TABLES

TABLE 1.--TEMPERATURE AND PRECIPITATION

Month	Temperature (degrees fahrenheit)					Precipitation (inches)		
				2 years in 10 will have at least 4 days--			1 year in 10 will have--	
	Average daily[1]	Average daily maximum[2]	Average daily minimum[2]	With max. temp. equal to or higher than--[2]	With min. temp. equal to or less than--[2]	Average monthly total[3]	Less than--	More than--
January	54	80	29	81	28	0.37	0.01	0.77
February	58	84	33	86	32	0.43	0.00	0.69
March	64	91	38	92	36	0.18	0.00	0.64
April	71	99	45	97	44	0.14	0.00	0.61
May	78	105	51	107	52	0.01	0.00	0.01
June	85	113	57	114	57	0.00	0.00	0.00
July	92	114	66	115	69	0.07	0.00	0.07
August	91	112	66	112	68	0.40	0.00	0.32
September	86	110	58	111	60	0.37	0.00	0.82
October	75	101	47	102	50	0.27	0.00	0.48
November	62	89	36	90	41	0.11	0.00	0.45
December	56	81	31	80	32	0.49	0.00	0.78
Year	73	---	---	116	28	2.4	1.0	3.4

[1]Climatological Data, California, Annual Summary, 1974, U.S. Dept. of Commerce.
[2]50-Year Summary, Records of Watermaster, Imperial Irrigation District.
[3]Climatological Data, California, Annual Summary, 1973, U.S. Dept. of Commerce.

TABLE 2.--FREEZE DATES IN SPRING AND FALL[1]

Probability	Temperature	
	32° F or lower	28° F or lower
Last freezing temperature in spring:		
1 year in 10 later than--	February 28	January 25
2 years in 10 later than--	February 18	January 10
5 years in 10 later than--	January 31	---
First freezing temperature in fall:		
1 year in 10 earlier than--	December 5	December 15
2 years in 10 earlier than--	December 10	December 25
5 years in 10 earlier than--	December 25	---

[1]Imperial Valley Weather Summary, 1962-1974, from Records of Watermaster, Imperial Irrigation District.

TABLE 3.--ACREAGE AND PROPORTIONATE EXTENT OF THE SOILS

Map symbol	Soil name	Acres	Percent
100	Antho loamy fine sand	4,134	0.4
101	Antho-Superstition complex	8,416	0.9
102	Badland	4,390	0.4
103	Carsitas gravelly sand, 0 to 5 percent slopes	7,011	0.7
104	Fluvaquents, saline	12,262	1.2
105	Glenbar clay loam	2,951	0.3
106	Glenbar clay loam, wet	4,239	0.4
107	Glenbar complex	12,894	1.3
108	Holtville loam	2,804	0.3
109	Holtville silty clay	3,628	0.4
110	Holtville silty clay, wet	70,547	7.1
111	Holtville-Imperial silty clay loams	2,242	0.2
112	Imperial silty clay	1,405	0.1
113	Imperial silty clay, saline	5,679	0.6
114	Imperial silty clay, wet	123,401	12.5
115	Imperial-Glenbar silty clay loams, wet, 0 to 2 percent slopes	203,659	20.6
116	Imperial-Glenbar silty clay loams, 2 to 5 percent slopes	2,162	0.2
117	Indio loam	9,169	0.9
118	Indio loam, wet	13,625	1.4
119	Indio-Vint complex	29,643	3.0
120	Laveen loam	2,322	0.2
121	Meloland fine sand	10,748	1.1
122	Meloland very fine sandy loam, wet	41,734	4.2
123	Meloland and Holtville loams, wet	11,483	1.2
124	Niland gravelly sand	7,884	0.8
125	Niland gravelly sand, wet	9,820	1.0
126	Niland fine sand	2,846	0.3
127	Niland loamy fine sand	2,088	0.2
128	Niland-Imperial complex, wet	6,974	0.7
129	Pits	1,400	0.1
130	Rositas sand, 0 to 2 percent slopes	22,608	2.3
131	Rositas sand, 2 to 5 percent slopes	1,590	0.2
132	Rositas fine sand, 0 to 2 percent slopes	77,301	7.8
133	Rositas fine sand, 2 to 9 percent slopes	40,748	4.1
134	Rositas fine sand, 9 to 30 percent slopes	19,401	2.0
135	Rositas fine sand, wet, 0 to 2 percent slopes	22,626	2.3
136	Rositas loamy fine sand, 0 to 2 percent slopes	90,896	9.2
137	Rositas silt loam, 0 to 2 percent slopes	3,737	0.4
138	Rositas-Superstition loamy fine sands	11,373	1.2
139	Superstition loamy fine sand	12,887	1.3
140	Torriorthents-Rock outcrop complex, 5 to 60 percent slopes	462	*
141	Torriorthents and Orthids, 5 to 30 percent slopes	900	0.1
142	Vint loamy very fine sand, wet	31,545	3.2
143	Vint fine sandy loam	13,066	1.3
144	Vint and Indio very fine sandy loams, wet	15,462	1.6
	Water	3,288	0.3
	Total	989,450	100.0

* Less than 0.1 percent.

TABLE 4.--YIELDS PER ACRE OF IRRIGATED CROPS

[Yields are those that can be expected under a high level of management. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil]

Soil name and map symbol	Alfalfa hay	Barley	Cantaloupe	Carrots	Cotton lint	Lettuce	Sugar beets
	Ton	Bu	Ton	Ton	Lb	Ton	Ton
105* Glenbar	8.0	83	8	---	1,300	---	24
106 Glenbar	7.0	80	8	16	1,750	---	27
109, 110 Holtville	7	80	7	15	1,200	8	25
114 Imperial	5	75	5	10	1,000	6	23
115 Imperial	6.5	78	5	13	1,375	---	26
117 Indio	9	100	8	20	1,250	---	28
118 Indio	8	100	8	20	1,250	---	28
122 Meloland	7.5	80	7	18	---	9	24
123 Meloland	7	80	8	17	---	9	25
125 Niland	---	80	---	---	1,000	---	---
128 Niland	---	79	---	---	1,000	---	---
135 Rositas	7	60	5	12	1,000	---	---
142 Vint	6.5	95	7	18	1,750	---	25
144 Vint	7	97	7	19	1,530	---	26

* Yields are for areas protected from flooding.

TABLE 5.--BUILDING SITE DEVELOPMENT

[Some terms that describe restrictive soil features are defined in the Glossary. See text for definitions of "slight," "moderate," and "severe." Absence of an entry indicates that the soil was not rated]

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets
100 Antho	Slight	Slight	Slight	Slight	Slight.
101*:					
Antho	Slight	Slight	Slight	Slight	Slight.
Superstition	Severe: cutbanks cave.	Slight	Slight	Slight	Slight.
102*. Badland					
103 Carsitas	Severe: cutbanks cave.	Slight	Slight	Slight	Slight.
104*. Fluvaquents					
105 Glenbar	Moderate: too clayey.	Moderate: shrink-swell, low strength.	Moderate: shrink-swell, low strength.	Moderate: shrink-swell, low strength.	Severe: low strength.
106 Glenbar	Moderate: wetness.	Moderate: shrink-swell, low strength.	Moderate: wetness, shrink-swell, low strength.	Moderate: shrink-swell, low strength.	Severe: low strength.
107* Glenbar	Moderate: too clayey.	Moderate: shrink-swell, low strength.	Moderate: shrink-swell, low strength.	Moderate: shrink-swell, low strength.	Severe: low strength.
108, 109 Holtville	Moderate: too clayey.	Severe: shrink-swell, low strength.	Severe: shrink-swell.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.
110 Holtville	Moderate: too clayey, wetness.	Severe: shrink-swell, low strength.	Severe: shrink-swell.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.
111*:					
Holtville	Moderate: too clayey.	Severe: shrink-swell, low strength.	Severe: shrink-swell.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.
Imperial	Severe: too clayey.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.
112 Imperial	Severe: too clayey.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.
113 Imperial	Severe: too clayey.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.	Severe: low strength, shrink-swell.
114 Imperial	Severe: too clayey.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.
115*:					
Imperial	Severe: too clayey.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.

See footnote at end of table.

TABLE 5.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets
115*:					
Glenbar	Moderate: wetness.	Moderate: shrink-swell, low strength.	Moderate: wetness, shrink-swell, low strength.	Moderate: shrink-swell, low strength.	Severe: low strength.
116*:					
Imperial	Severe: too clayey.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.
Glenbar	Moderate: too clayey.	Moderate: shrink-swell, low strength.	Moderate: shrink-swell, low strength.	Moderate: shrink-swell, low strength.	Severe: low strength.
117 Indio	Slight	Slight	Slight	Slight	Moderate: low strength.
118 Indio	Moderate: wetness.	Slight	Moderate: wetness.	Slight	Moderate: low strength.
119*:					
Indio	Slight	Slight	Slight	Slight	Moderate: low strength.
Vint	Severe: cutbanks cave.	Slight	Slight	Slight	Moderate: low strength.
120* Laveen	Slight	Slight	Slight	Slight	Slight.
121 Heloland	Moderate: too clayey.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.	Moderate: low strength.
122 Heloland	Severe: wetness.	Severe: shrink-swell, low strength.	Severe: wetness, shrink-swell, low strength.	Severe: shrink-swell, low strength.	Moderate: low strength, wetness.
123*:					
Heloland	Severe: wetness.	Severe: shrink-swell, low strength.	Severe: wetness, shrink-swell, low strength.	Severe: shrink-swell, low strength.	Moderate: low strength, wetness.
Holtville	Moderate: too clayey, wetness.	Severe: shrink-swell, low strength.	Severe: shrink-swell.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.
124 Niland	Severe: too clayey.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.	Severe: low strength, shrink-swell.
125 Niland	Severe: wetness.	Severe: shrink-swell, low strength.	Severe: wetness, shrink-swell, low strength.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.
126, 127 Niland	Severe: too clayey.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.	Severe: low strength, shrink-swell.
128*:					
Niland	Severe: wetness.	Severe: shrink-swell, low strength.	Severe: wetness, shrink-swell, low strength.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.

See footnote at end of table.

