | Loamy Sand | SM | A-4 | | | | | | | | |
| | | Fine Sandy Loam | | | | | | | | | | |
| Bojac | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Altavista | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Dragston | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |

23:

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|-----------------------------|-------|-----------------|----------------|--------|---------------|----------------|------------------------------|--------|--------|-------|-----------------|---------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 23: | | | | | | | | | | | | |
| Newflat | 0-8 | Loam | CL-ML | A-4 | 0 | 0 | 95-100 | 90-100 | 81-100 | 57-90 | 16-30 | 2-10 |
| | | Silt Loam | ML | | | | | | | | | |
| | 8-80 | Silty Clay Loam | CH | A-7 | 0 | 0 | 95-100 | 90-100 | 81-100 | 63-95 | 34-61 | 12-27 |
| | | Clay | CL | | | | | | | | | |
| | | Silty Clay | ML | | | | | | | | | |
| | | Clay Loam | | | | | | | | | | |
| Chickahominy | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Peawick | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Tetotum | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 24: | | | | | | | | | | | | |
| Nimmo | 0-17 | Loamy Fine Sand | ML | A-4 | 0 | 0 | 100 | 95-100 | 70-85 | 28-55 | 11-20 | NP-4 |
| | | Fine Sandy Loam | SC-SM | | | | | | | | | |
| | | | SM | | | | | | | | | |
| | 17-36 | Sandy Loam | ML | A-2 | 0 | 0 | 100 | 95-100 | 57-85 | 28-55 | 14-23 | 1-6 |
| | | Fine Sandy Loam | SM | A-4 | | | | | | | | |
| | | Loam | | | | | | | | | | |
| | 36-60 | Loamy Fine Sand | SC-SM | A-2 | 0 | 0 | 85-100 | 80-100 | 50-85 | 5-45 | 8-14 | NP-1 |
| | | Sand | SM | A-3 | | | | | | | | |
| | | Fine Sand | SP-SM | A-4 | | | | | | | | |
| | | Loamy Sand | | | | | | | | | | |
| Altavista | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Munden | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Seabrook | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Tomotley | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|--------------------------|-------|---|----------------------|-----------------------------------|------------|-------------|------------------------------|--------|--------|-------|--------------|------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 24: | | | | | | | | | | | | |
| 25B: | | | | | | | | | | | | |
| Norfolk | 0-17 | Sandy Loam Fine Sandy Loam | ML | A-4 | 0 | 0 | 95-100 | 93-100 | 58-85 | 28-55 | 16-23 | 3-7 |
| | 17-72 | Clay Loam Sandy Loam Sandy Clay Loam | CL SC | A-4 A-6 | 0 | 0 | 95-100 | 93-100 | 55-90 | 27-55 | 16-38 | 3-15 |
| Emporia | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Kempsville | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Slagle | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 26B: | | | | | | | | | | | | |
| Pamunkey | 0-14 | Sandy Loam Fine Sandy Loam Silt Loam Loam | ML | A-4 | 0 | 0 | 95-100 | 93-100 | 55-100 | 27-90 | 16-23 | 3-7 |
| | 14-43 | Silty Clay Loam Sandy Loam Sandy Clay Loam Clay Loam Loam | CL SC | A-4 A-6 | 0 | 0-3 | 95-100 | 93-100 | 55-100 | 27-95 | 16-38 | 3-15 |
| | 43-75 | Fine Sandy Loam Loam Sandy Loam Loamy Sand Sand | SC-SM SM SP-SM | A-1 A-2 A-2-4 A-3 A-4 | 0 | 0-8 | 95-100 | 93-100 | 40-85 | 4-55 | 8-25 | NP-8 |
| Altavista | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|-----------------------------|-------|--|----------------|-------------------|---------------|----------------|------------------------------|--------|--------|-------|-----------------|---------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | In | | | | Pct | Pct | | | | | Pct | |
| 26B: | | | | | | | | | | | | |
| Bojac | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Dogue | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Tetotum | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 27: | | | | | | | | | | | | |
| Peawick | 0-2 | Silt Loam | CL-ML | A-4 | 0 | 0 | 99-100 | 98-100 | 88-100 | 68-90 | 16-30 | 2-10 |
| | | | ML | | | | | | | | | |
| | 2-99 | Silty Clay Loam Clay Silty Clay Clay Loam | CH CL ML | A-6 A-7 | 0 | 0 | 99-100 | 98-100 | 88-100 | 68-95 | 38-61 | 14-27 |
| Chickahominy | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Dogue | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Newflat | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Pamunkey | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 28: | | | | | | | | | | | | |
| Seabrook | 0-9 | Loamy Fine Sand | SM | A-2 A-4 | 0 | 0 | 95-100 | 90-100 | 67-85 | 26-45 | 9-13 | NP |
| | 9-72 | Sand Fine Sand Loamy Fine Sand | SM SP-SM | A-2 A-3 A-4 | 0 | 0 | 95-100 | 90-100 | 48-85 | 5-45 | 7-13 | NP |
| Munden | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index | |
|-----------------------------|-------|--|----------------------------------|-------------------|---------------|----------------|------------------------------|--------|--------|-------|-----------------|---------------------|--|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | | |
| | | | | | | Pct | Pct | | | | | Pct | |
| 28: | | | | | | | | | | | | | |
| Nimmo | --- | | | | | --- | --- | --- | --- | --- | --- | --- | |
| Altavista | --- | | | | | --- | --- | --- | --- | --- | --- | --- | |
| Bojac | --- | | | | | --- | --- | --- | --- | --- | --- | --- | |
| Dragston | --- | | | | | --- | --- | --- | --- | --- | --- | --- | |
| Tomotley | --- | | | | | --- | --- | --- | --- | --- | --- | --- | |
| 29A: | | | | | | | | | | | | | |
| Slagle | 0-9 | Loam Sandy Loam Fine Sandy Loam | SC-SM SM | A-2 A-4 | 0 | 0-5 | 95-100 | 90-100 | 54-95 | 27-75 | 14-23 | 1-6 | |
| | 9-25 | Clay Loam Loam Sandy Clay Loam | CL CL-ML ML SC SC-SM | A-4 A-6 | 0 | 0-3 | 95-100 | 90-100 | 72-100 | 32-80 | 18-43 | 3-17 | |
| | 25-60 | Loamy Sand Sandy Loam Sandy Clay Clay Clay Loam Loam Sandy Clay Loam | CL ML SC | A-4 A-6 A-7 | 0 | 0-3 | 95-100 | 90-100 | 45-100 | 14-95 | 10-52 | NP-22 | |
| Bethera | --- | | | | | --- | --- | --- | --- | --- | --- | --- | |
| Emporia | --- | | | | | --- | --- | --- | --- | --- | --- | --- | |
| Izagora | --- | | | | | --- | --- | --- | --- | --- | --- | --- | |

