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SURVEY OF HIGHWAY CONSTRUCTION MATERIALS
IN THE TOWN OF JERICO, CHITTENDEN COUNTY, VERMONT

prepared by

Geologic Section, Materials Division
Vermont Department of Highways

in cooperation with

United States Department of Commerce
Bureau of Public Roads

Montpelier, Vermont

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Acknowledgments

The work of this project was greatly implemented by the cooperation and assistance of many groups and individuals. The following were particularly helpful in carrying out the project's objectives:

1. Various departments and individuals of the Vermont State Department of Highways, notably the Planning and Mapping Division and the Highway Testing Laboratory.
2. Professor D. P. Stewart of Miami University, Oxford, Ohio.
3. Professor Charles G. Doll, Vermont State Geologist, University of Vermont, Burlington, Vermont.
4. The United States Department of Commerce, Bureau of Public Roads.

History

The Materials Survey Project was formed in 1957 by the Vermont State Department of Highways with the assistance of the United States Bureau of Public Roads. Its prime objective was to compile an inventory of highway construction materials in the State of Vermont. Prior to the efforts of the personnel of the Survey as described in this and other reports, searches for highway construction materials were conducted only as the immediate situation required. Thus, only limited areas were surveyed and no over-all picture of material resources was available. Highway contractors or resident engineers are usually required to locate the materials for their respective projects and have samples tested by the Highway Testing Laboratory. The additional cost of exploration for construction material is passed on to the State in the form of higher construction costs. The Materials Survey

Project was established to minimize or eliminate this factor by enabling the State and its contractors to proceed with information on material sources available beforehand. Prior knowledge of locations of suitable material is an important factor in planning future highways.

The sources of construction materials are located by this Project through ground reconnaissance, study of maps and aerial photographs, and geological and physiographic interpretation. Maps, data sheets, and work sheets for reporting the findings of the Project were designed, keeping in mind their intended use. These maps and data sheets were devised to furnish information of particular use to the contractor or construction man. For maximum benefit, the maps, data sheets, and this report should be studied simultaneously.

Inclosures

Included in this folder are two surface-geology maps; one defining the location of tests conducted on bedrock sources, the other defining the location of tests conducted on granular materials. These maps are derived from 15 minute quadrangles of the United States Geological Survey enlarged to 1:31250 or 1" = 2604'. Delineated on the Bedrock Map are the various rock types of the area. This information was obtained from numerous sources; i.e., Vermont Geological Society Bulletins, Vermont State Geologist Reports, United States Geological Survey Bedrock Maps, Centennial Geological Map of Vermont, as well as other references.

The granular materials map depicts areas covered by various types of glacial deposits (outwash, moraines, kames, kame terraces, etc.) by which potential sources of gravel and sand may be recognized. This information

was obtained primarily from a survey being conducted by Professor D. P. Stewart of Miami University, Oxford, Ohio, who, since 1956, has been mapping the glacial features of the State of Vermont during the summer months. Further information was obtained from the Soil Survey (Reconnaissance) of Vermont, conducted by the Bureau of Chemistry and Soils of the United States Department of Agriculture, and from Vermont Geological Survey Bulletins, United States Geological Survey Quadrangles, aerial photographs, and other sources. On both maps the areas tested are represented by Identification Numbers. Several tests are usually conducted in each area represented by an Identification Number, the number of such tests being more or less arbitrarily determined either by the character of the material tested or by the topography.

Also included in this folder are Data Sheets for both the Bedrock and Granular Materials Survey which contain detailed information for each test conducted by the Project as well as information obtained from other sources, including an active card file compiled by the Highway Testing Laboratory. It was readily apparent that the latter information was gathered over a period of years by many persons and consequently lacks the organized approach and detail required for effective use. The information in the cards varied widely in completeness. Transfer of information from the cards to the Data Sheets was made without elaboration or verification. The locations of the deposits listed in the card files have also been plotted on the maps. However, caution should be exercised wherever this information appears incomplete. Some cards in the file were not used because the information on the location of the deposit was incomplete or unidentifiable. This project does not assume responsibility for the information taken from the card files.

Work Sheets containing more detailed information of each test including a detailed sketch of each Identification Number Area are on file in the office headquarters of this Project, together with the respective Laboratory Reports.

Location

The Town of Jericho is located in Chittenden County in the northwest corner of the state. It is bounded on the north by the Towns of Essex, Westford and Underhill, on the east by the Town of Bolton, on the south by the Town of Richmond and on the west by the Winooski River. It is in the western foothills of the Green Mountains, a region characterized by pronounced rounded ridge and wide, level stream valleys. The maximum elevation is over 1900 feet near the eastern edge of the town. The Lee River flows westward through the central portion, joining the Browns River at Jericho Village, the Browns River thence flowing north to the Lamotte River. Mill Brook flows westward through the southern section of the town to the Winooski River.

Procedure for Rock Survey

The routine employed by the Project in the survey of possible sources of rock for highway construction is divided into two main stages; the office investigation and field investigation. The first is conducted primarily during the winter months and comprises the mapping of rock types as indicated in various reference sources. Many different sources of information were utilized, as indicated in the Bibliography. These references differ considerably in dependability due to new developments and studies contributing to the obsolescence of a number of reports. In addition, the results of samples taken by other individuals are analyzed and the location in which

these samples were taken is mapped when possible. In other words, as complete a correlation as possible is made of all the information available concerning the geology of the area under consideration.

The second stage of the investigation is begun in the field by making a cursory preliminary survey over the entire area. The information obtained in this survey, together with the information assimilated in the first stage of the investigation is employed to determine the areas in which the testing and sampling will be concentrated. When a promising source is encountered as determined not only by rock type but also by volume, accessibility, and the existence of a good working face, chip samples are taken with a hammer and submitted to the Highway Testing Laboratory for testing by the Deval Method (AASHTO, T-3). It is kept in mind that samples taken by the chip method are often in the weathered zone of the outcrop and consequently may show a less satisfactory test result than the fresh material deeper in the body of the rock structure. When deemed necessary, further samples are taken by drilling to a depth of approximately 3 feet and blasting across the strike or trend of the outcrop. When the material is uniform, and satisfactory tests result from the chip samples, no further drilling, blasting, or sampling is done and the material source is included as being satisfactory.

Discussion of Rock and Rock Sources

It will be observed that the information on the surface-geology bedrock map in regard to rock type is simplified. For a more detailed description of the respective rock formations, a summary is included in this report. It is apparent from this summary that each formation may not be composed of one distinct rock

type, but may be a complex mixture of rock types blending into one another. For this reason, the data sheets may describe the rock tested as differing from the designation on the map.

The rock types of the Town of Jericho consisted almost entirely of schist which is not acceptable for construction purposes. Small sporadic outcrops of greenstone appear in the schist. A very small area of impure ^{graywacke} ~~quartzite~~ in the eastern edge of the town near the Winooski River was sampled. However, it proved to be too small in area and too variable to be of commercial value.

Procedure for Sand and Gravel Survey

The method employed by the Project in the survey of possible sources of sand and gravel for highway construction is divided into two main stages; office investigation and field investigation. The office investigation is conducted primarily during the winter months and comprises the mapping of possible potentially productive areas as indicated from various references. Of these references, the survey of glacial deposits mapped by Professor Stewart proves to be valuable, particularly when used in conjunction with other references such as soil type maps, aerial photographs and United States Geological Survey quadrangles. The last two are used in recognizing and locating physiographic features indicating glacial deposits, and in studying drainage patterns. In addition, the location of existing pits, when known are mapped. The locations in which samples were taken by other individuals are noted and mapped, when possible.

The second stage of the investigation is begun in the field by making a cursory preliminary survey over the entire area noting areas which show physiographic features giving evidence of glacial or fluvial deposits. These locations

are later examined by digging test pits with a backhoe at a depth of approximately 11 feet and again sampling the material. The samples are submitted to the Highway Testing Laboratory where they are tested for gradation and stone wear, the latter by the Deval Method (AASHO T-4-35).

Discussion of Sand and Gravel Deposits

The granular deposits of the Town of Jericho, although confined to the lower elevations, are very extensive. They are the result of glacial, fluvial, and lacustrine deposition. It is possible that sources may be found other than those tested by the survey.

Summary of Rock Formation in the Town of Jericho

Underhill Formation - silvery, gray-green quartz-sericite-albite-chlorite-biotite schist containing abundant lenticular segregations of granular white quartz; locally quartz-sericite-albite-chlorite phyllite.

Greenstone - a member of the Underhill Formation--varied composition including albite-chlorite-epidote-calcite and sericite-magnetite-chlorite-clinozoisite rocks.

Pinnacle Formation - schistose graywacke, gray to buff, commonly striped, quartz-albite-sericite-biotite-chlorite rock predominates; quartz-cobble and boulder conglomerate is common, chiefly near base.

Tibbitt Hill volcanic member of the Pinnacle Formation - albite-actinolite-chlorite-epidote greenstone; locally pillowed and vesicular.

Ottawaquechee Formation - quartz-muscovite-garnet-chlorite-biotite schist, rusty carbonaceous schist, amphibolite and schistose quartzite; schist locally contains porphyroblasts of staurolite and kyanite.

Glossary of Selected Geologic Terms

Alluvial - Pertaining to material carried or laid down by running water.

Bioherm - An organic reef.

Breccia - A rock consisting of consolidated angular rock fragments larger than sand grains.

Calcareous - Consisting of or containing calcium carbonate. As combined with rock names indicates a considerable proportion, say 50 percent, of calcium carbonate together with an equal or predominant amount of the material indicated by the rock name.