TABLE 5.--BUILDING SITE DEVELOPMENT--Continued

Soil name and map symbol	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets
128*:					
Imperial	Severe: too clayey.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.	Severe: shrink-swell, low strength.
130, 131, 132 Rositas	Severe: cutbanks cave.	Slight	Slight	Slight	Slight.
133 Rositas	Severe: cutbanks cave.	Slight	Slight	Moderate: slope.	Slight.
134 Rositas	Severe: cutbanks cave, slope.	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.
135 Rositas	Severe: cutbanks cave.	Slight	Moderate: wetness.	Slight	Slight.
136, 137 Rositas	Severe: cutbanks cave.	Slight	Slight	Slight	Slight.
138*:					
Rositas	Severe: cutbanks cave.	Slight	Slight	Slight	Slight.
Superstition	Severe: cutbanks cave.	Slight	Slight	Slight	Slight.
139 Superstition	Severe: cutbanks cave.	Slight	Slight	Slight	Slight.
140*:					
Torriorthents					
Rock outcrop					
141*:					
Torriorthents					
Orthids					
142 Vint	Severe: cutbanks cave.	Slight	Moderate: wetness.	Slight	Moderate: low strength.
143 Vint	Severe: cutbanks cave.	Slight	Slight	Slight	Moderate: low strength.
144*:					
Vint	Severe: cutbanks cave.	Slight	Moderate: wetness.	Slight	Moderate: low strength.
Indio	Moderate: wetness.	Slight	Moderate: wetness.	Slight	Moderate: low strength.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 6.--SANITARY FACILITIES

[Some terms that describe restrictive soil features are defined in the Glossary. See text for definitions of "slight," "moderate," "good," "fair," and other terms. Absence of an entry indicates that the soil was not rated]

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
100 Antho	Slight	Severe: seepage.	Severe: seepage.	Severe: seepage.	Fair: too sandy.
101*:					
Antho	Slight	Severe: seepage.	Severe: seepage.	Severe: seepage.	Fair: too sandy.
Superstition	Slight	Severe: seepage.	Severe: too sandy.	Slight	Poor: too sandy.
102*. Badland					
103 Carsitas	Slight	Severe: seepage.	Severe: too sandy.	Slight	Poor: too sandy.
104*. Fluvaquents					
105 Glenbar	Severe: percs slowly.	Slight	Moderate: too clayey.	Slight	Fair: too clayey.
106 Glenbar	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.	Moderate: wetness.	Fair: too clayey.
107* Glenbar	Severe: percs slowly.	Moderate: seepage.	Moderate: too clayey.	Slight	Fair: too clayey.
108, 109 Holtville	Severe: percs slowly.	Severe: seepage.	Severe: too sandy.	Slight	Fair: too clayey.
110 Holtville	Severe: wetness, percs slowly.	Severe: wetness, seepage.	Severe: seepage, wetness, too sandy.	Severe: wetness, seepage.	Fair: too clayey.
111*:					
Holtville	Severe: percs slowly.	Severe: seepage.	Severe: too sandy.	Slight	Fair: too clayey.
Imperial	Severe: percs slowly.	Slight	Severe: too clayey.	Slight	Poor: too clayey.
112 Imperial	Severe: percs slowly.	Slight	Severe: too clayey.	Slight	Poor: too clayey.
113, 114 Imperial	Severe: percs slowly, wetness.	Severe: wetness.	Severe: too clayey, wetness.	Moderate: wetness.	Poor: too clayey.
115*:					
Imperial	Severe: percs slowly, wetness.	Severe: wetness.	Severe: too clayey, wetness.	Moderate: wetness.	Poor: too clayey.
Glenbar	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.	Moderate: wetness.	Fair: too clayey.
116*:					
Imperial	Severe: percs slowly.	Moderate: slope.	Severe: too clayey.	Slight	Poor: too clayey.

See footnote at end of table.

TABLE 6.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
116*:					
Glenbar	Severe: percs slowly.	Moderate: slope.	Moderate: too clayey.	Slight	Fair: too clayey.
117 Indio	Moderate: percs slowly.	Moderate: seepage.	Slight	Slight	Good.
118 Indio	Severe: wetness.	Moderate: wetness, seepage.	Severe: wetness.	Moderate: wetness.	Good.
119*:					
Indio	Moderate: percs slowly.	Moderate: seepage.	Slight	Slight	Good.
Vint	Slight	Severe: seepage.	Moderate: too sandy.	Slight	Fair: too sandy.
120* Laveen	Slight	Moderate: seepage.	Slight	Slight	Fair: area reclaim.
121 Meloland	Severe: percs slowly.	Severe: seepage.	Severe: too clayey.	Slight	Poor: too clayey.
122 Meloland	Severe: wetness, percs slowly.	Severe: seepage, wetness.	Severe: wetness, seepage.	Severe: seepage.	Poor: too clayey.
123*:					
Meloland	Severe: wetness, percs slowly.	Severe: seepage, wetness.	Severe: wetness, seepage.	Severe: seepage.	Poor: too clayey.
Holtville	Severe: wetness, percs slowly.	Severe: wetness, seepage.	Severe: wetness, seepage, too sandy.	Severe: seepage.	Fair: too clayey.
124 Niland	Severe: percs slowly.	Slight	Severe: too clayey.	Slight	Poor: too clayey.
125 Niland	Severe: percs slowly, wetness.	Severe: seepage, wetness.	Severe: wetness, too clayey.	Severe: seepage.	Poor: too sandy.
126, 127 Niland	Severe: percs slowly.	Slight	Severe: too clayey.	Slight	Poor: too clayey.
128*:					
Niland	Severe: percs slowly, wetness.	Severe: seepage, wetness.	Severe: wetness, too clayey.	Severe: wetness.	Poor: too sandy.
Imperial	Severe: percs slowly, wetness.	Severe: wetness.	Severe: too clayey, wetness.	Moderate: wetness.	Poor: too clayey.
130, 131, 132, 133 Rositas	Slight	Severe: seepage.	Severe: too sandy.	Slight	Poor: too sandy.
134 Rositas	Severe: slope.	Severe: seepage, slope.	Severe: too sandy.	Severe: slope.	Poor: slope, too sandy.
135 Rositas	Severe: wetness.	Severe: wetness, seepage.	Severe: seepage, wetness, too sandy.	Severe: seepage.	Poor: too sandy.

See footnote at end of table.

TABLE 6.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
136, 137 Rositas	Slight	Severe: seepage.	Severe: too sandy.	Slight	Poor: too sandy.
138*:					
Rositas	Slight	Severe: seepage.	Severe: too sandy.	Slight	Poor: too sandy.
Superstition	Slight	Severe: seepage.	Moderate: too sandy.	Slight	Fair: too sandy.
139 Superstition	Slight	Severe: seepage.	Moderate: too sandy.	Slight	Fair: too sandy.
140*:					
Torriorthents					
Rock outcrop					
141*:					
Torriorthents					
Orthids					
142 Vint	Severe: wetness.	Severe: wetness, seepage.	Severe: wetness.	Moderate: wetness.	Poor: wetness.
143 Vint	Slight	Severe: seepage.	Moderate: too sandy.	Slight	Fair: too sandy.
144*:					
Vint	Severe: wetness, percs slowly.	Severe: wetness, seepage.	Severe: wetness.	Moderate: wetness.	Poor: wetness.
Indio	Severe: wetness, percs slowly.	Moderate: wetness, seepage.	Severe: wetness.	Moderate: wetness.	Good.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 7.--CONSTRUCTION MATERIALS

[Some terms that describe restrictive soil features are defined in the Glossary. See text for definitions of "good," "fair," and "poor." Absence of an entry indicates that the soil was not rated]

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
100 Antho	Good	Poor: excess fines.	Unsuited	Poor: too sandy.
101*:				
Antho	Good	Poor: excess fines.	Unsuited	Poor: too sandy.
Superstition	Good	Poor: excess fines.	Unsuited	Poor: too sandy.
102*. Badland				
103 Carsitas	Good	Fair: excess fines.	Unsuited: excess fines.	Poor: too sandy, small stones.
104*. Fluvaquents				
105 Glenbar	Poor: low strength.	Unsuited	Unsuited	Fair: too clayey.
106 Glenbar	Poor: low strength.	Unsuited	Unsuited	Fair: too clayey, excess sodium.
107* Glenbar	Poor: low strength.	Unsuited	Unsuited	Poor: excess salt, excess sodium.
108 Holtville	Poor: shrink-swell, low strength.	Unsuited: excess fines.	Unsuited: excess fines.	Fair: thin layer.
109, 110 Holtville	Poor: shrink-swell, low strength.	Unsuited: excess fines.	Unsuited: excess fines.	Poor: too clayey.
111*:				
Holtville	Poor: shrink-swell, low strength.	Unsuited: excess fines.	Unsuited: excess fines.	Fair: too clayey.
Imperial	Poor: shrink-swell, low strength.	Unsuited: excess fines.	Unsuited: excess fines.	Poor: too clayey.
112 Imperial	Poor: shrink-swell, low strength.	Unsuited: excess fines.	Unsuited: excess fines.	Poor: too clayey.
113 Imperial	Poor: low strength, shrink-swell.	Unsuited: excess fines.	Unsuited: excess fines.	Poor: too clayey, excess salt, excess sodium.
114 Imperial	Poor: shrink-swell, low strength.	Unsuited: excess fines.	Unsuited: excess fines.	Poor: too clayey.

See footnote at end of table.

TABLE 7.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
115*:				
Imperial	Poor: shrink-swell, low strength.	Unsuited: excess fines.	Unsuited: excess fines.	Poor: too clayey.
Glenbar	Poor: low strength.	Unsuited	Unsuited	Fair: too clayey, excess sodium.
116*:				
Imperial	Poor: shrink-swell, low strength.	Unsuited: excess fines.	Unsuited: excess fines.	Poor: too clayey.
Glenbar	Poor: low strength.	Unsuited	Unsuited	Fair: too clayey.
117, 118 Indio	Fair: low strength.	Unsuited: excess fines.	Unsuited: excess fines.	Good.
119*:				
Indio	Fair: low strength.	Unsuited: excess fines.	Unsuited: excess fines.	Good.
Vint	Fair: low strength.	Poor: excess fines.	Unsuited	Poor: too sandy.
120* Laveen	Good	Unsuited	Unsuited	Good.
121 Meloland	Poor: shrink-swell, low strength.	Unsuited: excess fines.	Unsuited: excess fines.	Poor: too sandy.
122 Meloland	Poor: low strength, shrink-swell.	Unsuited: excess fines.	Unsuited: excess fines.	Fair.
123*:				
Meloland	Poor: low strength, shrink-swell.	Unsuited: excess fines.	Unsuited: excess fines.	Fair.
Holtville	Poor: shrink-swell, low strength.	Unsuited: excess fines.	Unsuited: excess fines.	Fair: thin layer.
124 Niland	Poor: low strength, shrink-swell.	Unsuited: thin layer, excess fines.	Unsuited: excess fines.	Poor: small stones, too sandy.
125 Niland	Poor: low strength, shrink-swell.	Unsuited: thin layer, excess fines.	Unsuited: excess fines.	Poor: too sandy, small stones.
126 Niland	Poor: low strength, shrink-swell.	Unsuited: thin layer, excess fines.	Unsuited: excess fines.	Poor: too sandy.
127 Niland	Poor: low strength, shrink-swell.	Unsuited: thin layer, excess fines.	Unsuited: excess fines.	Fair: too sandy, excess salt.
128*:				
Niland	Poor: low strength, shrink-swell.	Unsuited: thin layer, excess fines.	Unsuited: excess fines.	Poor: too sandy, small stones.

See footnote at end of table.