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|-----------------------------|-------|--|----------------------------------|-------------------|---------------|----------------|------------------------------|--------|--------|-------|-----------------|---------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 29A: | | | | | | | | | | | | |
| Kempsville | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Peawick | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Yemassee | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Uchee | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 29B: | | | | | | | | | | | | |
| Slagle | 0-9 | Sandy Loam Fine Sandy Loam Loam | SC-SM SM | A-2 A-4 | 0 | 0-3 | 95-100 | 90-100 | 54-95 | 27-75 | 14-23 | 1-6 |
| | 9-25 | Clay Loam Loam Sandy Clay Loam | CL CL-ML ML SC SC-SM | A-4 A-6 | 0 | 0-3 | 95-100 | 90-100 | 72-100 | 32-80 | 18-43 | 3-17 |
| | 25-60 | Loamy Sand Sandy Loam Sandy Clay Clay Clay Loam Loam Sandy Clay Loam | CL ML SC | A-4 A-6 A-7 | 0 | 0-3 | 95-100 | 90-100 | 45-100 | 14-95 | 10-52 | NP-22 |
| Emporia | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Izagora | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Kempsville | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|-----------------------------|-------|--|----------------------------|--------------------------|---------------|----------------|------------------------------|--------|--------|-------|-----------------|---------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | In | | | | Pct | Pct | | | | | Pct | |
| 29B: | | | | | | | | | | | | |
| Peawick | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Uchee | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 30: | | | | | | | | | | | | |
| State | 0-11 | Fine Sandy Loam Loam | CL-ML ML SC-SM SM | A-4 | 0 | 0 | 95-100 | 95-100 | 66-95 | 38-75 | 14-23 | 1-6 |
| | 11-52 | Sandy Clay Loam Clay Loam Loam Sandy Loam Silt Loam | CL SC | A-4 A-6 | 0 | 0 | 95-100 | 95-100 | 57-100 | 28-90 | 23-38 | 6-14 |
| | 52-97 | Sand Sandy Loam Loamy Sand Fine Sandy Loam Loamy Fine Sand | SC-SM SM SP-SM | A-1 A-2 A-3 A-4 | 0 | 0 | 80-100 | 80-100 | 40-90 | 5-50 | 7-23 | NP-6 |
| Altavista | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Augusta | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Dogue | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Pamunkey | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Tetotum | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |

31B:

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|-----------------------------|-------|---|----------------------|--------------------------|---------------|----------------|------------------------------|--------|-------|-------|-----------------|---------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 31B: Suffolk | 0-14 | Fine Sandy Loam Sandy Loam | CL-ML ML SC-SM | A-2 A-4 | 0 | 0 | 98-100 | 98-100 | 58-85 | 29-55 | 14-23 | 1-6 |
| | 14-40 | Fine Sandy Loam Sandy Loam Sandy Clay Loam | CL SC | A-2 A-4 A-6 | 0 | 0 | 98-100 | 98-100 | 58-90 | 29-55 | 16-38 | 2-14 |
| | 40-64 | Sand Loamy Fine Sand Loamy Sand Sandy Loam Fine Sand Fine Sandy Loam | SC-SM SM SP | A-1 A-2 A-3 A-4 | 0 | 0 | 98-100 | 98-100 | 30-80 | 3-50 | 8-25 | NP-7 |
| Emporia | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Kempsville | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Kenansville | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Slagle | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 32: | | | | | | | | | | | | |

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|-----------------------------|-------|--|----------------------|----------------------------|---------------|----------------|------------------------------|--------|--------|-------|-----------------|---------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 32: Tetotum | 0-10 | Silt Loam Loam Fine Sandy Loam | CL ML SC SM | A-4 | 0 | 0 | 99-100 | 98-100 | 68-100 | 39-90 | 16-27 | 3-9 |
| | 10-51 | Loam Clay Loam Silty Clay Loam Fine Sandy Loam Silt Loam | CL SC | A-6 | 0 | 0-3 | 99-100 | 98-100 | 68-100 | 39-95 | 23-39 | 7-16 |
| | 51-65 | Fine Sandy Loam Clay Loam Loam Sand | CL ML SC SM | A-2 A-2-4 A-4 A-6 | 0 | 0-3 | 99-100 | 98-100 | 40-100 | 4-80 | 8-34 | NP-13 |
| Augusta | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Chickahominy | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Newflat | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Pamunkey | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| State | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |

33:

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|-----------------------------|-------|-----------------|----------------|--------|---------------|----------------|------------------------------|--------|--------|-------|-----------------|---------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 33: Tomotley | 0-8 | Fine Sandy Loam | SC-SM | A-4 | 0 | 0 | 98-100 | 95-100 | 66-95 | 38-75 | 14-25 | 1-7 |
| | 8-50 | Loam | SM | | | | | | | | | |
| | | Clay Loam | CL | A-4 | 0 | 0 | 98-100 | 95-100 | 66-100 | 38-80 | 23-38 | 6-14 |
| | | Sandy Clay Loam | CL-ML | A-6 | | | | | | | | |
| | | Fine Sandy Loam | SC | | | | | | | | | |
| | | Loam | SC-SM | | | | | | | | | |
| | 50-68 | Loam | CL | A-4 | 0 | 0 | 98-100 | 95-100 | 66-95 | 38-75 | 18-38 | 3-14 |
| | | Sandy Clay Loam | CL-ML | A-6 | | | | | | | | |
| | | Fine Sandy Loam | SC | | | | | | | | | |
| | | | SC-SM | | | | | | | | | |
| Altavista | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Augusta | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Dragston | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Munden | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Nimmo | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Seabrook | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Bojac | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |

34B:

