

11/18/69

**SURVEY OF HIGHWAY CONSTRUCTION MATERIALS
IN THE TOWN OF DANBY, RUTLAND COUNTY, VERMONT**

prepared by

**Engineering Geology Section, Materials Division
Vermont Department of Highways**

in cooperation with

**United States Department of Commerce
Bureau of Public Roads**

Montpelier, Vermont

January, 1969

TABLE OF CONTENTS

Introduction

Acknowledgements	1
History	1
Inclosures	2
Location	4
County and Town Outline Map of Vermont	
Survey of Rock Sources	
Procedure of Rock Survey	5
Discussion of Rock and Rock Sources	6
Survey of Sand and Gravel Deposits	
Procedure for Sand and Gravel Survey	9
Discussion of Sand and Gravel Deposits	10
Summary of Rock Formations in the Town of Danby	13
Glossary of Selected Geologic Terms	15
Bibliography	17
Partial Specifications for Highway Construction Materials	Appendix I
Danby Granular Data Sheets	Table I
Danby Property Owners - Granular	Supplement
Danby Rock Data Sheets	Table II
Danby Property Owners - Rock	Supplement
Granular Materials Map	Plate I
Rock Materials Map	Plate II

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 C.G. Doll, Vermont State Geologist, University of Vermont, Burlington, Vermont,
4. 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 overall 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 materials is passed onto 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 with their intended use in mind. 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 or 7½-minute quadrangles of the United States Geological Survey enlarged or reduced 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: Vermont Geological Survey Bulletins, Vermont State Geologist Reports, United States Geological Survey Bedrock Maps, and the 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, eskers, 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 has been mapping the glacial features of the State of Vermont during the summer months since

1956. 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 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, and including an active card file compiled by the Highway Testing Laboratory. 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 on the cards varied widely in completeness. Transfer of information from the cards to the data sheets was made without elaboration or verification. When possible, the locations of the deposits listed in the card files have also been plotted on the maps; however, some cards in the file were not used because the information on the location of the deposit was incomplete or unidentifiable. Caution should be exercised wherever this information appears incomplete. This Project does not assume responsibility for the information taken from the card files.

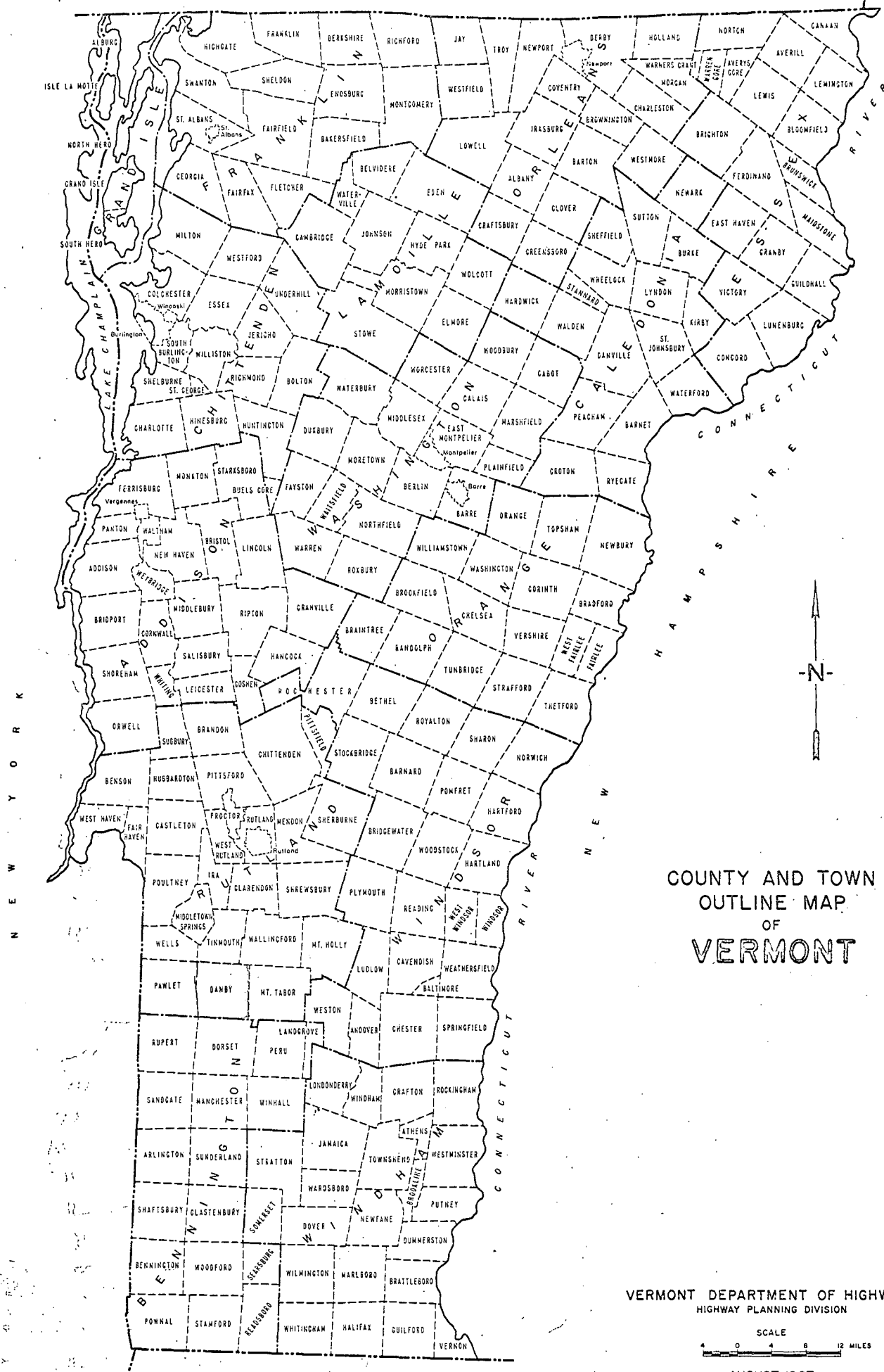
Work sheets contain more detailed information on each test and a detailed sketch of each Identification Number Area. The work sheets and laboratory reports are on file in the office headquarters of this Project.