Delta - A predominantly alluvial deposit built out by a stream into the sea or other body of water. Usually having the typical form of the Greek letter delta.

Dip - The angle which a stratum, sheet, vein, fissure or similar geological feature makes with a horizontal plane, as measured in a plane normal to the strike.

Dolomite - As used in this report it applies to rocks approximating the mineral dolomite in composition or consisting predominantly of the mineral dolomite. Mineralogically, dolomite is a mineral of definite chemical composition, $\text{Ca Mg}(\text{CO}_3)_2$; carbon dioxide 47.7, lime 30.4, and magnesia 21.9 percent.

Drift - Rock material of any sort deposited in one place after having been moved from another; as river drift. Specif., a deposit of earth, sand, gravel, and boulders, transported by glaciers (glacial drift) or by running water emanating from glaciers (fluvio-glacial drift) and distributed chiefly over large portions of North America and Europe, esp. in the higher latitudes.

Dune - A heap of sand or other material accumulated by wind. The outward form may be that of a hill or a ridge.

Fluvial - Pertaining to streams or stream action.

Geode - As applied in this report, a rock cavity lined with crystals that are not separable from the surrounding rock.

Gneiss - A term originally applied to a more or less banded metamorphic rock with the mineral composition of granite. As now employed it designates a foliated metamorphic rock with no specific composition implied, but having layers that are mineralogically unlike and consisting of interlocking mineral particles that are mostly large enough to be visible to the eye. Usually gneiss displays an alteration of granular minerals and tabular or schistose minerals with the rock, tending to split along the planes where tabular or schistose minerals predominate.

Graywacke - An old rock name loosely used with a variety of related meanings. Some graywackes are massive, others show marked graded bedding and are associated with slate. In view of the diversity of usage, the term probably should not be used without specific definition.

Kame - A conical hill of stratified drift, deposited at a glacial terminus by glacial streams flowing in or on the ice.

Kame Terrace - An accumulation of stratified drift laid down chiefly by streams between a glacier and an adjacent valley wall.

Lacustrine - Pertaining to lakes.

Limestone - A bedded sedimentary deposit consisting chiefly of calcium carbonate. The most important and widely distributed of the carbonate rocks. The percentage of calcium carbonate ranges from 40 percent to more than 98 percent. Common impurities are clay and sand.

Marine Deposits - Sedimentary deposits laid down in the sea.

Megascopic - Characters of a material that can be perceived by the unaided eye.

Metamorphic Rocks - Rocks that owe their distinctive characters to the transformation of pre-existing rocks, either through intense heat or pressure or both.

Moraine - An accumulation of drift with an initial topographic expression of its own built within a glaciated region chiefly by the direct action of glacier ice.

Normal - Perpendicular to a surface.

Outwash - Stratified drift that is stream built beyond the glacier; laid down by meltwater streams issuing from the face of the glacier ice.

Pleistocene - The first epoch of the Quaternary period, in general including the time and deposits of the last great glacial epoch, marked by repeated glacial advances and world-wide fluctuations of the sea level.

Quartzite - A firm, compact rock composed of grains of quartz so firmly united that fracture takes place across the grains instead of around them. A metamorphosed sandstone.

Schist - A crystalline rock with a secondary foliation or lamination based on parallelism of platy or needle-like grains. The name refers to the tendency to split along the foliation.

Schistosity - The property of a foliated rock by which it can be split into thin layers or flakes. The property of splitting may be due to alternating layers of differing mineral composition or to preferred orientation and parallelism of cleavage planes of the mineral.

Siliceous - Containing or pertaining to silica (Silicon dioxide, SiO_2) or partaking of its nature.

Slate - A homogeneous, metamorphic rock, so fine-grained that no mineral grains can be seen. Slate splits with a foliation so perfect that it yields slabs having plane smooth surfaces.

Strike - The direction of a line formed by the intersection of a stratum with a horizontal plane.

Surface-Geology Map - A map showing areas of outcrop of geologic formations, both consolidated rocks and the unconsolidated sediments. Its scale is large enough that pits and quarries can be accurately shown and indexed.

Synclinal - Formed by strata dipping toward a common line or plane.

Terrace - A plain, natural or artificial, from which the surface descends on one side and ascends on the other. Terraces are commonly long and narrow, and they border seas, lakes, or interior valleys. A terrace may be built by deposition of sediment from water, it may be cut by the breaking of waves on a shore or the sweeping of currents, or it may be formed by the dislocation of rocks in crustal movements. The descent from river terraces toward the river may be very abrupt, especially in arid regions, the ascent on the other side may be only that of an extensive alluvial slope.

Till - Unsorted drift, or the mixture of rock fragments and fine materials left by melting glaciers.

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JERICHO GRANULAR DATA SHEET NO. 1

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Exist-ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
1	1	1959	—	—	No		—	Not	Sampled		—	—	—	Owner: Vincent Farrell Test #1 on top of knoll southeast of brook, 0.3 mile east on abandoned road north of house. Till. Test #2 on knoll 0.15 mile east of house. Till.
	2	1959	—	—	No		—	Not	Sampled		—	—	—	
2	1	1959	1-7	0-1	No		—	Not	Sampled		—	—	—	Owner: Norman Bishop. Test #1 in field west of town road opposite Farrell home. Fine sand & stone. Test #2 southeast of Test #1. Fine sand with fine sand bottom. Test #3 west of Test #2 & southwest of Test #1. Fine sand with fine sand bottom.
	2	1959	1-6.5	0-1	No		—	Not	Sampled		—	—	—	
	3	1959	1-7	0-1	No		—	Not	Sampled		—	—	—	
3	1	1959	1-3	0-1	No		--	34.2	4.0	1	3	14.0	Gravel	Owner: Norman Bishop. Test #1 preliminary sample taken with hand shovel. Gravel with sand bottom. Acceptable for Item 201, sub-base of gravel. Test #2 southeast of Test #1. Gravel over sand. Sand portion was sampled. Acceptable for Item 202, sub-base of sand.
	2	1959	4-9	0-4	No		100	93.8	11.3	1.9	3	—	Sand	

JERICHO GRANULAR DATA SHEET NO. 2

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Exist-ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
3	3239	1959	1.5-7.5	0-1.5	No		100	96.4	18.3	2.9	3	—	Gran. Borrow (Sand)	Test #3 west of Test #2 & southwest of Test #1. Sand with sand bottom. Fails on gradation for Item 202, sand for sub-base. Has 18.3% passing #100 mesh. Acceptable for Item 102A, granular borrow.
	4	1959	0.5-9	0-0.5	No		100	93.5	8.4	0.9	1	—	Sand	Test #4 at north side of road to Vermont Research Forest. Sand with sand bottom. Acceptable for Item 202, sub-base of sand.
	5	1959	1-5	0-1	No		100	96.9	12.6	1.9	2	—	Sand	Test #5 west of Test #4 at north side of road. Sand with sand bottom. Acceptable for Item 202, sub-base of sand.
4	1	1959	1-6	0-1	No		—	Not	Sampled	—	—	—	—	Owner: Demore. A moderate-sized area containing knolls of fine sand & silt. Test #1 on knoll northeast of house. Fine sand & silt with similar material in bottom.
	2	1959	1-8	0-1	No		—	Not	Sampled	—	—	—	—	Test #2 west of Test #1 on ridge west of fence. Fine sand & silt with similar material in bottom.

JERICHO GRANULAR DATA SHEET NO? 3

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Exist-ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
5	1	1959	4-9	0-4	No		100	85.9	12.0	1.5	1	—	Sand	Owner: Thompson. Test #1 in field southwest of town road. Material from 0-4' fine sand. Sand with sand bottom. Acceptable for Item 202, sub-base of sand.
	2	1959	0.5-9	0-0.5	No		—	Not	Sampled	—	—	—	—	Test #2 southwest of Test #1 in extreme southwest corner of field. Very fine sand with fine sand bottom.
6	1	1959	0.5-7	0-0.5	No		—	53.5	4.0	0.75	2	19.8	Gravel	Owner: Thompson. Test #1 in northeast corner of field near fence. Gravel with clay bottom. Acceptable for Item 201, sub-base of gravel.
	2	1959	0.5-4	0-0.5	No		—	Not	Sampled	—	—	—	—	Test #2 several hundred feet west of Test #1. Fine sand & top soil.
	3	1959	0.5-5	0-0.5	No		—	Not	Sampled	—	—	—	—	Test #3 west of Test #2 at base of terrace. 0-0.5' gravel, 0.5-5' blue clay.
7	1	1959	1-4	0-1	No		—	45.0	17.0	5.5	2	20.2	Gran. Borrow (Grav)	Owner: Robert Ayers. Shallow limited area of river gravel. Test #1 on south bank of Mill Brook 1500' west of bridge. Gravel with

JERICHO GRANULAR DATA SHEET NO. 4

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over- Burden (ft)	Exist- ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	2	1959	3-6	0-3	No		—	39.3	5.0	2.0	3½	19.4	Gravel	gravel bottom. Fails on gradation for Item 201, sub-base of gravel. Has 17% passing #100 mesh. Acceptable for Item 102A, granular borrow. Test #2 north of brook 200' west of bridge. Gravel with gravel & water in bottom. Resistivity indicated gravel to a depth of 24'. Acceptable for Item 201, sub-base of gravel.
	3	1959	3-6	0-3	No		—	Not	Sampled	—	—	—	—	Test #3 150' northwest of Test #2 at toe of hill. Fine sand & silt with similar material in bottom.
8	1	1959	1-7	0-1	No		100	87.2	6.1	0.8	1½	--	Sand	Owner: Robert Ayers. Test #1 on western extremity of large sand knoll southeast of barn. Knoll extends to east-north-east. Sand with fine sand bottom. Acceptable for Item 202, sub-base of sand.
9	1	1960	4-10.5	0-4	Yes		—	45.9	14.0	2.0	1	24.6	Gravel	Owner: Vermont Agricultural Research Forest. Test #1 in