TABLE 7.--CONSTRUCTION MATERIALS--Continued

Soil name and map symbol	Roadfill	Sand	Gravel	Topsoil
128*:				
Imperial	Poor: shrink-swell, low strength.	Unsuited: excess fines.	Unsuited: excess fines.	Poor: too clayey.
130, 131, 132, 133 Rositas	Good	Poor: excess fines.	Unsuited: excess fines.	Poor: too sandy.
134 Rositas	Fair: slope.	Poor: excess fines.	Unsuited: excess fines.	Poor: too sandy, slope.
135 Rositas	Fair: wetness.	Poor: excess fines.	Unsuited: excess fines.	Poor: too sandy.
136 Rositas	Good	Poor: excess fines.	Unsuited: excess fines.	Poor: too sandy.
137 Rositas	Good	Poor: excess fines.	Unsuited: excess fines.	Fair: thin layer.
138*:				
Rositas	Good	Poor: excess fines.	Unsuited: excess fines.	Poor: too sandy.
Superstition	Good	Poor: excess fines.	Unsuited	Fair: too sandy.
139 Superstition	Good	Poor: excess fines.	Unsuited	Fair: too sandy.
140*:				
Torriorthents				
Rock outcrop				
141*:				
Torriorthents				
Orthids				
142 Vint	Fair: wetness.	Poor: excess fines.	Unsuited	Poor: too sandy.
143 Vint	Fair: low strength.	Poor: excess fines.	Unsuited	Fair: thin layer.
144*:				
Vint	Fair: wetness.	Poor: excess fines.	Unsuited	Fair: thin layer, excess sodium.
Indio	Fair: low strength.	Unsuited: excess fines.	Unsuited: excess fines.	Good.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 8.--WATER MANAGEMENT

[The terms that describe restrictive soil features are defined in the Glossary. Absence of an entry indicates that the soil was not evaluated]

Soil name and map symbol	Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Drainage	Irrigation	Terraces and diversions
ho	Seepage	Piping	No water	Favorable	Droughty	Erodes easily.
ho	Seepage	Piping	No water	Favorable	Droughty	Erodes easily.
perstition	Seepage	Seepage, piping.	No water	Cutbanks cave	Fast intake, droughty, soil blowing.	Too sandy, soil blowing.
dland						
sitas	Seepage	Seepage	No water	Slope, cutbanks cave.	Slope, droughty, fast intake.	Too sandy, soil blowing.
vaquents						
nbar	Favorable	Low strength, piping.	No water	Floods, percs slowly.	Favorable	Piping.
nbar	Favorable	Low strength, piping.	Slow refill	Wetness, percs slowly, excess sodium.	Wetness, excess sodium.	Wetness, percs slowly.
nbar	Favorable	Low strength, piping.	No water	Floods, percs slowly, excess sodium.	Excess salt, excess sodium.	Piping.
109 tville	Seepage	Hard to pack, piping.	No water	Percs slowly, cutbanks cave.	Percs slowly	Not needed.
tville	Seepage	Hard to pack, piping.	Deep to water	Percs slowly, cutbanks cave.	Percs slowly, wetness.	Not needed.
tville	Seepage	Hard to pack, piping.	No water	Percs slowly, cutbanks cave.	Percs slowly	Not needed.
perial	Favorable	Hard to pack	No water	Percs slowly	Slow intake, percs slowly.	Erodes easily, percs slowly.
perial	Favorable	Hard to pack	No water	Percs slowly	Slow intake, percs slowly.	Erodes easily, percs slowly.
perial	Favorable	Hard to pack, piping.	Deep to water, slow refill.	Percs slowly, excess salt, excess sodium.	Percs slowly, excess sodium, excess salt.	Erodes easily, percs slowly.
perial	Favorable	Hard to pack	Slow refill, deep to water.	Percs slowly	Slow intake, percs slowly.	Erodes easily, percs slowly.
perial	Favorable	Hard to pack	Slow refill, deep to water.	Percs slowly	Slow intake, percs slowly.	Erodes easily, percs slowly.
nbar	Favorable	Low strength, piping.	Slow refill	Wetness, percs slowly, excess sodium.	Wetness, excess sodium.	Wetness, percs slowly.
perial	Favorable	Hard to pack	No water	Percs slowly	Slow intake, percs slowly.	Erodes easily, percs slowly.

See footnote at end of table.

TABLE 8.--WATER MANAGEMENT--Continued

Soil name and map symbol	Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Drainage	Irrigation	Terraces and diversions
116*:						
Glenbar	Favorable	Low strength, piping.	No water	Floods, percs slowly.	Favorable	Piping.
117 Indio	Seepage	Piping	No water	Favorable	Soil blowing	Soil blowing.
118 Indio	Seepage	Piping	Deep to water	Favorable	Soil blowing	Soil blowing.
119*:						
Indio	Seepage	Piping	No water	Favorable	Soil blowing	Soil blowing.
Vint	Seepage	Low strength, piping, seepage.	No water	Cutbanks cave	Droughty, seepage.	Too sandy, piping.
120* Laveen	Seepage	Low strength, piping.	No water	Favorable	Favorable	Piping.
121 Meloland	Favorable	Hard to pack, piping.	No water	Percs slowly	Percs slowly, soil blowing, excess salt.	Percs slowly, soil blowing.
122 Meloland	Favorable	Piping, hard to pack.	Slow refill	Percs slowly, excess salt.	Percs slowly, wetness, soil blowing.	Wetness, percs slowly, soil blowing.
123*:						
Meloland	Favorable	Piping, hard to pack.	Slow refill	Percs slowly, excess salt.	Percs slowly, wetness, soil blowing.	Wetness, percs slowly, soil blowing.
Holtville	Seepage	Hard to pack, piping.	Deep to water	Percs slowly, cutbanks cave.	Percs slowly, wetness.	Not needed.
124 Niland	Favorable	Seepage, hard to pack.	No water	Percs slowly	Percs slowly, fast intake.	Too sandy.
125 Niland	Favorable	Seepage, hard to pack.	Slow refill	Percs slowly	Wetness, percs slowly, soil blowing.	Percs slowly, too sandy, soil blowing.
126, 127 Niland	Favorable	Seepage, hard to pack.	No water	Percs slowly	Percs slowly, fast intake.	Too sandy.
128*:						
Niland	Favorable	Seepage, hard to pack.	Slow refill	Percs slowly	Wetness, percs slowly, soil blowing.	Percs slowly, too sandy, soil blowing.
Imperial	Favorable	Hard to pack	Slow refill, deep to water.	Percs slowly	Slow intake, percs slowly.	Erodes easily, percs slowly.
130 Rositas	Seepage	Seepage, piping.	No water	Cutbanks cave	Droughty, fast intake, soil blowing.	Too sandy, soil blowing.
131 Rositas	Seepage	Seepage, piping.	No water	Slope, cutbanks cave.	Droughty, fast intake, slope.	Too sandy, soil blowing.
132 Rositas	Seepage	Seepage, piping.	No water	Cutbanks cave	Droughty, fast intake, soil blowing.	Too sandy, soil blowing.
133 Rositas	Seepage	Seepage, piping.	No water	Slope, cutbanks cave.	Droughty, fast intake, slope.	Too sandy, soil blowing.

See footnote at end of table.

TABLE 8.--WATER MANAGEMENT--Continued

Soil name and map symbol	Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Drainage	Irrigation	Terraces and diversions
[illegible] ositas	Seepage, slope.	Seepage, piping.	No water	Slope, cutbanks cave.	Droughty, fast intake, slope.	Too sandy, slope, soil blowing.
[illegible] ositas	Seepage	Seepage, piping.	Deep to water	Cutbanks cave, excess salt.	Wetness, droughty, fast intake.	Wetness, too sandy.
[illegible] 137 ositas	Seepage	Seepage, piping.	No water	Cutbanks cave	Droughty, fast intake, soil blowing.	Too sandy, soil blowing.
[illegible] ositas	Seepage	Seepage, piping.	No water	Cutbanks cave	Droughty, fast intake, soil blowing.	Too sandy, soil blowing.
[illegible] perstition	Seepage	Seepage, piping.	No water	Cutbanks cave	Fast intake, droughty, soil blowing.	Too sandy, soil blowing.
[illegible] perstition	Seepage	Seepage, piping.	No water	Cutbanks cave	Fast intake, droughty, soil blowing.	Too sandy, soil blowing.
[illegible] riorthents						
[illegible] outcrop						
[illegible] riorthents						
[illegible] thids						
[illegible] nt	Seepage	Seepage, piping, low strength.	Favorable	Wetness, excess sodium, cutbanks cave.	Wetness, excess sodium.	Wetness, piping.
[illegible] nt	Seepage	Low strength, piping, seepage.	No water	Cutbanks cave	Droughty, seepage.	Too sandy, piping.
[illegible] nt	Seepage	Seepage, piping, low strength.	Favorable	Wetness, excess sodium, cutbanks cave.	Wetness, excess sodium.	Wetness, piping.
[illegible] dio	Seepage	Piping	Deep to water	Favorable	Soil blowing	Soil blowing.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 9.--RECREATIONAL DEVELOPMENT

[Some terms that describe restrictive soil features are defined in the Glossary. See text for definitions of "slight," "moderate," and "severe." Absence of an entry indicates that the soil was not rated]

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails
100 Antho	Severe: too sandy, soil blowing.	Severe: too sandy, soil blowing.	Severe: too sandy.	Moderate: too sandy.
101*:				
Antho	Severe: too sandy, soil blowing.	Severe: too sandy, soil blowing.	Severe: too sandy.	Moderate: too sandy.
Superstition	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.
102*. Badland				
103 Carsitas	Severe: too sandy.	Severe: too sandy.	Severe: too sandy, small stones.	Severe: too sandy.
104*. Fluvaquents				
105 Glenbar	Slight	Slight	Moderate: too clayey.	Slight.
106 Glenbar	Slight	Slight	Moderate: too clayey.	Slight.
107* Glenbar	Slight	Slight	Slight	Slight.
108 Holtville	Moderate: dusty.	Moderate: dusty.	Moderate: dusty.	Moderate: dusty.
109 Holtville	Moderate: too clayey, dusty.	Moderate: too clayey, dusty.	Severe: too clayey.	Moderate: too clayey, dusty.
110 Holtville	Moderate: too clayey.	Moderate: too clayey.	Severe: too clayey.	Moderate: too clayey.
111*:				
Holtville	Moderate: dusty.	Moderate: dusty.	Moderate: too clayey, dusty.	Moderate: dusty.
Imperial	Moderate: too clayey.	Moderate: too clayey.	Severe: too clayey.	Moderate: too clayey.
112, 113, 114 Imperial	Moderate: too clayey.	Moderate: too clayey.	Severe: too clayey.	Moderate: too clayey.
115*:				
Imperial	Moderate: too clayey.	Moderate: too clayey.	Severe: too clayey.	Moderate: too clayey.
Glenbar	Slight	Slight	Moderate: too clayey.	Slight.
116*:				
Imperial	Moderate: too clayey.	Moderate: too clayey.	Severe: too clayey.	Moderate: too clayey.