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|-----------------------------|-------|-------------------------------|----------------|--------------|---------------|----------------|------------------------------|--------|--------|-------|-----------------|---------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 34B: | | | | | | | | | | | | |
| Uchee | 0-24 | Loamy Sand Sand | SM | A-1-b A-2 | 0 | 0 | 80-100 | 78-100 | 40-70 | 15-30 | 10-16 | NP-2 |
| | 24-56 | Loamy Fine Sand Clay | SC | A-2 | 0 | 0 | 80-100 | 78-100 | 46-100 | 23-95 | 14-52 | 1-22 |
| | | Sandy Clay | SC-SM | A-4 | | | | | | | | |
| | | Sandy Loam | | A-6 | | | | | | | | |
| | | Sandy Clay Loam | | | | | | | | | | |
| | 56-65 | Sandy Clay Loam | CL | A-2-6 | 0 | 0 | 80-100 | 78-100 | 46-95 | 23-60 | 18-43 | 3-17 |
| | | Sandy Loam | SC | A-6 | | | | | | | | |
| | | Sandy Clay | | A-7 | | | | | | | | |
| Emporia | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Kempsville | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Slagle | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Suffolk | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 34C: | | | | | | | | | | | | |
| Uchee | 0-24 | Loamy Sand Sand | SM | A-1-b A-2 | 0 | 0 | 80-100 | 78-100 | 40-70 | 15-30 | 10-16 | NP-2 |
| | 24-56 | Loamy Fine Sand Sandy Clay | SC | A-2 | 0 | 0 | 80-100 | 78-100 | 46-100 | 23-95 | 14-52 | 1-22 |
| | | Clay | SC-SM | A-4 | | | | | | | | |
| | | Sandy Clay Loam | | A-6 | | | | | | | | |
| | | Sandy Loam | | | | | | | | | | |
| | 56-65 | Sandy Loam | CL | A-2-6 | 0 | 0 | 80-100 | 78-100 | 46-95 | 23-60 | 18-43 | 3-17 |
| | | Sandy Clay | SC | A-6 | | | | | | | | |
| | | Sandy Clay Loam | | A-7 | | | | | | | | |
| Emporia | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|-----------------------------|-------|--------------|----------------|--------|---------------|----------------|------------------------------|-----|-----|-----|-----------------|---------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 34C: | | | | | | | | | | | | |
| Kempsville | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Slagle | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Suffolk | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 35: | | | | | | | | | | | | |
| Udorthents | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Pamunkey | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Slagle | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Suffolk | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Uchee | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Bethera | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Caroline | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Emporia | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 36: | | | | | | | | | | | | |
| Udorthents | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Dumps | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Igazora | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|-----------------------------|-------|--------------|----------------|--------|---------------|----------------|------------------------------|-----|-----|-----|-----------------|---------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 36: | | | | | | | | | | | | |
| Slagle | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Suffolk | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Uchee | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Bethera | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Caroline | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Kempsville | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 37: | | | | | | | | | | | | |
| Urban land | >0 | Material | --- | --- | --- | 0 | --- | --- | --- | --- | --- | --- |
| Emporia | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Slagle | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| 38: | | | | | | | | | | | | |

Table H. - Engineering Index Properties - Continued

James City and York Counties and the City of Williamsburg, Virginia

| Map Symbol and Soil Name | Depth | USDA Texture | Classification | | Fragments | | Percent Passing Sieve Number | | | | Liquid Limit | Plasticity Index |
|-----------------------------|-------|--|----------------------------|-------------------|---------------|----------------|------------------------------|-----|--------|-------|-----------------|---------------------|
| | | | Unified | AASHTO | >10 Inches | 3-10 Inches | 4 | 10 | 40 | 200 | | |
| | | In | | | Pct | Pct | | | | | Pct | |
| 38: Yemassee | 0-11 | Fine Sandy Loam Sandy Loam | SM | A-2 A-4 | 0 | 0 | 100 | 100 | 60-85 | 30-55 | 16-25 | 2-7 |
| | 11-51 | Sandy Loam Clay Loam Sandy Clay Loam | CL CL-ML SC | A-2 A-4 A-6 | 0 | 0 | 100 | 100 | 60-100 | 30-80 | 23-38 | 6-14 |
| | 51-63 | Fine Sandy Loam Sandy Clay Loam Sand Loamy Sand Sandy Loam Fine Sand Loamy Fine Sand | CL-ML SC SC-SM SM | A-2 A-4 A-6 | 0 | 0 | 100 | 100 | 50-90 | 5-55 | 8-38 | NP-14 |
| Bethera | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Izagora | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| Slagle | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |
| W: Water | --- | | | | --- | --- | --- | --- | --- | --- | --- | --- |