JERICHO GRANULAR DATA SHEET NO. 5

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Exist-ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs	Remarks
							1½"	#4	#100	#270				
														face of pit. Poorly graded fine sand with stones. Some stones over 6". Acceptable for Item 201, sub-base of gravel.
10	1	1959	1-6	0-1	No		—	Not	Sampled	—	—	—	—	Owner: Fitzsimmons. Area is in Soil Bank & not available. Fine sand, silt, & large stones. Similar material in each test hole. Test #1 on small knoll showing pebbly material on surface. Test #2 several hundred feet north of Test #1. Test #3 north of Test #2 at top of terrace near fence.
	2	1959	1-6.5	0-1	No		—	Not	Sampled	—	—	—	—	
	3	1959	1-5.5	0-1	No		—	Not	Sampled	—	—	—	—	
11	1	1959	1-6.5	0-1	No		100	87.7	0.8	0.4	1 --	--	Sand	Owner: B. J. Mobbs. A large sand ridge extending north & south. Test #1 on bank sloping eastward in northernmost enclosure of Mobbs' property. 0-1' over-burden, 1-6.5' sand, 6.5-8' fine sand. Acceptable for Item 202, sub-base of sand. Test #2 northeast of Test #1 on side of
	2	1959	0.5-4.5	0-0.5	No		—	Not	Sampled	—	—	—	—	

JERICHO GRANULAR DATA SHEET NO. 6

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Exist-ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	3	1959	1-5	0-1	No		—	Not	Sampled	—	—	—	—	bank sloping south- eastward. Sand with fine gravel with fine sand bottom. Test #3 northeast of Test #2 near line fence. Fine sand with fine sand bottom. Test #4 on easterly slope across second wire fence south of Test #1. Fine sand with fine sand bottom. Test #5 across wire fence south of Test #4. Fine sand with fine sand bottom.
	4	1959	1-6	0-1	No		—	Not	Sampled	—	—	—	—	
	5	1959	1-6	0-1	No		—	Not	Sampled	—	—	—	—	
12	1	1960	1-5	0-1	Yes		100	100	58.0	2.5	3	—	Gran. Borrow (Sand)	Owner: E. Wright Fay. Test #1 in north face of pit. Fine sand with fine sand bottom. Fails for Item 202, sub-base of sand. Has 58% passing 100 mesh. Acceptable for Item 102A, granular borrow.
13	1	1959	1.5-3	0-1.5	No		—	54.5	2.0	1.0	2½	26.3%	Gran. Borrow (Grav)	Owner: Arthur C. Brown Test #1 on top of last knoll northwest of house & east of old sand pit. This was a preliminary sample taken with handshovel. Gravel with gravel

JERICHO GRANULAR DATA SHEET NO. 7

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Existing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	2	1959	1.5-8	0-1.5	No		—	69.4	3.0	1.25	2	—	Gran. Borrow (Grav)	bottom. Fails on stone wear for Item 201, sub-base of gravel. Acceptable for Item 102A, granular borrow. Test #2 adjacent to Test #1. 0-1.5' overburden, 1.5-8' sandy gravel, 8-11' fine sand. Insufficient stone for Item 201, sub-base of gravel. Acceptable for Item 102A, granular borrow.
	3	1959	1-9	0-1	Yes		100	97.8	2.9	0.4	1	—	Sand	Test #3 in face of old sand pit west of Test #2. Sand with sand bottom. Acceptable for Item 202, sub-base of sand.
	4	1959	1-8	0-1	No		100	93.5	1.8	0.6	2½	—	Sand	Test #4 on ridge southeast of that on which Test #2 is located. Sand with sand bottom. Acceptable for Item 202, sub-base of sand.
	5	1959	0-3	0	Yes		—	Not	Sampled	—	—	—	—	Test #5 west of Test #3 in bottom of pit. Sand to 1' then silty clay.
	6	1959	1-8	0-1	No		—	Not	Sampled	—	—	—	—	Test #6 on westerly slope southwest of Test #4. Fine sand with fine sand bottom.
	7	1959	1-9	0-1	No		—	Not	Sampled	—	—	—	—	Test #7 on southerly slope south of Test #4

JERICHO GRANULAR DATA SHEET NO. 8

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Exist-ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	8	1959	1-9	0-1	No		100	98.6	7.9	1	2	—	Sand	Fine sand with fine sand bottom. Test #8 on top of knoll behind barn. Sand with sand bottom. Acceptable for Item 202, sub-base of sand.
14	1	1959	1-9	0-1	No		—	43.5	6.0	2.5	3	20.0	Gravel	Owner: Clifford Cole. Test #1 at top of slope midway in field. Gravel with gravel bottom. Acceptable for Item 201, sub-base of gravel.
	2	1959	1-7	0-1	No		—	46.3	3.0	1.5	1½	23.0	Gravel	Test #2 on slope south of Test #1. Gravel with gravel bottom. Acceptable for Item 201, sub-base of gravel. Area limited on north by town road & on south by Mill Brook. Possibly extends to west. Survey resulted in exploitation of source in 1960.
15	1	1960	0-3	0	No		100	84.1	15.0	6.6	1½	—	Gran. Borrow (Sand)	Owner: Arthur Bentley. A very small kame. Test #1 taken on top of knoll. Pebbly sand. Limited volume. Fails for Item 202, sub-base of sand. Has 84.1% passing #4 mesh. Acceptable for Item 102A granular borrow.

JERICHO GRANULAR DATA SHEET NO. 9

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Exist-ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
16	1	1960	2-9	0-2	Yes		—	39.7	3.0	1.75	2	18.6	Gravel	Owner: U. S. Govt. Military Reservation. Test #1 in pit nearest town road. Pit has 23' face. East end of north face is more sandy. Area sampled contains some stones over 6". Gravel with clay at 23'. Acceptable for Item 201, sub-base of gravel. Test #2 in north face of pit east of pit in which Test #1 was taken 0-1' overburden, 1-6.5' gravel, 6.5-11.5' sand. Clay bottom. Some stones over 6". Test 2A represents sampling of gravel portion. Acceptable for Item 201, sub-base of gravel. Test 2B represents sampling of sand portion of Test #2. Acceptable for Item 202, sub-base of sand.
	2A	1960	1-6.5	0-1	Yes		—	38.9	4.0	1.5	3½	18.6	Gravel	
	2B	1960	6.5-11.5	—	Yes		100	88.2	3.2	0.8	1	—	Sand	
17	1	1960	0-25	0	Yes		100	99.6	8.1	0.9	3	—	Sand	Owner: U.S. Govt. Military Reservation. Sand hill beyond firing butts on National Guard K. D. Range. Test #1 on

JERICHO GRANULAR DATA SHEET NO. 10

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Exist-ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
														north face. Stripped. Pebbly sand on surface finer sand on face. Material extends to north. Sand with sand bottom. Acceptable for Item 202, sub-base of sand.
18	1	1959	1.5-9	0-0.5	No		—	25.5	5.0	1.5	2	13.2	Gravel	Owner: Arthur Pratt. Test #1 in abandoned roadway. Gravel with gravel in bottom. Water at 9'. Acceptable for Item 201, sub-base of gravel.
	2	1959	2.5-9	0-2.5	No		—	34.4	5.0	1.75	2½	16.0	Gravel	Test #2 south of Test #1. Gravel with gravel bottom. Water at 9'. Acceptable for Item 201, sub-base of gravel.
	3	1959	1.5-4	0-1.5	No		—	Not	Sampled		—	—	—	Test #3 west of Test #2. Silt with silt bottom.
	4	1959	1.5-5	0-1.5	No		—	Not	Sampled		—	—	—	Test #4 southwest of Test #3. Silt with silt bottom.
19	1	1960	1-4	0-1	No		—	Not	Sampled		—	—	—	Owner: Roy Rounds. A large knoll of promising contour. Contains a loose till with unsorted large stones. Test #1 at base of west side of knoll.