See footnote at end of table.

TABLE 9.--RECREATIONAL DEVELOPMENT--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails
116*:				
Glenbar	Slight	Slight	Moderate: too clayey.	Slight.
117, 118 Indio	Slight	Slight	Slight	Slight.
119*:				
Indio	Slight	Slight	Slight	Slight.
Vint	Moderate: too sandy.	Moderate: too sandy.	Moderate: too sandy.	Moderate: too sandy.
120* Laveen	Slight	Slight	Slight	Slight.
121 Meloland	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.
122 Meloland	Moderate: wetness.	Moderate: wetness.	Moderate: wetness.	Moderate: wetness.
123*:				
Meloland	Moderate: wetness.	Moderate: wetness.	Moderate: wetness.	Moderate: wetness.
Holtville	Slight	Slight	Slight	Slight.
124, 125, 126 Niland	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.
127 Niland	Moderate: too sandy.	Moderate: too sandy.	Moderate: too sandy.	Moderate: too sandy.
128*:				
Niland	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.
Imperial	Moderate: too clayey.	Moderate: too clayey.	Severe: too clayey.	Moderate: too clayey.
130, 131, 132 Rositas	Severe: soil blowing.	Severe: soil blowing.	Severe: soil blowing.	Severe: soil blowing.
133 Rositas	Severe: soil blowing.	Severe: soil blowing.	Severe: too sandy, slope.	Severe: soil blowing.
134 Rositas	Severe: too sandy, slope.	Severe: too sandy, slope.	Severe: too sandy, slope.	Severe: soil blowing.
135 Rositas	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.	Severe: too sandy.
136 Rositas	Severe: soil blowing.	Severe: soil blowing.	Severe: soil blowing.	Severe: soil blowing.
137 Rositas	Severe: dusty.	Severe: dusty.	Severe: dusty.	Severe: dusty.
138*:				
Rositas	Severe: soil blowing.	Severe: soil blowing.	Severe: soil blowing.	Severe: soil blowing.
Superstition	Moderate: too sandy.	Moderate: too sandy.	Moderate: too sandy.	Moderate: too sandy.

See footnote at end of table.

TABLE 9.--RECREATIONAL DEVELOPMENT--Continued

Soil name and map symbol	Camp areas	Picnic areas	Playgrounds	Paths and trails
139 Superstition	Moderate: too sandy.	Moderate: too sandy.	Moderate: too sandy.	Moderate: too sandy.
140*:				
Torriorthents				
Rock outcrop				
141*:				
Torriorthents				
Orthids				
142 Vint	Moderate: too sandy.	Moderate: too sandy.	Moderate: too sandy.	Moderate: too sandy.
143 Vint	Slight	Slight	Slight	Slight.
144*:				
Vint	Slight	Slight	Slight	Slight.
Indio	Slight	Slight	Slight	Slight.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 10.--WILDLIFE HABITAT POTENTIALS

[See text for definitions of "good," "fair," "poor," and "very poor." Absence of an entry indicates that the soil was not rated]

Soil name and map symbol	Potential for habitat elements						Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Wetland wildlife	Rangeland wildlife
100 Antho	Very poor	Very poor	Poor	Poor	Poor	Very poor	---	---	Poor
101*:									
Antho	Very poor	Very poor	Poor	Poor	Poor	Very poor	---	---	Poor
Superstition	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	---	Very poor	Very poor
102*. Badland									
103 Carsitas	Very poor	Very poor	Poor	Poor	Very poor	Very poor	Poor	Very poor	Poor
104*. Fluvaquents									
105 Glenbar	---	---	Poor	Poor	Poor	Very poor	---	Very poor	Poor
106 Glenbar	Fair	Fair	Poor	Poor	Good	Good	Fair	Good	---
107 Glenbar	---	---	Poor	Poor	Poor	Very poor	---	Very poor	Poor
108, 109 Holtville	Very poor	Very poor	Poor	Poor	---	---	---	---	Poor
110 Holtville	Good	Good	Good	Fair	Fair	Fair	Good	Fair	---
111*:									
Holtville	Very poor	Very poor	Poor	Poor	---	---	---	---	Poor
Imperial	Very poor	Very poor	Poor	Poor	---	---	---	---	Poor
112 Imperial	Very poor	Very poor	Poor	Poor	---	---	---	---	Poor
113 Imperial	Very poor	Very poor	Fair	Poor	Fair	Fair	Very poor	Fair	Poor
114 Imperial	Fair	Fair	Fair	Poor	Fair	Fair	Fair	Fair	---
115*:									
Imperial	Fair	Fair	Fair	Poor	Fair	Fair	Fair	Fair	---
Glenbar	Fair	Fair	Poor	Poor	Good	Good	Fair	Good	---
116*:									
Imperial	Very poor	Very poor	Poor	Poor	---	---	---	---	Poor
Glenbar	---	---	Poor	Poor	Poor	Very poor	---	Very poor	Poor
117 Indio	Good	Good	Good	Good	Poor	Very poor	Good	Very poor	---
118 Indio	Good	Good	Good	Good	Fair	Fair	Good	Fair	---

See footnote at end of table.

TABLE 10.--WILDLIFE HABITAT POTENTIALS--Continued

Soil name and map symbol	Potential for habitat elements						Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Wetland wildlife	Rangeland wildlife
119*:									
Indio	Very poor	Very poor	Poor	Poor	Very poor	Very poor	---	Very poor	Poor.
Vint	---	---	Poor	Poor	Poor	Very poor	---	Very poor	Poor.
120* Laveen	Very poor	Very poor	Poor	Poor	Poor	Very poor	Very poor	Very poor	Poor.
121 Meloland	Very poor	Very poor	Poor	Poor	Very poor	Very poor	---	Very poor	Poor.
122 Meloland	Fair	Good	Good	Poor	Fair	Fair	Good	Fair	---
123*:									
Meloland	Fair	Good	Good	Poor	Fair	Fair	Good	Fair	---
Holtville	Good	Good	Good	Fair	Fair	Fair	Good	Fair	---
124 Niland	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor.
125 Niland	Fair	Fair	Good	Poor	Fair	Fair	Fair	Fair	---
126, 127 Niland	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor.
128*:									
Niland	Fair	Fair	Good	Poor	Fair	Fair	Fair	Fair	---
Imperial	Fair	Fair	Fair	Poor	Fair	Fair	Fair	Fair	---
130, 131, 132, 133, 134 Rositas	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	---	Very poor	Very poor.
135 Rositas	Fair	Fair	Good	Good	Good	Fair	Fair	Fair	---
136, 137 Rositas	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	---	Very poor	Very poor.
138*:									
Rositas	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	---	Very poor	Very poor.
Superstition	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	---	Very poor	Very poor.
139 Superstition	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	---	Very poor	Very poor.
140*:									
Torriorthents									
Rock outcrop									
141*:									
Torriorthents									
Orthids									
142 Vint	Fair	Fair	Poor	Poor	Good	Good	Fair	Good	---
143 Vint	---	---	Poor	Poor	Poor	Very poor	---	Very poor	Poor.

See footnote at end of table.

TABLE 10.--WILDLIFE HABITAT POTENTIALS--Continued

Soil name and map symbol	Potential for habitat elements						Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Wetland wildlife	Rangeland wildlife
LA*:									
Vint	Fair	Fair	Poor	Poor	Good	Good	Fair	Good	---
Indio	Good	Good	Good	Good	Fair	Fair	Good	Fair	---

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 11.--ENGINEERING INDEX PROPERTIES

[The symbol > means more than. Absence of an entry indicates that data were not estimated]

Soil name and map symbol	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments > 3 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct					Pct	
100---------- Antho	0-13	Loamy fine sand	SM	A-2	0	100	100	75-85	10-30	---	NP
	13-60	Sandy loam, fine sandy loam.	SM	A-2, A-4	0	90-100	75-95	50-60	15-40	---	NP
101*:											
Antho----------	0-8	Loamy fine sand	SM	A-2	0	100	100	75-85	10-30	---	NP
	8-60	Sandy loam, fine sandy loam.	SM	A-2, A-4	0	90-100	75-95	50-60	15-40	---	NP
Superstition------	0-6	Fine sand-------	SM	A-2	0	100	95-100	70-85	15-25	---	NP
	6-60	Loamy fine sand, fine sand, sand.	SM	A-2	0	100	95-100	70-85	15-25	---	NP
102*. Badland											
103---------- Carsitas	0-10	Gravelly sand---	SP, SP-SM	A-1, A-2	0-5	60-90	50-85	30-55	0-10	---	NP
	10-60	Gravelly sand, gravelly coarse sand, sand.	SP, SP-SM	A-1	0-5	60-90	50-85	25-50	0-10	---	NP
104* Fluvaquents											
105---------- Glenbar	0-13	Clay loam-------	CL	A-6	0	100	100	90-100	70-95	35-45	15-30
	13-60	Clay loam, silty clay loam.	CL	A-6	0	100	100	90-100	70-95	35-45	15-30
106---------- Glenbar	0-13	Clay loam-------	CL	A-6, A-7	0	100	100	90-100	70-95	35-45	15-25
	13-60	Clay loam, silty clay loam.	CL	A-6, A-7	0	100	100	90-100	70-95	35-45	15-25
107*---------- Glenbar	0-13	Loam----------	ML, CL-ML, CL	A-4	0	100	100	100	70-80	20-30	NP-10
	13-60	Clay loam, silty clay loam.	CL	A-6, A-7	0	100	100	95-100	75-95	35-45	15-30
108---------- Holtville	0-14	Loam----------	ML	A-4	0	100	100	85-100	55-95	25-35	NP-10
	14-22	Clay, silty clay	CL, CH	A-7	0	100	100	95-100	85-95	40-65	20-35
	22-60	Silt loam, very fine sandy loam.	ML	A-4	0	100	100	95-100	65-85	25-35	NP-10
109---------- Holtville	0-17	Silty clay------	CL, CH	A-7	0	100	100	95-100	85-95	40-65	20-35
	17-24	Clay, silty clay	CL, CH	A-7	0	100	100	95-100	85-95	40-65	20-35
	24-35	Silt loam, very fine sandy loam.	ML	A-4	0	100	100	95-100	65-85	25-35	NP-10
	35-60	Loamy very fine sand, loamy fine sand.	SM, ML	A-2, A-4	0	100	100	75-100	20-55	---	NP
110---------- Holtville	0-17	Silty clay------	CH, CL	A-7	0	100	100	95-100	85-95	40-65	20-35
	17-24	Clay, silty clay	CH, CL	A-7	0	100	100	95-100	85-95	40-65	20-35
	24-35	Silt loam, very fine sandy loam.	ML	A-4	0	100	100	95-100	55-85	25-35	NP-10
	35-60	Loamy very fine sand, loamy fine sand.	SM, ML	A-2, A-4	0	100	100	75-100	20-55	---	NP

See footnote at end of table.