JERICHO GRANULAR DATA SHEET NO. 11

pt. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Exist-ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHTO T-21	Abrasion AASHTO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	1	1960	0.5-7	0-0.5	Yes		—	36.7	4.0	1.5	1½	17.2%	Gravel	<p>Owner: Clifford Wilder</p> <p>A very extensive area with numerous knolls & terraces. Test #1 in face of pit west of barn. Sandy gravel with clay bottom. Gravel very clean, sloughs readily. Acceptable for Item 201, sub-base of gravel.</p> <p>Test #2 80' north of Test #1 & 40' west of barn. Sand & gravel with gravel bottom. Meets gradation requirements for Item 201, sub-base of gravel. Sample does not include sufficient stones to run percent of wear test.</p> <p>Test #3 250' west of Test #2 & 80' east of western edge of terrace. Sand with sand bottom. Fails on gradation for Item 202, sub-base of sand. Has 17.8% passing #100 mesh. Acceptable for Item 102A, granular borrow.</p> <p>Test #4 185' northwest of twin maple trees which are 190' north of Test #3. Test #4</p>
	2	1960	2-8	0-2	No		—	54.4	3.0	1.8	3	—	—	
	3	1960	0.5-10	0-0.5	No		100	99.5	17.8	1.8	1	—	Gran. Borrow (Sand)	
	4	1960	0.5-9	0-0.5	No		100	89.8	15.0	2.4	2	—	Sand	

JERICHO GRANULAR DATA SHEET NO. 12

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Exist-ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	5	1960	0.5-6.5	0-0.5	No		—	30.8	12.0	5.6	3	16.4%	Gran. Borrow (Grav)	80' northwest of old pit & 110' east of edge of terrace. 0-0.5' overburden, 0.5-3' pebbly sand, 3-5' sand, 5-7' fine sand, 7-9' sand. Acceptable for Item 202, sub-base of sand. Test #5 265' northeast of Test #4 & 115' west of stone wall. Dirty gravel with boulders. Many stones over 6". Same material in bottom. Fails on gradation for Item 201, sub-base of gravel. Has 5.6% passing #270 mesh. Acceptable for Item 102A, granular borrow.
	6	1960	0.5-5	0-0.5	No		—	35.6	4.0	1.3	3	13.4%	Gravel	Test #6 north of Test #4 & adjacent to rock pile. 180' east of beaver pond & 230' south of drainage ditch. Interbedded sand & gravel. Acceptable for Item 201, sub-base of gravel.
	7	1960	0.5-10	0-0.5	No		100	81.4	3.2	0.5	2½	—	Gran. Borrow (Sand)	Test #7 on knoll north of Test #6 & north of drainage ditch. Stony sand with stony sand bottom. Fails on gradation for Item 202,

JERICHO GRANULAR DATA SHEET NO. 13

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Existing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1 1/2"	#4	#100	#270				
	8	1960	0.5-8	0-0.5	No		—	36.9	5.0	2.3	3	15.4%	Gravel	sub-base of sand. Has 81.4% passing #4 screen. Acceptable for Item 102A, granular borrow. Test #8 500' east of Test #7, 250' north of drainage ditch to south & 285' south of drainage ditch to north. Clean sand & gravel interbedded. 0.5-2.5' sand, 2.5-5' gravel, 5-6.5' sand, 6.5-8' gravel. Acceptable for Item 201,
	9	1960	0.5-2	0-0.5	No		—	Not	Sampled	—	—	—	—	sub-base of gravel. Test #9 550' east of Test #8, 100' north of drainage ditch on south, 135' south of drainage ditch on north & 100' west of stone wall. Till with till bottom.
21	1				Yes		—	Not	Sampled	—	—	—	—	Owner: Norman Tillotson. Pit is closed & grassed over. Owner does not wish to exploit material. Records of material formerly taken from pit are on file at Highway Lab.

JERICHO GRANULAR DATA SHEET NO. 14

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Existing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
22	1	1960	1.5-9	0-0.5	No		100	98.1	61.8	8.8	1	—	Gran. Borrow (Sand)	Owner: Donald Rivers. Test #1 on top of northwest extremity of ridge. 0-0.5' overburden, 0.5-1.5' pebbly sand, 1.5-9' (sampled) sand. Failed on gradation for Item 202, sub-base of sand. Has 8.8% passing #270 mesh. Acceptable for Item 102A, granular borrow.
	2A	1960	1-4	0-1	No		—	44.5	8.0	1.5	3	20.6%	Gravel	Test #2 at eastern edge of private road midway between house site & sand pit. 0-1' overburden, 1-4' gravel, 4-9' sand. Test #2A represents sampling of gravel portion. Acceptable for Item 201, sub-base of gravel.
	B	1960	4-9	—	No		100	96.2	24.0	0.96	1½	—	Gran. Borrow (Sand)	Test #2B represents sampling of sand portion. Fails on gradation for Item 202, sub-base of sand. Has 24% passing #100 mesh. Acceptable for Item 102A, granular borrow.
	3	1960	0-6.5	0	Yes		100	99.2	38.6	9.2	1	—	Gran. Borrow (Sand)	Test #3 in bottom of sand pit. 0-6.5' sand, 6.5-10' gravel. Sand fails for Item 202, sub-base of sand. Has 9.2% passing #270 mesh. Acceptable for Item 102A, granular borrow.

JERICHO GRANULAR DATA SHEET NO. 15

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Exist-ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1 1/2"	#4	#100	#270				
	4	1960	0.5-10	0-0.5	No		100	85.0	24.6	7.2	1 1/2	—	Gran. Borrow (Sand)	Test #4 east of Test #3 at base of hill. Fine sand with fine sand bottom. Fails for Item 202, sub-base of sand. Has 7.2% passing #270 mesh. Acceptable for Item 102A, granular borrow.
	5	1960	1-10	0-1	No		100	100	35.0	4.5	2	—	Gran. Borrow (Sand)	Test #5 north of Test #4 at base of hill. Fine sand with fine sand bottom. Fails for Item 202, sub-base of sand. Has 35% passing #100 mesh. Acceptable for Item 102A, granular borrow.
	6	1960	1.5-8	0-1.5	No		—	73.2	2.0	1.0	5	—	Gran. Borrow (Grav)	Test #6 on small knoll east of Test #4. 0-1.5 ft. overburden, 1.5-3.5' gravel, 3.5-8' stony sand. Insufficient stones of certain size grade for wear test. Fails for Item 201, sub-base of gravel. Contains only 26.8% stone. Acceptable for Item 102A, granular borrow.
	7	1960	1-8	0-1	No		—	35.6	4.0	1.25	3	26.2%	Gran. Borrow (Grav)	Test #7 on ridge east of Test #6. 0-1' overburden, 1-4' gravel, 4-5.5' sand, 5.5-8' gravel. A few stones

JERICHO GRANULAR DATA SHEET NO. 16

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Existing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	8	1960	0.5-10	0-0.5	No		61.0	58.7	23.5	4.8	1	—	Gran. Borrow (Grav)	over 6". Fails on stone wear for Item 201, sub-base of gravel, acceptable for Item 102A, granular borrow. Test #8 on ridge 120' southeast of Test #7. Mostly sand with a 3' gravel cap & pockets of gravel at depth. Fails for Item 202, sub-base of sand. Acceptable for Item 102A, granular borrow.
	9	1960	0.5-5.5	0-0.5	No		—	23.2	5.0	1.5	3½	24.6	Gravel	Test #9 280' south of Test #8 on top of ridge & 150' west of fence. 0-0.5' overburden, 0.5-5.5' gravel with many stones over 6". 5.5-8' coarse sand. Acceptable for Item 201, sub-base of gravel.
	10	1960	0.5-9	0-0.5	No		—	25.3	43.0	30.5	5	22.2	Borrow (Grav)	Test #10 165' north of Test #8 & 100' northeast of Test #7. Silty gravel. Fails on gradation for Item 201, sub-base of gravel; Item 102A, granular borrow. Acceptable for Item 102, common borrow.

JERICHO GRANULAR DATA SHEET NO. 17

dent. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over- Burden (ft)	Exist- ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
23	1	1960	1-9	0-1	No		—	See	Remarks		—	—	Borrow (Grav)	Owner: Adrian Hebert. Test #1 in southeast corner of field north of farm road & 100' from fence of Military Reservation. Dirty gravel with fine sand bottom. Sample pro- cessed by Soils Lab. 100% passing 1½" mesh 90.9 " 3/4" 86.4 " 3/8" 80.8 " #4 73.9 " #10 60.3 " #40 33.4 " #200 21.2 " #270 Soil type A-2-4. Fails for Item 102A, granu- lar borrow. Acceptab for Item 102, common borrow.
	2	1960	1-8	0-1	No		—	28.0	12.0	5.0	3½	21.2	Gravel	Test #2 in northwest corner of same field as Test #1, 210' from north end of field & 65' from west edge. Dirty matrix with poorly sorted stones, many over 6". Accept- able for Item 201, sub-base of gravel.
	3	1960	1-8	0-1	No		—	31.2	6.0	3.0	3½	21.0	Gravel	Test #3 265' south of Test #2, 400' west of Test #1, & 100' north of farm. road. Dirty

JERICHO GRANULAR DATA SHEET NO. 18

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Exist-ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	4	1960	0.5-8	0-0.5	No		—	13.7	6.0	2.0	3	24.8	Gravel	gravel with gravel bottom. Material improves with depth. Some soft stones. Acceptable for Item 201, sub-base of gravel. Test #4 in northwest corner of field east of barn south of farm road, 35' south of fence & 100' east of fence. Gravel with gravel bottom. Acceptable for Item 201, sub-base of gravel.
	5	1960	2.5-9	0-0.5	No		100	81.6	3.2	0.4	2	--	Gran. Borrow (Sand)	Test #5 in corn field southeast of Test #4, 100' south of edge of corn field & 50' west of fence. 0-0.5' overburden, 0.5-2.5' dirty gravel, 2.5-9' sand, sand bottom. Fails for Item 202, sub-base of sand. Has 81.6% passing #4 screen. Acceptable for Item 102A, granular borrow.
	6	1960	1-8.5	0-1	No		—	39.5	4.0	1.25	2	22.8	Gravel	Test #6 in southeast corner of corn field, 100' north of south edge & 30' west of east edge of field. 0-1' overburden, 1-5' coarse gravel, 5-8.5'

JERICHO GRANULAR DATA SHEET NO. 19

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over- Burden (ft)	Exist- ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	7	1960	0.5-8	0-0.5	No		—	54.3	3.0	0.75	2	—	Gravel	fine gravel. Acceptable for Item 201, sub-base of gravel. Test #7 on knoll in southeast corner of field south of corn field, 125' north of stone wall, 200' west of fence. Fine gravel mixed with coarse gravel. Sample contained insufficient stones for abrasion test. Material may be assumed acceptable for Item 201, sub-base of gravel.
	8	1960	1-2.5	0-1	No		—	Not	Sampled		—	—	—	Test #8 on knoll on west side of field containing Test #7, 50' east of fence. Fine sand with ledge bottom.
	9	1960	0.5-5	0-0.5	No		—	32.7	10.0	4.5	3½	27.4	Gran. Borrow (Grav)	Test #9 in northwest corner of corn field containing Test Nos. 5 & 6, 25' south & 25' east of edges of corn field. 0-0.5' overburden, 0.5-5' coarse gravel, 5-9' sand (not sampled). Fails on stone wear for Item 201, sub-base of gravel. Acceptable for Item 102A, granular borrow.