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments > 3 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct					Pct	
111*:											
Holtville	0-10	Silty clay loam	CL, CH	A-7	0	100	100	95-100	85-95	40-65	20-35
	10-22	Clay, silty clay	CL, CH	A-7	0	100	100	95-100	85-95	40-65	20-35
	22-60	Silt loam, very fine sandy loam.	ML	A-4	0	100	100	95-100	65-85	25-35	NP-10
Imperial	0-12	Silty clay loam	CL	A-7	0	100	100	100	85-95	40-50	10-20
	12-60	Silty clay loam, silty clay, clay.	CH	A-7	0	100	100	100	85-95	50-70	25-45
112 Imperial	0-12	Silty clay	CH	A-7	0	100	100	100	85-95	50-70	25-45
	12-60	Silty clay loam, silty clay, clay.	CH	A-7	0	100	100	100	85-95	50-70	25-45
113 Imperial	0-12	Silty clay	CH	A-7	0	100	100	100	85-95	50-70	25-45
	12-60	Silty clay, clay, silty clay loam.	CH	A-7	0	100	100	100	85-95	50-70	25-45
114 Imperial	0-12	Silty clay	CH	A-7	0	100	100	100	85-95	50-70	25-45
	12-60	Silty clay loam, silty clay, clay.	CH	A-7	0	100	100	100	85-95	50-70	25-45
115*:											
Imperial	0-12	Silty clay loam	CL	A-7	0	100	100	100	85-95	40-50	10-20
	12-60	Silty clay loam, silty clay, clay.	CH	A-7	0	100	100	100	85-95	50-70	25-45
Glenbar	0-13	Silty clay loam	CL	A-6, A-7	0	100	100	90-100	70-95	35-45	15-25
	13-60	Clay loam, silty clay loam.	CL	A-6, A-7	0	100	100	90-100	70-95	35-45	15-25
116*:											
Imperial	0-13	Silty clay loam	CL	A-7	0	100	100	100	85-95	40-50	10-20
	13-60	Silty clay loam, silty clay, clay.	CH	A-7	0	100	100	100	85-95	50-70	25-45
Glenbar	0-13	Silty clay loam	CL	A-6, A-7	0	100	100	90-100	70-95	35-45	15-25
	13-60	Clay loam, silty clay loam.	CL	A-6	0	100	100	90-100	70-95	35-45	15-30
117, 118 Indio	0-12	Loam	ML	A-4	0	95-100	95-100	85-100	75-90	20-30	NP-5
	12-72	Stratified loamy very fine sand to silt loam.	ML	A-4	0	95-100	95-100	85-100	75-90	20-30	NP-5
119*:											
Indio	0-12	Loam	ML	A-4	0	95-100	95-100	85-100	75-90	20-30	NP-5
	12-72	Stratified loamy very fine sand to silt loam.	ML	A-4	0	95-100	95-100	85-100	75-90	20-30	NP-5
Vint	0-10	Loamy fine sand	SM	A-2	0	95-100	95-100	70-80	25-35	---	NP
	10-60	Loamy sand, loamy fine sand.	SM	A-2	0	95-100	95-100	70-80	20-30	---	NP
120* Laveen	0-12	Loam	ML, CL-ML	A-4	0	100	95-100	75-85	55-65	20-30	NP-10
	12-60	Loam, very fine sandy loam.	ML, CL-ML	A-4	0	95-100	85-95	70-80	55-65	15-25	NP-10

See footnote at end of table.

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Frag- ments > 3 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas- ticity index
	In				Pct					Pct	
121---------- Meloland	0-12	Fine sand--------	SM, SP-SM	A-2, A-3	0	95-100	90-100	75-100	5-30	---	NP
	12-26	Stratified loamy fine sand to silt loam.	ML	A-4	0	100	100	90-100	50-65	25-35	NP-10
	26-71	Clay, silty clay, silty clay loam.	CL, CH	A-7	0	100	100	95-100	85-95	40-65	20-40
122---------- Meloland	0-12	Very fine sandy loam.	ML	A-4	0	95-100	95-100	95-100	55-85	25-35	NP-10
	12-26	Stratified loamy fine sand to silt loam.	ML	A-4	0	100	100	90-100	50-70	25-35	NP-10
	26-71	Clay, silty clay, silty clay loam.	CH, CL	A-7	0	100	100	95-100	85-95	40-65	20-40
123*:											
Meloland----------	0-12	Loam----------	ML	A-4	0	95-100	95-100	95-100	55-85	25-35	NP-10
	12-26	Stratified loamy fine sand to silt loam.	ML	A-4	0	100	100	90-100	50-70	25-35	NP-10
	26-38	Clay, silty clay, silty clay loam.	CH, CL	A-7	0	100	100	95-100	85-95	40-65	20-40
	38-60	Stratified silt loam to loamy fine sand.	SM, ML	A-4	0	100	100	75-100	35-55	25-35	NP-10
Holtville---------	0-12	Loam----------	ML	A-4	0	100	100	85-100	55-95	25-35	NP-10
	12-24	Clay, silty clay	CH, CL	A-7	0	100	100	95-100	85-95	40-65	20-35
	24-36	Silt loam, very fine sandy loam.	ML	A-4	0	100	100	95-100	55-85	25-35	NP-10
	36-60	Loamy very fine sand, loamy fine sand.	SM, ML	A-2, A-4	0	100	100	75-100	20-55	---	NP
124, 125---------- Niland	0-23	Gravelly sand---	SM, SP-SM	A-2. A-3	0	90-100	70-95	50-65	5-25	---	NP
	23-60	Silty clay, clay, clay loam.	CL, CH	A-7	0	100	100	85-100	80-95	40-65	20-40
126---------- Niland	0-23	Fine sand--------	SM, SP-SM	A-2, A-3	0	90-100	90-100	50-65	5-25	---	NP
	23-60	Silty clay-------	CL, CH	A-7	0	100	100	85-100	80-95	40-65	20-40
127---------- Niland	0-23	Loamy fine sand	SM	A-2	0	90-100	90-100	50-65	15-30	---	NP
	23-60	Silty clay-------	CL, CH	A-7	0	100	100	85-100	80-95	40-65	20-40
128*:											
Niland----------	0-23	Gravelly sand---	SM, SP-SM	A-2, A-3	0	90-100	70-95	50-65	5-25	---	NP
	23-60	Silty clay, clay, clay loam.	CL, CH	A-7	0	100	100	85-100	80-100	40-65	20-40
Imperial----------	0-12	Silty clay-------	CH	A-7	0	100	100	100	85-95	50-70	25-45
	12-60	Silty clay loam, silty clay, clay.	CH	A-7	0	100	100	100	85-95	50-70	25-45
129*: Pits											
130, 131---------- Rositas	0-27	Sand----------	SP-SM	A-3, A-1, A-2	0	100	80-100	40-70	5-15	---	NP
	27-60	Sand, fine sand, loamy sand.	SM, SP-SM	A-3, A-2, A-1	0	100	80-100	40-85	5-30	---	NP

See footnote at end of table.

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Soil name and map symbol	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments > 3 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct					Pct	
132, 133, 134, 135-Rositas	0-9	Fine sand--------	SM	A-3, A-2	0	100	80-100	50-80	10-25	---	NP
	9-60	Sand, fine sand, loamy sand.	SM, SP-SM	A-3, A-2, A-1	0	100	80-100	40-85	5-30	---	NP
136---------- Rositas	0-4	Loamy fine sand	SM	A-1, A-2	0	100	80-100	40-85	10-35	---	NP
	4-60	Sand, fine sand, loamy sand.	SM, SP-SM	A-3, A-2, A-1	0	100	80-100	40-85	5-30	---	NP
137---------- Rositas	0-12	Silt loam--------	ML	A-4	0	100	100	90-100	70-90	20-30	NP-5
	12-60	Sand, fine sand, loamy sand.	SM, SP-SM	A-3, A-2, A-1	0	100	80-100	40-85	5-30	---	NP
138*:											
Rositas----------	0-4	Loamy fine sand	SM	A-1, A-2	0	100	80-100	40-85	10-35	---	NP
	4-60	Sand, fine sand, loamy sand.	SM, SP-SM	A-3, A-2, A-1	0	100	80-100	40-85	5-30	---	NP
Superstition------	0-6	Loamy fine sand	SM	A-2	0	100	95-100	70-85	15-25	---	NP
	6-60	Loamy fine sand, fine sand, sand.	SM	A-2	0	100	95-100	70-85	15-25	---	NP
139---------- Superstition	0-6	Loamy fine sand	SM	A-2	0	100	95-100	70-85	15-25	---	NP
	6-60	Loamy fine sand, fine sand, sand.	SM	A-2	0	100	95-100	70-85	15-25	---	NP
140*:											
Torriorthents											
Rock outcrop											
141*:											
Torriorthents											
Orthids											
142---------- Vint	0-10	Loamy very fine sand.	SM, ML	A-4	0	100	100	85-95	40-65	15-25	NP-5
	10-60	Loamy fine sand	SM	A-2	0	95-100	95-100	70-80	20-30	---	NP
143---------- Vint	0-12	Fine sandy loam	ML, CL-ML, SM, SM-SC	A-4	0	100	100	75-85	45-55	15-25	NP-5
	12-60	Loamy sand, loamy fine sand.	SM	A-2	0	95-100	95-100	70-80	20-30	---	NP
144*:											
Vint----------	0-10	Very fine sandy loam.	SM, ML	A-4	0	100	100	85-95	40-65	15-25	NP-5
	10-40	Loamy fine sand	SM	A-2	0	95-100	95-100	70-80	20-30	---	NP
	40-60	Silty clay------	CL, CH	A-7	0	100	100	95-100	85-95	40-65	20-35
Indio----------	0-12	Very fine sandy loam.	ML	A-4	0	95-100	95-100	85-100	75-90	20-30	NP-5
	12-40	Stratified loamy very fine sand to silt loam.	ML	A-4	0	95-100	95-100	85-100	75-90	20-30	NP-5
	40-72	Silty clay------	CL, CH	A-7	0	100	100	95-100	85-95	40-65	20-35

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 12.--PHYSICAL AND CHEMICAL PROPERTIES OF SOILS

[The symbol < means less than; > means more than. Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" apply only to the surface layer. Absence of an entry indicates that data were not available or were not estimated]

Soil name and map symbol	Depth	Permeability	Available water capacity	Soil reaction	Salinity	Shrink-swell potential	Erosion factors K	Erosion factors T	Wind erodibility group
	In	In/hr	In/in	pH	Mmhos/cm				
100---------- Antho	0-13	2.0-6.0	0.08-0.09	7.9-8.4	<4	Very low	0.17	5	2
	13-60	2.0-6.0	0.08-0.12	7.9-8.4	<4	Low--------	0.32		
101*:									
Antho----------	0-8	2.0-6.0	0.08-0.09	7.9-8.4	<4	Very low	0.17	5	2
	8-60	2.0-6.0	0.08-0.12	7.9-8.4	<4	Low--------	0.32		
Superstition----	0-6	2.0-6.0	0.05-0.11	7.9-8.4	<2	Low--------	0.15	5	2
	6-60	2.0-6.0	0.05-0.11	7.9-8.4	<2	Low--------	0.15		
102*. Badland									
103---------- Carsitas	0-10	6.0-20	0.03-0.06	7.4-8.4	<4	Low--------	0.10	5	1
	10-60	6.0-20	0.03-0.06	7.4-8.4	<4	Low--------	0.10		
104*. Fluvaquents									
105---------- Glenbar	0-13	0.2-0.6	0.19-0.21	7.4-8.4	2-4	Moderate	0.37	5	4L
	13-60	0.2-0.6	0.19-0.21	7.4-8.4	2-4	Moderate	0.37		
106---------- Glenbar	0-13	0.2-0.6	0.19-0.21	7.4-8.4	2-8	Moderate	0.37	5	4L
	13-60	0.2-0.6	0.19-0.21	7.4-8.4	2-8	Moderate	0.37		
107*---------- Glenbar	0-13	0.6-2.0	0.13-0.15	8.5-9.0	4-8	Low--------	0.43	5	4L
	13-60	0.2-0.6	0.16-0.18	8.5-9.0	>4	Moderate	0.43		
108---------- Holtville	0-14	0.6-2.0	0.15-0.25	7.4-8.4	2-8	Low--------	0.43	5	4L
	14-22	0.06-0.2	0.17-0.25	7.4-8.4	2-8	High-------	0.32		
	22-60	0.6-2.0	0.15-0.25	7.4-8.4	2-8	Low--------	0.43		
109, 110--------- Holtville	0-17	0.06-0.2	0.17-0.25	7.4-8.4	2-8	High-------	0.32	5	4
	17-24	0.06-0.2	0.17-0.25	7.4-8.4	2-8	High-------	0.32		
	24-35	0.6-2.0	0.15-0.25	7.4-8.4	2-8	Low--------	0.43		
	35-60	2.0-6.0	0.08-0.10	7.4-8.4	2-8	Low--------	0.28		
111*:									
Holtville--------	0-10	0.06-0.2	0.17-0.25	7.4-8.4	2-8	High-------	0.32	5	4
	10-22	0.06-0.2	0.17-0.25	7.4-8.4	2-8	High-------	0.32		
	22-60	0.6-2.0	0.15-0.25	7.4-8.4	2-8	Low--------	0.43		
Imperial---------	0-12	0.06-0.2	0.17-0.35	7.9-8.4	4-8	High-------	0.43	5	4
	12-60	0.06-0.2	0.17-0.35	7.9-8.4	4-8	High-------	0.43		
112---------- Imperial	0-12	0.06-0.2	0.17-0.35	7.9-8.4	4-8	High-------	0.43	5	4
	12-60	0.06-0.2	0.17-0.35	7.9-8.4	4-8	High-------	0.43		
113---------- Imperial	0-12	0.06-0.2	0.06-0.17	8.5-9.0	>8	High-------	0.43	5	4
	12-60	0.06-0.2	0.06-0.17	8.5-9.0	>8	High-------	0.43		
114---------- Imperial	0-12	0.06-0.2	0.17-0.35	7.9-8.4	4-8	High-------	0.43	5	4
	12-60	0.06-0.2	0.17-0.35	7.9-8.4	4-8	High-------	0.43		
115*:									
Imperial---------	0-12	0.06-0.2	0.17-0.35	7.9-8.4	4-8	High-------	0.43	5	4
	12-60	0.06-0.2	0.17-0.35	7.9-8.4	4-8	High-------	0.43		
Glenbar----------	0-13	0.2-0.6	0.19-0.21	7.9-8.4	2-8	Moderate	0.37	5	4L
	13-60	0.2-0.6	0.19-0.21	7.9-8.4	2-8	Moderate	0.37		

See footnote at end of table.

TABLE 12.--PHYSICAL AND CHEMICAL PROPERTIES OF SOILS--Continued

Soil name and map symbol	Depth	Permeability	Available water capacity	Soil reaction	Salinity	Shrink-swell potential	Erosion factors K	Erosion factors T	Wind erodibility group
	In	In/hr	In/in	pH	Mmhos/cm				
116*:									
Imperial	0-13	0.06-0.2	0.17-0.35	7.9-8.4	4-8	High	0.43	5	4
	13-60	0.06-0.2	0.17-0.35	7.9-8.4	4-8	High	0.43		
Glenbar	0-13	0.2-0.6	0.19-0.21	7.9-8.4	2-4	Moderate	0.37	5	4L
	13-60	0.2-0.6	0.19-0.21	7.9-8.4	2-4	Moderate	0.37		
117, 118 Indio	0-12	0.6-2.0	0.18-0.20	7.9-8.4	<4	Low	0.55	5	4L
	12-72	0.6-2.0	0.16-0.20	7.9-8.4	<4	Low	0.49		
119*:									
Indio	0-12	0.6-2.0	0.18-0.20	7.9-8.4	<4	Low	0.55	5	4L
	12-72	0.6-2.0	0.16-0.20	7.9-8.4	<4	Low	0.49		
Vint	0-10	2.0-6.0	0.09-0.11	7.9-8.4	2-4	Low	0.24	4	2
	10-60	2.0-6.0	0.09-0.11	7.9-8.4	2-4	Low	0.24		
120* Laveen	0-12	0.6-2.0	0.16-0.18	7.9-8.4	<4	Low	0.37	4	4L
	12-60	0.6-2.0	0.16-0.18	7.9-8.4	<4	Low	0.43		
121 Meloland	0-12	2.0-6.0	0.08-0.09	7.4-8.4	2-8	Low	0.28	5	1
	12-26	0.6-2.0	0.08-0.25	7.4-8.4	2-8	Low	0.43		
	26-71	0.06-0.2	0.06-0.15	7.4-8.4	8-16	High	0.32		
122 Meloland	0-12	0.6-2.0	0.15-0.25	7.4-8.4	2-8	Low	0.43	5	4L
	12-26	0.6-2.0	0.08-0.25	7.4-8.4	2-8	Low	0.43		
	26-71	0.06-0.2	0.06-0.15	7.4-8.4	8-16	High	0.32		
123*:									
Meloland	0-12	0.6-2.0	0.15-0.25	7.4-8.4	2-8	Low	0.43	5	4L
	12-26	0.6-2.0	0.08-0.25	7.4-8.4	2-8	Low	0.43		
	26-38	0.06-0.2	0.06-0.15	7.4-8.4	8-16	High	0.32		-
	38-60	0.6-2.0	0.08-0.25	7.4-8.4	8-16	Low	0.43		
Holtville	0-12	0.6-2.0	0.15-0.25	7.4-8.4	2-8	Low	0.43	5	4L
	12-24	0.06-0.2	0.17-0.25	7.4-8.4	2-8	High	0.32		
	24-36	0.6-2.0	0.15-0.25	7.4-8.4	2-8	Low	0.43		
	36-60	2.0-6.0	0.08-0.10	7.4-8.4	2-8	Low	0.28		
124, 125 Niland	0-23	6.0-20	0.04-0.06	7.9-8.4	2-8	Low	0.24	5	1
	23-60	0.06-0.2	0.10-0.16	7.9-8.4	2-16	High	0.32		
126, 127 Niland	0-23	6.0-20	0.06-0.08	7.9-8.4	2-8	Low	0.28	5	2
	23-60	0.06-0.2	0.10-0.16	7.9-8.4	2-16	High	0.32		
128*:									
Niland	0-23	6.0-20	0.04-0.06	7.9-8.4	2-8	Low	0.24	5	1
	23-60	0.06-0.2	0.10-0.16	7.9-8.4	2-16	High	0.32		
Imperial	0-12	0.06-0.2	0.17-0.35	7.9-8.4	4-8	High	0.43	5	4
	12-60	0.06-0.2	0.17-0.35	7.9-8.4	4-8	High	0.43		
129*. Pits									
130, 131, 132, 133, 134 Rositas	0-9	6.0-20	0.05-0.07	7.9-8.4	2-4	Low	0.20	5	1
	9-60	6.0-20	0.05-0.08	7.9-8.4	2-4	Low	0.20		
135 Rositas	0-9	6.0-20	0.05-0.07	7.9-8.4	2-8	Low	0.20	5	1
	9-60	6.0-20	0.05-0.08	7.9-8.4	2-8	Low	0.20		
136 Rositas	0-4	6.0-20	0.06-0.08	7.9-8.4	2-4	Low	0.20	5	2
	4-60	6.0-20	0.05-0.08	7.9-8.4	2-4	Low	0.20		
137 Rositas	0-12	0.6-2.0	0.20-0.25	7.9-8.4	2-4	Low	0.49	5	4L
	12-60	6.0-20	0.05-0.08	7.9-8.4	2-4	Low	0.20		
138*:									
Rositas	0-4	6.0-20	0.06-0.08	7.9-8.4	2-4	Low	0.20	5	2
	4-60	6.0-20	0.05-0.08	7.9-8.4	2-4	Low	0.20		

See footnote at end of table.

TABLE 12.--PHYSICAL AND CHEMICAL PROPERTIES OF SOILS--Continued

Soil name and map symbol	Depth	Permeability	Available water capacity	Soil reaction	Salinity	Shrink-swell potential	Erosion factors K	Erosion factors T	Wind erodibility group
	In	In/hr	In/in	pH	Mmhos/cm				
138*:									
Superstition----	0-6	2.0-6.0	0.05-0.11	7.9-8.4	<2	Low--------	0.15	5	2
	6-60	2.0-6.0	0.05-0.11	7.9-8.4	<2	Low--------	0.15		
139----------	0-6	2.0-6.0	0.05-0.11	7.9-8.4	<2	Low--------	0.15	5	2
Superstition	6-60	2.0-6.0	0.05-0.11	7.9-8.4	<2	Low--------	0.15		
140*:									
Torriorthents									
Rock outcrop									
141*:									
Torriorthents									
Orthids									
142----------	0-10	2.0-6.0	0.10-0.20	7.9-8.4	2-8	Low--------	0.32	5	3
Vint	10-60	2.0-6.0	0.09-0.11	7.9-8.4	2-8	Low--------	0.17		
143----------	0-12	0.6-2.0	0.13-0.15	7.9-8.4	2-4	Low--------	0.37	4	3
Vint	12-60	2.0-6.0	0.09-0.11	7.9-8.4	2-4	Low--------	0.24		
144*:									
Vint----------	0-10	2.0-6.0	0.10-0.20	7.9-8.4	2-8	Low--------	0.32	5	3
	10-40	2.0-6.0	0.09-0.11	7.9-8.4	2-8	Low--------	0.17		
	40-60	0.06-0.2	0.17-0.35	7.9-8.4	4-8	High-------	0.43	5	3
Indio----------	0-12	0.6-2.0	0.18-0.20	7.9-8.4	<4	Low--------	0.55	5	4L
	12-40	0.6-2.0	0.16-0.20	7.9-8.4	<4	Low--------	0.49		
	40-70	0.06-0.2	0.17-0.35	7.9-8.4	4-8	High-------	0.43		