JERICHO GRANULAR DATA SHEET NO. 20

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Exist-ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							#1/2"	#4	#100	#270				
	10	1960	4-9	0-1	No		100	100	83.0	48.0	1	—	—	Test #10 on knoll just south of farm road in field east of that containing Test #9. 0-1' overburden, 1-4' dirty gravel (not sampled), 4-9' fine white sand. Material too fine for Item 202, sub-base of sand, Item 102A, granular borrow, Item 102, common borrow.
	11	1960	1-7	0-1	No		—	59.6	5.0	2.0	3	—	Gran. Borrow (Grav)	Test #11 southeast of Test #10. 0-1' overburden, 1-7' interbedded gravel & sand; 7-9' fine white sand (not sampled). Sample contained insufficient stones for wear test. Acceptable for Item 102A, granular borrow.
	12	1960	0.5-9	0-0.5	No		—	43.7	4.0	1.25	2½	24.6	Gravel	Test #12 on knoll south of Test #11. Gravel with gravel bottom. Acceptable for Item 102A, granular borrow.
	13	1960	0.5-8	0-0.5	No		100	99.4	65.6	29.1	1½	—	Borrow (Sand)	Test #13 on knoll southwest of Test #12 & east of Test #7 15' east of fence. Fine sand with fine sand bottom. Too fine for Item 202, sub-base of sand & Item 102A,

JERICHO GRANULAR DATA SHEET NO. 21

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Existing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	14	1960	1-8	0-1	No		—	26.7	13.0	5.0	5	27.6	Gran. Borrow (Grav)	granular borrow. Acceptable for Item 102, common borrow. Test #14 on east side of field behind vacant house, 55' west of fence. Many stones over 6". Fails on stone wear for Item 201, sub-base of gravel. Acceptable for Item 102A, granular borrow.
	15	1960	1-8	0-1	No		—	30.8	8.0	2.25	3½	24.6	Gravel	Test #15 on west side of field containing Test #14, 65' east of fence, 165' south of fence, & 120' north of fence. Acceptable for Item 201, sub-base of gravel. Dirty gravel with some stones over 6".
	16	1960	2-7	0-2	No		—	31.8	5.0	2.0	2½	25.2	Gran. Borrow (Grav)	Test #16 in northeast corner of field behind house 160' south of fence & 90' west of fence. Fails on stone wear for Item 201, sub-base of gravel. Acceptable for Item 102A, granular borrow.
	17	1960	2-7	0-2	No		—	45.6	3.0	0.5	2	26.2	Gran. Borrow (Grav)	Test #17 in southeast corner of same field as Test #16, 45' west & 105' north of fence.

JERICHO GRANULAR DATA SHEET NO. 22

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Exist-ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHTO T-21	Abrasion AASHTO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	18	1960	1-8	0-1	No		—	45.0	9.0	3.5	2½	26.4	Gran. Borrow (Grav)	Gravel with gravel bottom. Fails on stone wear for Item 201, sub-base of gravel. Acceptable for Item 102A, granular borrow. Test #18 in northwest corner of field containing Test #19, 40' south of power pole #735 & 25' east of stone wall. Gravel with gravel bottom. Fails on stone wear for Item 201, sub-base of gravel. Acceptable for Item 102A, granular borrow.
	19	1960	0.5-8	0-0.5	No		—	25.2	5.0	2.5	3½	24.2	Gravel	Test #19 in northwest corner of field west of that containing Test #18, 10' south of town road & 215' east of fence. Excellent well-sorted gravel. Acceptable for Item 201, sub-base of gravel.
	20	1960	1-8	0-1	No		—	23.8	8.0	3.75	2	20.4	Gravel	Test #20 south of Test #19, 160' north of swamp & 40' east of fence. Coarse gravel with gravel bottom. Acceptable for Item 201, sub-base of gravel.

JERICHO GRANULAR DATA SHEET NO. 23

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Existing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	21	1960	1-8	0-1	No		—	37.7	4.0	1.75	3	20.6	Gravel	Test #21 in northeast corner of field at junction of town roads 220' south of town road & 185' west of fence. Very clean gravel with small stones. Gravel bottom. Acceptable for Item 201, sub-base of gravel.
	22	1960	1-7.5	0-1	No		—	55.1	2.0	0.75	1½	27.2	Gran. Borrow (Grav)	Test #22 northwest of Test #21 60' south of town road & 70' east of town road. Fine gravel with fine silt bottom. Fails on stone wear for Item 201, sub-base of gravel. Acceptable for Item 102A, granular borrow.
	23	1960	0.5-8.5	0-0.5	No		100	80.8	1.6	0.4	1	—	Gran. Borrow (Sand)	Test #23 15' south of Test #22. Alternate bands of coarse & fine sand. Fails for Item 202, sub-base of sand. Has only 80.8% passing #4 mesh. Acceptable for Item 102A, granular borrow.
	24	1960	0.5-8	0-0.5	No		—	58	3.0	0.5	1½	19.0	Gravel	Test #24 southeast of Test #21 175' west of fence. Sandy gravel with sandy gravel bottom. Acceptable for Item 201, sub-base of gravel.

JERICHO GRANULAR DATA SHEET NO. 24

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Exist-ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	25	1960	0.5-8	0-0.5	No		—	35.4	4.0	1.75	3	23.8	Gravel	Test #25 on top of large knoll containing old pit south of Test #23. Gravel with fine sand bottom. Acceptable for Item 201, sub-base of gravel.
24	1	1960	1-9.5	0-1	Yes		100	73.5	4.0	1.5	2	—	Gran. Borrow (Sand)	Owner: Roy Rounds. Test #1 at center of north face of pit. Face sloughed in making it impossible to sample entire face. Material too coarse for Item 202, sub-base of sand. Has only 73.5% passing #4 mesh. Acceptable for Item 102A, granular borrow.
	2	1960	12-30	0-1.5	Yes		100	85.7	29.9	9.0	2	—	Gran. Borrow (Sand)	Test #2 in northeast face of pit. Due to 30' height of face, backhoe could not reach top. Consequently, sample represents general composition of face. Fails for Item 202, sub-base of sand. Has 29.9% passing #100 mesh. Acceptable for Item 102A, granular borrow.
	3	1960	0-8	0	Yes		—	35.2	15.0	3.0	1½	14.2	Gravel	Test #3 in floor of pit. Sand & gravel. Water at 8'. Acceptable for Item 201, sub-base of gravel.

JERICHO GRANULAR DATA SHEET NO. 25

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Exist-ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	4	1960	0.5-4	0-0.5	No		—	Not	Sampled		—	—	—	Test #4 150' south of Test #3 & 30' north of brook. 0-0.5' overburden, 0.5-2' gravel, 2-4' clay & silt.
	5	1960	4-10	0-0.5	No		100	100	57.0	3.8	1	—	Gran. Borrow (Sand)	Test #5 at top of bank above pit. 0-0.5' overburden, 0.5-4' gravel, 4-10' sand (sampled). Fails for Item 202, sub-base of sand. Has 57% passing #100 mesh. Acceptable for Item 102A, granular borrow.
	6	1960	0.5-9	0-0.5	No		—	57.9	9.0	2.0	3	20.4	Gravel	Test #6 290' west of Test #5 150' east of town road & 30' north of power pole. Sandy gravel with sandy gravel bottom. Acceptable for Item 201, sub-base of gravel.
	7	1960	2-9	0-0.5	No		100	100	61.0	12.0	1	—	Borrow (Sand)	Test #7 175' north of Test #6, 35' west of power pole & 100' east of edge of road. 0.5-2' fine gravel cap over sand, 2-9' sand with sand bottom. Fails for Item 202, sub-base of sand & Item 102A, granular borrow. Has 12% passing #270 mesh. Acceptable for Item 102, common borrow.

JERICHO GRANULAR DATA SHEET NO. 26

dent. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over- Burden (ft)	Exist- ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	8	1960	3-9	0-0.5	No		100	95.6	35.2	6.9	1½	—	Gran. Borrow (Sand)	Test #8 660' east of Test #7 66' west of top of bank. 0-0.5' overburden, 0.5-3' pebbly sand, 3-9' fine sand, coarse sand bot- tom. Fails for Item 202, sub-base of sand. Has 6.9% passing #270 mesh. Acceptable for Item 102A, granular borrow.
	9	1960	0.5-8	0-0.5	No		100	100	93.0	30.0	1½	—	—	Test #9 300' north of Test #8 & 70' west of top of bank. Fine sand & silt with fine sand & silt bottom. Fails for Item 102, common borrow. Has 30% pass- ing #270.
	10	1960	1-8	0-1	No		100	100	86.0	53.0	1	—	—	Test #10 north of Test #7, 82' southeast of pole near fence & 155' east of town road. Fine sand & silt with fine sand & silt bot- tom. Fails for Item 102, Common Borrow. Has 53% passing #270.
25	1	1960	0.5-10	0-0.5	No		93.3	86.8	10.1	0.8	1	—	Gran. Borrow (Sand)	Owner: Roy Rounds. Test #1 just north of old pit. 0-0.5' over- burden, 0.5-4.5' sandy gravel, 4.5-10' sand with sand bottom.