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 13.--SOIL AND WATER FEATURES

[The definitions of "flooding" and "water table" in the Glossary explain terms such as "rare," "brief," "apparent," and "perched." The symbol > means more than. Absence of an entry indicates that the feature is not a concern]

Soil name and map symbol	Hydrologic group	High water table			Risk of corrosion	
		Depth	Kind	Months	Uncoated steel	Concrete
		Ft				
100 Antho	B	>6.0	---	---	High	Low.
101*:						
Antho	B	>6.0	---	---	High	Low.
Superstition	A	>6.0	---	---	High	Low.
102*. Badland						
103 Carsitas	A	>6.0	---	---	High	Low.
104*. Fluvaquents						
105 Glenbar	B	>6.0	---	---	High	Moderate.
106 Glenbar	B	3.0-5.0	Perched	Jan-Dec	High	Moderate.
107* Glenbar	B	>6.0	---	---	High	High.
108, 109 Holtville	C	>6.0	---	---	High	Low.
110 Holtville	C	3.0-5.0	Perched	Jan-Dec	High	Moderate.
111*:						
Holtville	C	>6.0	---	---	High	Low.
Imperial	D	>6.0	---	---	High	Moderate.
112 Imperial	D	>6.0	---	---	High	Moderate.
113 Imperial	D	3.0-5.0	Perched	Jan-Dec	High	High.
114 Imperial	D	3.0-5.0	Perched	Jan-Dec	High	Moderate.
115*:						
Imperial	D	3.0-5.0	Perched	Jan-Dec	High	Moderate.
Glenbar	B	3.0-5.0	Perched	Jan-Dec	High	Moderate.
116*:						
Imperial	D	>6.0	---	---	High	Moderate.
Glenbar	B	>6.0	---	---	High	Moderate.
117 Indio	B	>6.0	---	---	High	Low.
118 Indio	B	3.0-5.0	Perched	Jan-Dec	High	Low.

See footnote at end of table.

TABLE 13.--SOIL AND WATER FEATURES--Continued

Soil name and map symbol	Hydrologic group	High water table			Risk of corrosion	
		Depth	Kind	Months	Uncoated steel	Concrete
		Ft				
119*:						
Indio	B	>6.0	---	---	High	Low.
Vint	B	>6.0	---	---	High	Low.
120* Laveen	B	>6.0	---	---	High	Low.
121 Meloland	C	>6.0	---	---	High	Moderate.
122 Meloland	C	2.0-3.0	Perched	Jan-Dec	High	Moderate.
123*:						
Meloland	C	2.0-3.0	Perched	Jan-Dec	High	Moderate.
Holtville	C	3.0-5.0	Perched	Jan-Dec	High	Moderate.
124 Niland	C	>6.0	---	---	High	Moderate.
125 Niland	C	2.0-3.0	Perched	Jan-Dec	High	Moderate.
126, 127 Niland	C	>6.0	---	---	High	Moderate.
128*:						
Niland	C	2.0-3.0	Perched	Jan-Dec	High	Moderate.
Imperial	D	3.0-5.0	Perched	Jan-Dec	High	Moderate.
130, 131, 132, 133, 134 Rositas	A	>6.0	---	---	High	Low.
135 Rositas	A	3.0-5.0	Perched	Jan-Dec	High	Moderate.
136, 137 Rositas	A	>6.0	---	---	High	Low.
138*:						
Rositas	A	>6.0	---	---	High	Low.
Superstition	A	>6.0	---	---	High	Low.
139 Superstition	A	>6.0	---	---	High	Low.
140*:						
Torriorthents						
Rock outcrop						
141*:						
Torriorthents						
Orthids						
142 Vint	B	3.0-5.0	Perched	Jan-Dec	High	Moderate.
143 Vint	B	>6.0	---	---	High	Low.

See footnote at end of table.

TABLE 13.--SOIL AND WATER FEATURES--Continued

Soil name and map symbol	Hydrologic group	High water table			Risk of corrosion	
		Depth	Kind	Months	Uncoated steel	Concrete
		Ft				
144*:						
Vint	B	3.0-5.0	Perched	Jan-Dec	High	Moderate.
Indio	B	3.0-5.0	Perched	Jan-Dec	High	Low.

* See description of the map unit for composition and behavior characteristics of the map unit.

TABLE 14.--CLASSIFICATION OF THE SOILS

[An asterisk in the first column indicates that the soil is a taxadjunct to the series. See text for a description of those characteristics of the soil that are outside the range of the series]

Soil name	Family or higher taxonomic class
*Antho	Coarse-loamy, mixed (calcareous), hyperthermic Typic Torrifluvents
Carsitas	Mixed, hyperthermic Typic Torripsamments
Glenbar	Fine-silty, mixed (calcareous), hyperthermic Typic Torrifluvents
Holtville	Clayey over loamy, montmorillonitic (calcareous), hyperthermic Typic Torrifluvents
Imperial	Fine, montmorillonitic (calcareous), hyperthermic Vertic Torrifluvents
Indio	Coarse-silty, mixed (calcareous), hyperthermic Typic Torrifluvents
Laveen	Coarse-loamy, mixed, hyperthermic Typic Calciorthids
Meloland	Coarse-loamy over clayey, mixed (calcareous), hyperthermic Typic Torrifluvents
Niland	Sandy over clayey, mixed (calcareous), hyperthermic Typic Torrifluvents
Rositas	Mixed, hyperthermic Typic Torripsamments
Superstition	Sandy, mixed, hyperthermic Typic Calciorthids
Vint	Sandy, mixed, hyperthermic Typic Torrifluvents

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SOIL LEGEND

SYMBOL	NAME
100	Antho loamy fine sand
101	Antho-Superstition complex
102	Badland
103	Carsitas gravelly sand, 0 to 5 percent slopes
104	Fluvaquents, saline
105	Glenbar clay loam
106	Glenbar clay loam, wet
107	Glenbar complex
108	Holtville loam
109	Holtville silty clay
110	Holtville silty clay, wet
111	Holtville-Imperial silty clay loams
112	Imperial silty clay
113	Imperial silty clay, saline
114	Imperial silty clay, wet
115	Imperial-Glenbar silty clay loams, wet, 0 to 2 percent slopes
116	Imperial-Glenbar silty clay loams, 2 to 5 percent slopes
117	Indio loam
118	Indio loam, wet
119	Indio-Vint complex
120	Laveen loam
121	Meloland fine sand
122	Meloland very fine sandy loam, wet
123	Meloland and Holtville loams, wet
124	Niland gravelly sand
125	Niland gravelly sand, wet
126	Niland fine sand
127	Niland loamy fine sand
128	Niland-Imperial complex, wet
129	Pits
130	Rositas sand, 0 to 2 percent slopes
131	Rositas sand, 2 to 5 percent slopes
132	Rositas fine sand, 0 to 2 percent slopes
133	Rositas fine sand, 2 to 9 percent slopes
134	Rositas fine sand, 9 to 30 percent slopes
135	Rositas fine sand, wet, 0 to 2 percent slopes
136	Rositas loamy fine sand, 0 to 2 percent slopes
137	Rositas silt loam, 0 to 2 percent slopes
138	Rositas-Superstition loamy fine sand
139	Superstition loamy fine sand
140	Torriorthents-Rock outcrop complex, 5 to 60 percent slopes
141	Torriorthents and Orthids, 5 to 30 percent slopes
142	Vint loamy very fine sand, wet
143	Vint fine sandy loam
144	Vint and Indio very fine sandy loams, wet

CONVENTIONAL AND SPECIAL SYMBOLS LEGEND

CULTURAL FEATURES

BOUNDARIES

- National
- State
- County, parish, municipo
- Reservation, national or state
- Small park, cemetery, airfield, airport, floodpool, etc — Davis Airstrip; Cem; FLOOD POOL LINE
- Land grant
- Limit of soil survey (labeled)

TOWNSHIP OR RANGE LINE, U S LAND SURVEY

SECTION LINE, U S LAND SURVEY

TOWNSHIP LINE, NOT U S LAND SURVEY

SECTION LINE, NOT U S LAND SURVEY

SECTION CORNER: Found - Indicated

BOUNDARY MONUMENT

ROADS

- Divided, hard surface
- Primary highway, hard surface
- Secondary highway, hard surface
- Light-duty road, hard or improved surface
- Unimproved road
- Trail

ROAD EMBLEMS & DESIGNATIONS

- Interstate — 70
- Federal — 410
- State — 52
- County, farm or ranch — 378

RAILROADS

- Single track
- Multiple track

LEVEES

- Without road
- With road
- With railroad

POWER TRANSMISSION LINE

LANDMARK LINE (labeled as to type) — TELEPHONE

OVERPASS - UNDERPASS

DAMS

- Large dam
- Small dam; masonry - earth — w; water

MISCELLANEOUS MAP FEATURES

- Buildings (dwelling, farmstead, etc.)
- School - Church
- Buildings (barn, warehouse, etc.)
- Tanks; oil, water (labeled only if water) — Water Tank
- Wells other than water (labeled as to type) — Oil; Gas
- U S mineral or location monument - Prospect
- Quarry - Gravel Pit
- Mine shaft - Tunnel or cave entrance
- Campsite - Picnic area
- Located or landmark object - Windmill
- Foreshore flat
- Horizontal control station
- Vertical control station — BM × 671 × 672
- Road fork - Section corner with elevation — 429 +58
- Checked spot elevation — × 5970

WATER FEATURES

DRAINAGE

- Perennial, double line
- Perennial, single line
- Intermittent
- Drainage end

CANALS OR DITCHES

- Double line — CANAL
- Drainage and/or irrigation

LAKES, PONDS AND RESERVOIRS

- Perennial — w; water
- Intermittent — int; intermittent

MISCELLANEOUS WATER FEATURES

- Land subject to controlled inundation
- Marsh or swamp
- Aqueduct tunnel

475691

- Spring
- Wet spot

SPECIAL SYMBOLS FOR SOIL SURVEY

SOIL DELINEATIONS AND SYMBOLS — 102; 108

ESCARPMENTS

- Bedrock (points down slope)
- Other than bedrock (points down slope)