JERICHO GRANULAR DATA SHEET NO. 27

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Exist-ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
														Fails for Item 202, sub-base of sand. Acceptable for Item 102A, granular borrow. Has only 93.3% passing 1½" mesh.
26	1	1960	1-6	0-1	No		100	79.9	8.8	1.0	3	—	Gran. Borrow (Sand)	Owner: Donald Rivers. Test #1 200' west of barn, & 140' north of field road. 0-1' overburden, 1-4' dirty gravel, 4-6' sand, ledge at 6'. Fails for Item 202, sub-base of sand. Has only 79.9% passing #4 mesh. Acceptable for Item 102A, granular borrow.
	2	1960	1.5-10	0-1.5	No		—	65.7	6.0	0.75	3	28.6	Gran. Borrow (Grav)	Test #2 365' northwest of Test #1 & 60' south of fence. Gravelly sand with gravelly sand bottom. Fails for Item 201, sub-base of gravel. Has 65.7% passing #4 mesh. Also fails on stone wear. Acceptable for Item 102A, granular borrow.
	3	1960	2.5-8	0-2.5	No		—	47.3	6.0	2.25	3½	24.2	Gravel	Test #3 230' east of Test #2 & 50' south of fence. Sandy gravel with gravel bottom. Acceptable for Item 201A, sub-base of gravel.

JERICHO GRANULAR DATA SHEET NO. 28

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Existing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	4	1960	1.5-9	0-1.5	No		—	51.9	15.0	2.5	2½	22.8	Gravel	Test #4 west of ravine west of field containing Test #1. 135' west of top of bank & 35' south of fence. Poorly sorted gravel with sand & large stones. Acceptable for Item 201, sub-base of gravel.
	5	1960	2-5	0-2	No		100	76.6	15.3	2.3	1½	—	Gran. Borrow (Sand)	Test #5 200' west of Test #4. Sand with till bottom. Fails for Item 202, sub-base of sand. Has only 76.6% passing #4 mesh. Acceptable for Item 102A granular borrow.
27	1	1960	0-7	0	Yes		—	Not	Sampled		—	—	—	Owner: Burt Arsenault. Test #1 in small pit northwest of house. 0-5' fine sand, clay bottom.
	2	1960	0.5-9	0-0.5	No		100	97.4	25.2	3.6	2½	—	Gran. Borrow (Sand)	Test #2 85' east of Test #1 on top of ridge & 40' south of fence. Sand with fine sand. Fine sand bottom. Fails for Item 202, sub-base of sand. Has 25.2% passing #100 mesh. Acceptable for Item 102A, granular borrow.

JERICHO GRANULAR DATA SHEET NO. 29

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Exist-ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	3	1960	0.5-8	0-0.5	No		100	91.8	9.1	0.9	1½	—	Sand	Test #3 200' south of Test #1 on top of ridge. Sand & fine sand with sand & fine sand bottom. Acceptable for Item 202, sub-base of sand.
	4	1960	0.5-8	0-0.5	No		100	94.5	52.9	25.9	2	—	—	Test #4 on knoll east of house 90' west of fence. Very fine sand. Fails for Item 102, common borrow. Has 25.9% passing #270 mesh.
	5	1960	0.5-4	0-0.5	No		—	Not	Sampled		—	—	—	Test #5 on knoll south east of house near ledge outcrop. Clay with ledge at 4'. Not sampled.
28	1	1960	0.5-8	0-0.5	No		—	See	Remarks		—	—	—	Owner: Burt Arsenault. Test #1 150' south of town road; 65' west of fence, 120' north of fence. Fine silt with ledge bottom. Too fine for Item 102, common borrow. Sample processed by Soils Lab. 100% passing 3/4" mesh 99.6 " 3/8" 98.6 " #4 97.8 " #10 95.6 " #40 81.4 " #200 72.6 " #270

JERICHO GRANULAR DATA SHEET NO. 30

dent. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over- Burden (ft)	Exist- ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	2	1960	0.5-4	0-0.5	No		100	88.9	4.4	0.67	1½	—	Sand	Test #2 240' west of Test #1, 120' south of town road, & 20' north of old pit. Pebbly sand with fine sand bottom. 0.5-4' contains stones over ½", 4' to 10' fine sand, not sampled. Acceptable for Item 202, sub-base of sand.
	3	1960	1-5	0-1	No		—	61.7	11.0	2.5	5	—	Borrow (Grav)	Test #3 at east edge of old pit 90' south of Test #2 & 55' north of edge of field. Sandy gravel. Ledge bottom. Fails on color for Item 201, sub-base of gravel; & Item 102A, granular borrow. Acceptable for Item 102, common borrow.
	4	1960	0.5-10	0-0.5	No		—	See	Remarks	—	—	—	—	Test #4 180' west of Test #2 120' south of town road & 130' north of fence. Fine sand with till. 100% passing 3/8" mesh 97.2 " #4 94.2 " #10 86.6 " #40 55.9 " #200 46.2 " #270 Soil type A-4. Sample processed by Soils Lab. Not acceptable for Item 102, common borrow. Has 55.9% passing #200.

JERICHO GRANULAR DATA SHEET NO. 31

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Exist-ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
29	1	1960	0.5-9.5	0-0.5	No		100	100	75.0	24.5	1	—	—	Owner: Adrian Hebert. Test #1 by town road & woods road. 0-0.5' overburden, 0.5-2' sand, 2.5-9.5' fine sand. Fails for Item 102, common borrow. Has 24.5% passing #270.
	2	1960	0.5-9	0-0.5	No		100	96.1	33.6	3.6	2½	—	Gran. Borrow (Sand)	Test #2 100' north of junction on logging road north of Test #1. Fine & coarse sand with sand bottom. Fails for Item 202, sub-base of sand. Has 33.6% passing #100. Acceptable for Item 102A, granular borrow.
	3	1960	0.5-8	0-0.5	No		100	82.2	9.8	1.0	3	—	Gran. Borrow (Sand)	Test #3 at point of ridge north of Test #2. Pebbly sand with sand bottom. Fails for Item 202, sub-base of sand. Has only 82.2% passing #4 mesh. Acceptable for Item 102A granular borrow.
	4	1960	0.5-9.5	0-0.5	No		100	79.7	3.2	1.6	1½	—	Gran. Borrow (Sand)	Test #4 in pine woods west of Test #3. Sand with sand bottom. Fails for Item 202, sub-base of sand. Has only 79.7% passing #4 mesh. Acceptable for Item 102A, granular borrow.

JERICHO GRANULAR DATA SHEET NO. 32

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Exist-ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
30	1	1960	1-8	0-1	No		—	69.2	2.0	0.5	4	—	Borrow (Grav)	Owner: Adrian Hebert. Test #1 on knoll west of barn. Boney gravel, some stones over 6". Clay bottom. Fails for Item 201, sub-base of gravel. Has 69.2% passing #4 mesh. Fails on color for Item 102A granular borrow. Acceptable for Item 102, common borrow.
31	1	1960	1-5	0-1	No		—	38.2	8.0	2.5	1	26.4	Gran. Borrow (Grav)	Owner: Adrian St. Dennis. Test #1 on knoll 225' northwest of power pole. Pebbly sand with fine sand bottom. Fails on stone wear for Item 201, sub-base of gravel. Acceptable for Item 102A, granular borrow.
	2	1960	1-8	0-1	No		100	83.2	5.0	0.5	1	—	Gran. Borrow (Sand)	Test #2 230' east of Test #1, 140' north-east of power pole, & 210' west of line fence. Alternate bands of fine & pebbly coarse sand. Fine sand bottom. Fails for Item 202, sub-base of sand. Has only 83.2% passing #4 mesh. Acceptable for Item 102A, granular borrow.

JERICHO GRANULAR DATA SHEET NO. 33

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over- Burden (ft)	Exist- ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHTO T-21	Abrasion AASHTO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	3	1960	0.5-8	0-0.5	No		100	91.4	50.2	20.0	1	—	—	Test #3 200' northeast of Test #2 & 50' west of line fence. 0-0.5' overburden, 0.5-3' sand & silt, 3-8' sandy silty till with boulders. Fails for Item 102, common borrow. Has 20% passing #270 mesh.
	4	1960	0.5-8	0-0.5	No		—	27.3	4.0	2.0	3½	22.0	Gravel	Test #4 on small knoll 220' north of Test #3 & 55' west of line fence. 0-0.5' overburden, 0.5-3' dirty gravel, 3-8' gravel, gravel bottom. Acceptable for Item 201, sub-base of gravel.
	5	1960	0.5-8	0-0.5	No		100	100	4.0	1.0	1	—	Sand	Test #5 northwest of Test #4 & 210' west of fence corner. Sand with sand bottom. Good clean sand in beds dipping steeply to the north. Acceptable for Item 202, sub-base of sand.
	6	1960	0.5-9	0-0.5	No		100	100	36.0	8.5	1	—	Gran. Borrow (Sand)	Test #6 180' northeast of Test #5 on same knoll. 0-0.5' overburden, 0.5-2' silt, 2-9' bands of silt & sand. Silt & sand bottom. Fails for Item 202, sub-base of sand. Has

JERICHO GRANULAR DATA SHEET NO. 34

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over- Burden (ft)	Exist- ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	7	1960	0.5-9	0-0.5	No		100	97.1	52.5	18.0	1	—	—	36% passing #100 mesh. Acceptable for Item 102A, granular borrow. Test #7 in far north-east corner of meadow 150' south of fence & 45' east of fence. 0-0.5' overburden, 0.5-8.5' silt & sand, 8.5-9' pebbly sand. Pebbly sand bottom. Fails for Item 202, sub-base of sand & Item 102A, granular borrow. Has 18% passing #270 mesh. May be acceptable for Item 102, common borrow, depending on amount passing #200 mesh.
	8	1960	0.5-8	0-0.5	No		100	100	6.0	1.0	1½	—	Sand	Test #8 on knoll at south edge of meadow southwest of Test #7. Good clean sand with sand bottom. Acceptable for Item 202, sub-base of sand.
	9	1960	0.5-8.5	0-0.5	No		82.8	78.4	1.4	0.7	2	—	Gran. Borrow (Sand)	Test #9 just east of east face of Norton & Lamphere Pit. Sand with sand bottom. Fails for Item 202, sub-base of sand. Has 82.8% passing 1½" mesh. Acceptable for Item 102A, granular borrow.