SHORT STEEP SLOPE

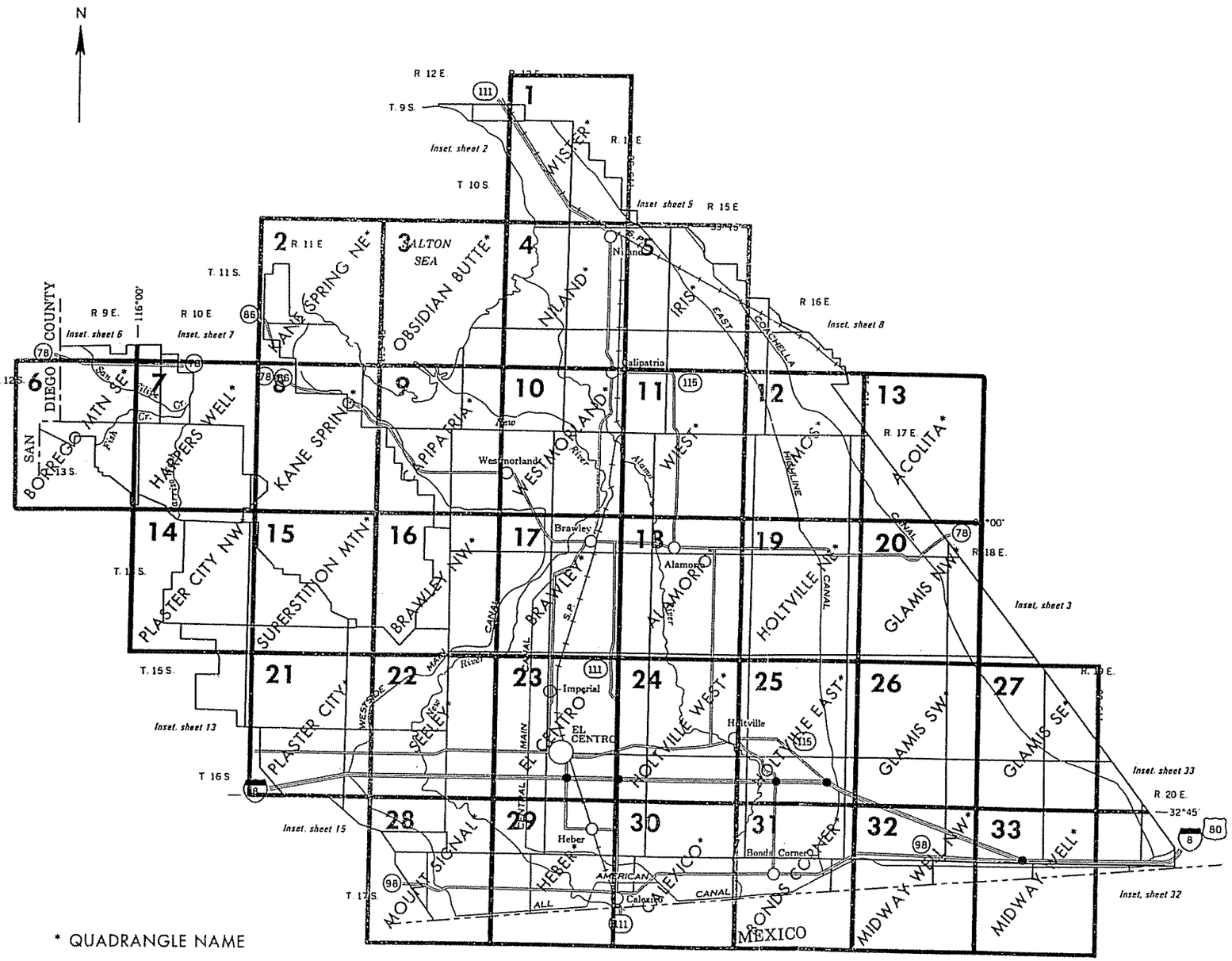
GULLY

DEPRESSION OR SINK

SOIL SAMPLE SITE — S

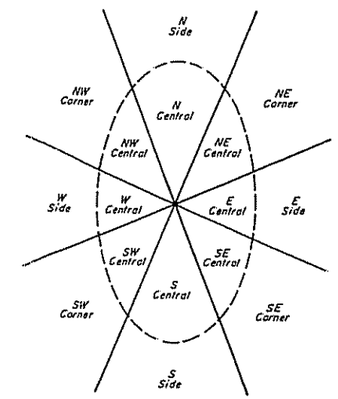
MISCELLANEOUS

- Blowout
- Clay spot
- Gravelly spot
- Gumbo, slick or scabby spot (sodic)
- Dumps and other similar non soil areas
- Prominent hill or peak
- Saline spot
- Severely eroded spot
- Slide or slip (tips point up slope)
- Stony spot - Very stony spot
- Rock outcrop
- Sandy spot
- Salt pond — S. P.
- Sewer lagoon — S. L.
- Borrow pit — B. P.



* QUADRANGLE NAME

INDEX TO LOCATIONS ON MAP SHEETS



LOCATION OF PROFILES REPRESENTATIVE OF SOIL SERIES

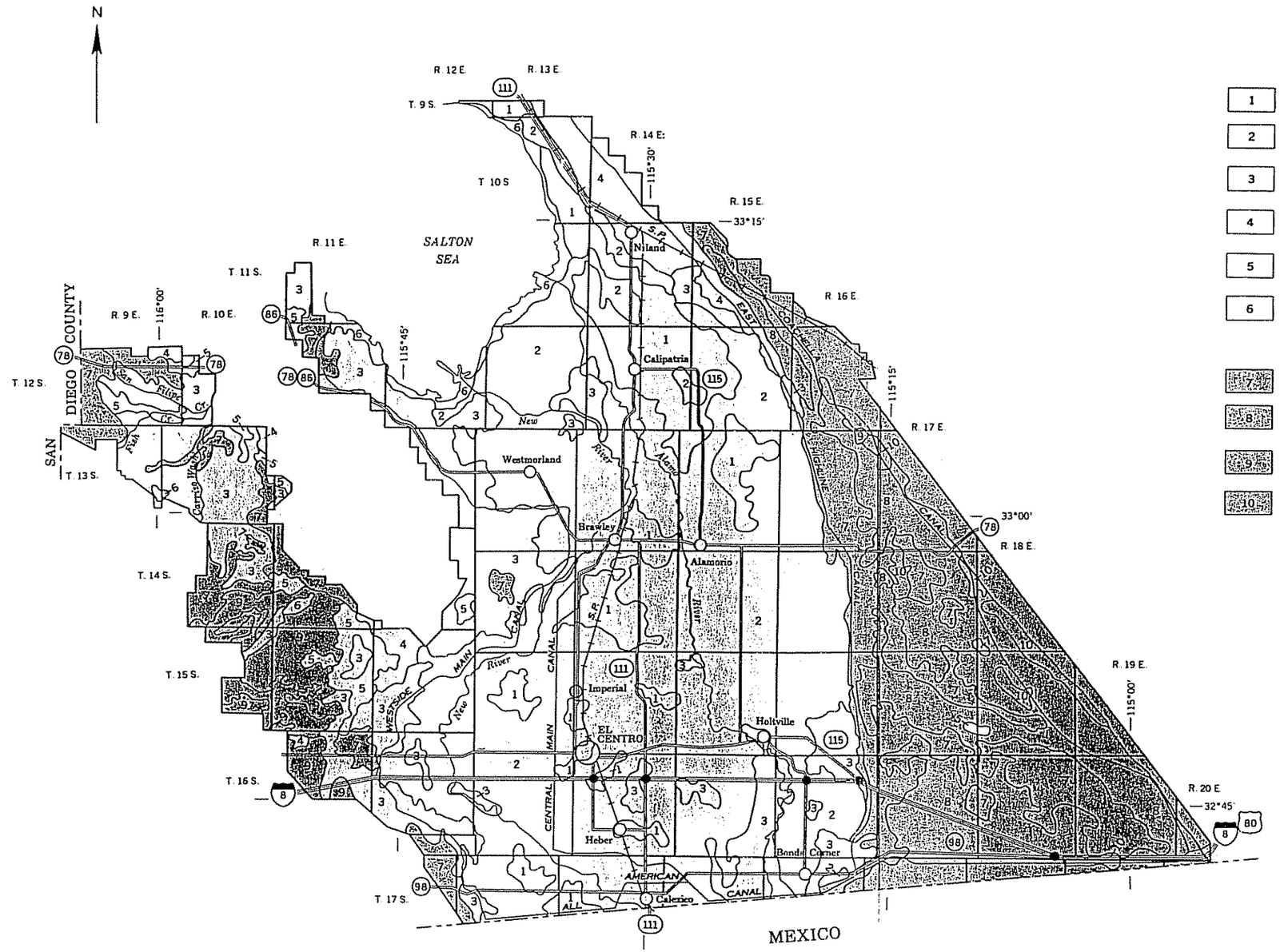
Series	Map-Sheet	Location
Antho	20	E Side
Carsitas	1	SE Corner
Glenbar	18	NW Central
Holtville	9	E Central
Imperial	10	SE Corner
India	28	NE Corner
Laveen	13	Inset
Meloland	10	SE Corner
Niland	1	SE Corner
Rositas	33	S Central
Superstition	32	E Central
Vint	25	S Central

INDEX TO MAP SHEETS

IMPERIAL COUNTY, CALIFORNIA, IMPERIAL VALLEY AREA

Scale 1: 443,520

1 0 1 2 3 4 5 6 7 MILES



MAP UNITS*

WELL DRAINED TO POORLY DRAINED SOILS DOMINANTLY IN THE LACUSTRINE BASIN

1	Imperial: Nearly level. moderately well drained silty clay in the lacustrine basin
2	Imperial-Holtville Glenbar: Nearly level, moderately well drained and well drained silty clay. silty clay loam, and clay loam in the lacustrine basin
3	Meloland-Vint-Indio: Nearly level, well drained fine sand, loamy very fine sand, fine sandy loam, very fine sandy loam. loam, and silt loam in the lacustrine basin and on low alluvial fans
4	Niland-Imperial: Nearly level, moderately well drained gravelly sand, fine sand, silty clay. and silty clay loam at the edges of the lacustrine basin
5	Glenbar-Imperial: Nearly level, well drained and moderately well drained silt loam, clay loam, silty clay loam. sand. fine sand, and silty clay dominantly in basins on West Mesa
6	Fluvaquents: Nearly level. poorly drained soils of undifferentiated texture in the lacustrine basin

WELL DRAINED AND SOMEWHAT EXCESSIVELY DRAINED SOILS DOMINANTLY ON EAST MESA AND ON WEST MESA

7	Rositas: Nearly level to moderately steep, somewhat excessively drained sand. fine sand. and silt loam in alluvial basins and on fans and sandhills
8	Rositas-Superstition: Nearly level, somewhat excessively drained loamy fine sand or fine sand on alluvial terraces and fans
9	Antho-Superstition-Rositas: Nearly level, well drained and somewhat excessively drained fine sand and loamy fine sand in alluvial basins and on alluvial fans and terraces
10	Holtville-Antho: Nearly level, well drained loamy fine sand. loam. silty clay loam. and silty clay on alluvial terraces

*Texture refers to surface layer

Compiled 1979

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
UNIVERSITY OF CALIFORNIA AGRICULTURAL EXPERIMENT STATION

GENERAL SOIL MAP

IMPERIAL COUNTY, CALIFORNIA, IMPERIAL VALLEY AREA

Scale 1: 443,520

1 0 1 2 3 4 5 6 7 MILES

Each area outlined on this map consists of more than one kind of soil. The map is thus meant for general planning rather than a basis for decisions on the use of specific tracts.