JERICHO GRANULAR DATA SHEET NO. 35

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Existing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1 1/2"	#4	#100	#270				
32	1		0-55	Stripped	Yes		—	Not	Sampled		—	—	—	Owner: Norton and Lamphere. Material blends into sand to east (See Ident. #31, Test #9). Test #1 taken in NE face, not sampled. Test #2 taken by Resident Engineer, passes for Items 201A & 102A.
	2		0-55	Stripped	Yes		—	28.1	3.0	0.5	1	13.8	Gravel	
33	1	1960	1-3	0-1	No		—	Not	Sampled	—	—	—	—	Owner: Maitland Hunt. Test #1 on slope on west side of logging road. Not sampled. Till with till bottom.
34	1	1960	1-10	0-1	No		100	100	35.0	6.0	1	—	Gran. Borrow (Sand)	Owner: Maitland Hunt. Test #1 150' southwest of barn & 160' south of row of trees. Sand with sand bottom. Stones on surface but none in hole. Fails for Item 202, sub-base of sand. Has 35% passing #100 mesh. Acceptable for Item 102A, granular borrow. Test #2 170' northwest of Test #1, 45' south of row of trees & 240' west of barn. Test 2A represents sampling of medium sand in lower portion of hole. Fails
	2A	1960	4.5-9.5	—	No		100	98.5	55.1	11.8	1	—	Borrow (Sand)	

JERICHO GRANULAR DATA SHEET NO. 36

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Exist-ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	B	1960	1-4.5	0-1	No		—	42.4	5.0	1.25	3½	18.6	Gravel	for Item 202, sub-base of sand & Item 102A, granular borrow. Has 11.8% passing #270 mesh. Acceptable for Item 102, common borrow. Test #2B represents sampling of gravel in upper portion of hole. Acceptable for Item 201, sub-base of gravel.
	3	1960	3-9	0-1	No		100	96.4	57.0	21.0	1	—	—	Test #3 250' southwest of Test #2 & 300' west of Test #1. 0-1' overburden, 1-3' stony sand, 3-9' thin bands of sand & silt. Sand & silt with boulders. Fails for Item 102, common borrow. Has 21% passing #270 mesh.
	4	1960	2-9	0-0.5	No		100	100	88.0	39.0	1	—	—	Test #4 220' southwest of Test #3 & 70' north of top of bank. 0-0.5' overburden, 0.5-2' gravel, 2-9' fine sand & silt. Fine sand & silt bottom. Fails for Item 102, common borrow. Has 39% passing #270 mesh.
	5	1960	0.5-4	0-0.5	No		—	Not	Sampled	—	—	—	—	Test #5 200' south of Test #4 in floor of valley near river.

JERICHO GRANULAR DATA SHEET NO. 37

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Existing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	6	1960	1-4	0-1	No		—	39.6	3.0	0.5	3	16.2	Gravel	Alluvium deposits with organic matter. Water at 4'. Not sampled. Test #6 400' west of Test #4. 0-1' overburden with many stones, 1-4' sandy gravel, dirty, full of roots, 4-8' fine sand with large stones. Sampled 1-4'. Acceptable for Item 201, sub-base of gravel.
	7	1960	0.5-9	0-0.5	No		100	100	83.0	38.5	1	—	—	Test #7 485' north of Test #6 & 130' south of town road. Fine light-colored sand with no stones. Fails for Item 102, common borrow. Has 38.5% passing #270 mesh.
35	1	1960	0.5-10	0-0.5	Yes		100	62.2	4.4	0.5	2	—	Gran. Borrow (Grav)	Owner: Penshaw-Taylor. Test #1 in first pit to west of house. Alternate bands of pebbly sand to coarse sand to fine sand. 0-0.5' overburden, 0.5-4.5' pebbly sand, 4.5-10' fine sand. Fails for Item 202, sub-base of sand. Has only 62.2% passing #4 mesh. Acceptable for Item 102A, granular borrow.

JERICO GRANULAR DATA SHEET NO. 38

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Existing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	2	1960	0.5-5	0-0.5	Yes		100	88.6	10.6	0.9	1½	—	Sand	Test #2 in face of pit west of pit containing Test #1. Alternate bands of coarse & fine sand with some small stones. Fine sand bottom. 5-10" fine sand. Clay at 10". Acceptable for Item 202, sub-base of sand.
36	1	1960	0.5-7	0-0.5	Yes		100	94.2	13.2	0.6	1½	—	Sand	Owner: John Davis. Test #1 in east face of small shallow pit. Pebbly sand with fine sand bottom. Acceptable for Item 202, sub-base of sand.
37	1	1960	0-2	0	No		—	41.9	1.0	0.5	2½	14.2	Gravel	Owner: Ramon Lawrence. A very small shallow river bar 35' by 250'. Gravel with gravel bottom. Acceptable for Item 201, sub-base of gravel.
38	1	1960	2-15	0-2	Yes		100	91.6	9.1	3.6	2	—	Sand	Owner: Ramon Lawrence. Pit on north side of knoll. Sand with fine sand bottom. Extension of material to the south. Test #1 in face of pit. Acceptable for Item 202, sub-base of sand.

JERICHO GRANULAR DATA SHEET NO. 39

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over- Burden (ft)	Exist- ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4+35	Passes VHD Specs.	Remarks
							1 1/2"	#4	#100	#270				
39	1	1960	0.5-4.5	0-0.5	No		100	94.7	8.1	1.8	1	—	Sand	Owner: Ramon Lawrence Knoll north of Ident. #16. Test #1 taken on east slope at south end of knoll. Good relief. Sand with fine sand bottom. Acceptable for Item 202 sub-base of sand. Test #2 at north end of knoll 295' north of Test #1. Uniformly graded sand. Acceptable for Item 202, sub-base of sand.
	2	1960	0.5-7	0-0.5	No		100	94.6	7.0	1.0	2 1/2	—	Sand	
40	1	1960	0-3	0	No		—	35.5	2.0	0.8	1	18.2	Gravel	Owner: A. S. Bennett. A very limited area of river gravel upstream from dam. Silt bottom. Acceptable for Item 201, sub-base of gravel.
41	1	1960	0-21	0	Yes		100	83.4	1.0	0.25	3	—	Gran. Borrow (Sand)	Owner: George White. In pit south of ball-field. Test #1 in north face where trucks were loading. Fails for Item 202, sub-base of sand, Has only 83.4% passing #4 mesh. Acceptable for Item 102A, granular borrow.

JERICHO GRANULAR DATA SHEET NO. 40

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Exist-ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHQ T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	2	1960	0-8-14	0-1.5	Yes		100	92.5	4.0	1.85	1½	—	Sand, Borrow (Grav)	Test #2 in floor at south end of pit. Acceptable for Item 202 sub-base of sand.
42	1	1960	1.5-14	0-1.5	Yes		—	77.5	1.0	0.25	2	—	Gran. Borrow (Grav)	Owner: George White. Pit adjacent to ball field. Test #1 in south face. Fine gravel & sand. Fails for Item 201, sub-base of gravel. Has 77.5% passing #4 mesh. Acceptable for Item 102A, granular borrow.
	2	1960	0-7	Stripped	Yes		—	63.5	1.0	0.5	1½	—	Gran. Borrow (Grav)	Test #2 in floor at east end of pit. Fine sandy gravel. Sandy gravel in bottom. Fails for Item 201, sub-base of gravel. Has 63.5% passing #4 mesh. Acceptable for Item 102A, granular borrow.
	3	1960	0.5-9	0-0.5	Yes		100	97.6	8.0	0.5	2	—	Sand	Test #3 75° west of Test #1 & 65' south of south face of pit. Represents expansion of pit to south. 0.5-4' stony sand, 4-9' sand. Acceptable for Item 202, sub-base of sand.

JERICHO GRANULAR DATA SHEET NO. 41

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Existing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
43	1	1960	1-5	0-1	No		100	87.0	9.5	1	3	—	Sand	Owner: Foster Davis. In very large sand flat. Test #1 in bank at east side of stream. 1-4' pebbly sand, 4-5' fine sand. Acceptable for Item 202, sub-base of sand.
44	1	1960	1-5	0-1	No		100	100	42.0	3.0	3	—	Gran. Borrow (Sand)	Owner: Nate Brown. In northwest extremity of same sand flat as Ident. #43. Sand with fine sand in bottom. Water at 4.5'. Fails for Item 202, sub-base of sand. Has 42% passing #100 mesh. Acceptable for Item 102A, granular borrow.
45	1	1960	0.5-11	0-0.5	Yes		—	58.0	1.0	0.25	1½	—	Gran. Borrow (Grav)	Owner: Malcolm Brown. A large pit covering an extensive area. Test #1 350' west of town road, 225' south of Vt Rt. 15. In north face of pit. Fine sandy gravel. Meets grading requirements for Item 201, sub-base of gravel. Insufficient stone in sample for abrasion test. Acceptable for Item 102A, granular borrow.

JERICHO GRANULAR DATA SHEET NO. 42

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Exist-ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHTO T-21	Abrasion AASHTO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	2A	1960	7-11	—	Yes		100	92.8	3.0	0.5	2	—	Sand	Test #2 200' west of Test #1 in north face of pit. 0-0.5' over-burden, 0.5-7' gravel 7-11' stony sand. Sand bottom. Test 2A represents sampling of sand at 7-11'. Acceptable for Item
	B	1960	0.5-7	0-0.5	Yes		—	44.5	1.0	0.5	3	18.0	Gravel	202, sub-base of sand. Test #2B represents sampling of gravel at 0.5-7'. Acceptable for Item 201, sub-base of gravel.
	3	1960	0-20	0	Yes		—	69.9	1.0	0.25	2½	—	Gran. Borrow (Grav)	Test #3 in south face of large pit west of Test #2. Stripped. Sandy gravel with gravel bottom. Fails for Item 201, sub-base of gravel. Has 69.9% passing #4 mesh. Acceptable for Item
	4	1960	0-9	0	Yes		100	100	9.0	2.5	1½	—	Sand	102A, granular borrow. Test #4 in lowest area of floor northeast of Test #3. Stripped. Sand with sand bottom. Acceptable for Item
	5	1960	1-6	0-1	No		—	58.1	6.0	1.0	1	20.8	Gravel	202, sub-base of sand. Test #5 in field south of pit containing Test #4, 210' east of power pole #7 & 60' north-west of fence. Sandy gravel with sandy

JERICHO GRANULAR DATA SHEET NO. 43

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over- Burden (ft)	Exist- ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	6	1960	1-9	0-1	No		100	80.6	18.5	2.3	1½	—	Gran. Borrow (Sand)	gravel bottom. Acceptable for Item 201, sub-base of gravel. Test #6 110' south of power pole #7, 70' north of fence & 240' southwest of Test #5. Pebbly sand interbedded with medium sand. Pebbly sand in bottom. Fails for Item 202, sub-base of sand. Has only 80.6% passing #4 mesh. Acceptable for Item 102A, granular borrow.
46	1	1960	5-9	0-1	No		100	88.6	2.0	1.0	2	—	Sand	Owner: Malcolm Brown. Test #1 taken in a high terrace overlooking the Brown's River. The river apparently contains numerous gravel bars. Test #1 80' west of old cemetery & 25' north of wire fence. 0-1' overburden 1-5' fine sand & silt, 5-9' coarse sand with coarse sand bottom. Sampled coarse sand 5-9'. Acceptable for Item 202, sub-base of sand.
7	1	1960	0-10	0	Yes		—	33.1	2.0	0.5	1	20.8	Gravel	Owner: Davis Bros. Test #1 in face of

JERICHO GRANULAR DATA SHEET NO. 44

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over- Burden (ft)	Exist- ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHTO T-21	Abrasion AASHTO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	2A	1960	1-5.5	0-1	No		100	75.8	21.9	4.2	1½	—	Gran. Borrow (Sand)	small pit. Stripped. Fairly coarse gravel with stony till in bottom. Acceptable for Item 201, sub-base of gravel. Test #2 150' north of edge of pit near edge of terrace. 1-5.5' fine sand with some stones, 5.5-9' medium fine gravel with large proportion of sand. Test #2A represents sampling of sand 1-5.5'. Fails for Item 202, sub-base of sand. Has only 75.8% passing #4 mesh. Acceptable for Item 102A, granular borrow.
	B	1960	5.5-9	—	No		—	24.7	5.0	2.0	1	18.0	Gravel	Test #2B represents sampling of gravel portion 5.5-9'. Acceptable for Item 201, sub-base of gravel.
	3	1960	1-8	0-1	No		—	54.7	3.0	1.0	1½	—	Gran. Borrow	Test #3 200' north of Test #2, 350' west of wire fence & 150' south of fence. Sandy gravel with gravel bottom. Meets grading requirements for Item 201, sub-base of gravel. Insufficient stone in sample for abrasion test. Acceptable for Item 102A, granular borrow.

JERICHO GRANULAR DATA SHEET NO. 45

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Existing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
48	1A	1960	0-12	0	Yes		—	30.9	1.0	0.5	1	19.0	Gravel	Owner: Xenophon Wheeler. Test #1A in south face of pit. Stripped. Gravel with clay & silt in bottom. Water standing in bottom. Acceptable for Item 201, sub-base of gravel.
	1B	1960	1-8	0-1	No		—	19.4	5.0	1.0	1	23.0	Gravel	Test #1B 750' south of fence south of pit at point of bluff overlooking bend in river. Coarse gravel with gravel. Acceptable for Item 201, sub-base of gravel.
	2	1960	1-8	0-1	No		—	20.8	2.0	0.5	3	22.6	Gravel	Test #2 250' north of Test #1B, 70' east of pole, & 30' west of edge of bluff. Coarse gravel with gravel bottom. Acceptable for Item 201, sub-base of gravel.
	3	1960	1-8	0-1	No		—	20.2	2.0	0.75	3	18.6	Gravel	Test #3 100' southeast of pit & 65' north of fence. Gravel not as coarse as that in Test #1B & Test #2. Gravel in bottom. Acceptable for Item 201, sub-base of gravel.
	4	1960	1-8	0-1	No		—	42.0	1.0	0.5	2	—	Gran. Borrow (Grav)	Test #4 500' east of Test #3 & 100' west of fence. Medium to fine gravel with gravel

JERICHO GRANULAR DATA SHEET NO. 46

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over-Burden (ft)	Exist-ing Pit	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
	5A	1960	4-8	—	No		100	97.0	4.0	0.5	1	—	Sand	bottom. Meets grading requirements for Item 201, sub-base of gravel, Sample contained insufficient stone for abrasion test. Acceptable for Item 102A, granular borrow. Test #5 300' east of Test #4. 0-1' overburden, 1-4' gravel, 4-8' sand with sand bottom. Test #5A represents sampling of sand, 4-8'. Acceptable for Item 202, sub-base of sand.
	B	1960	1-4	0-1.	No		—	27.4	7.0	4.0	1	22.0	Gravel	Test #5B represents sampling of gravel portion. Acceptable for Item 201, sub-base of gravel.
	6	1960	1-7	0-1	No		—	27.0	3.0	1.0	3½	16.2	Gravel	Test #6 400' east of Test #5 & 200' south of town road. Coarse gravel with gravel bottom. Acceptable for Item 201, sub-base of gravel.
	7	1960	1-6	0-1	No		—	29.3	4.0	1.75	3½	21.4	Gravel	Test #7 775' east of Test #6, 250' west of fence, 125' south of town road. Gravel with gravel bottom. Acceptable for Item 201, sub-base of gravel. A very extensive area of excellent gravel.

JERICHO GRANULAR DATA SHEET NO. 47

Ident. No.	Field Test No.	Year Field Tested	Depth of Sample or Test (ft)	Over- Burden (ft)	Exist- ing P&t	Volume Estimate (cu. yds)	Sieve Analysis % Passing				Color AASHTO T-21	Abrasion AASHTO T-4-35	Passes VHD Specs.	Remarks
							1½"	#4	#100	#270				
49	1	1960	1-13	0-1	Yes		—	35.1	3.0	1.0	3½	18.2	Gravel	Owner: Mabel Irish. A medium-sized pit with limited extension to south & west. Test #1 in south face. Gravel with fine sand bottom. Acceptable for Item 201, sub-base of gravel.
	2	1960	1-13	0-1	Yes		—	34.2	1.0	0.3	2	20.0	Gravel	Test #2 in north face. Gravel with fine sand bottom. Acceptable for Item 201, sub-base of gravel.
50	1	1960	0.5-3.5	0-0.5	No		100	93.7	27.1	4.9	3	—	Gran. Borrow (Sand)	Owner: Harley Irish. A large knoll overlooking Vt Rt. 15. Test #1 on southern tip of knoll. 0.5-2.5' pebbly orange-colored sand, 2.5-3.5' fine white sand. Fails for Item 202, sub-base of sand. Has 27.1% passing #100 mesh. Acceptable for Item 102A, granular borrow.
51	1	1960	0-1	0.	No		—	26.8	4.0	0.5	2½	14.0	Gravel	Owner: Whitcomb & Stokes. River bar extends for large distance along river & on both sides under meadow. Acceptable for Item 201, sub-base of gravel.

JERICHO ROCK DATA SHEET NO. 1

Ident. No.	Field Test No.	Year Field Tested	Rock Type	Existing Quarry	Method of Sampling	Abrasion AASHO T-3	Distance Between Samples (ft)	Remarks
1	1	1960	Schist	No	Chip	10.6	—	Owner: Bushey Bros. Sample represents 200' across strike. Rock is a member of the Pinnacle Formation, composed of angular grains of quartz, feldspar and a variety of rock and mineral fragments imbedded in a compact matrix. Outcrop extends further west, becoming more foliated. Fails on wear for Item 204, sub-base of crushed rock.