LOCATION

The town of Danby is located in the south part of Rutland County in the southwest part of the State. It is bounded on the south by Dorset; the town of Pawlet lies to the west; the towns of Timmouth and Wallingford border Danby on the north; and the town of Mount Tabor lies to the east. (See County and Town Outline Map of Vermont on the following page.)

Danby is located partly in the Vermont Valley Physiographic Region, but is mainly in the Taconic Range Physiographic Region. Otter Creek flows northward through the Vermont Valley, crossing and re-crossing the Danby-Mount Tabor Town Line north of Danby Village. The interior of the township is hilly to mountainous terrain of the Taconic Hills, and is extensively farmed.

Drainage from the Taconic Range into Otter Creek on the east side and into the Mettawee River in Pawlet on the west side, is effected by Baker Brook, Mill Brook, and Flower Brook and their tributaries. Numerous Taconic Hills with elevations ranging from 1,500 feet to 3,072 feet, and steep-sided, picturesque valleys are dominated by Dorset Peak, the second highest mountain in the Taconic Range.



COUNTY AND TOWN
 OUTLINE MAP
 OF
VERMONT

VERMONT DEPARTMENT OF HIGHWAYS
 HIGHWAY PLANNING DIVISION

SCALE
 0 4 8 12 MILES

AUGUST, 1967

SURVEY OF ROCK SOURCES

Procedure for Rock Survey

The routine employed by the project in a survey of possible sources of rock for highway construction is divided into two main stages; office and field investigations.

The office investigation is conducted primarily during the winter months and comprises the mapping and description of rock types as indicated in various reference sources. Many different sources of information are utilized, as indicated in the bibliography. These references differ considerably in dependability due to new developments and studies that have contributed to the obsolescence of a number of reports. In addition, the results of samples taken by other individuals are analyzed, and the location at 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 field investigation is begun by making a cursory preliminary survey of the entire area. The information obtained in the preliminary survey, together with the information assimilated in the office investigation, is employed to determine the areas where testing and sampling will be concentrated. When a promising source has been determined by rock type, volume of material, accessibility, and adequate exposure and relief, chip samples are taken with a hammer across the strike or trend of the rock. The samples are submitted to the Material Testing Laboratory for abrasion testing both by the Deval Method (AASHO T-3) and the Los Angeles Method (AASHO T-96). It should be kept in mind that the samples taken by the chip method are often within the weathered zone of the outcrop and consequently may give a less satisfactory test result than fresh material deeper in the rock structure. When the material is uniform and acceptable abrasion tests result from the chip samples, the material source is included in this report as being satisfactory.

Discussion of Rock and Rock Sources

It should be noted that information on the Rock Materials Map is somewhat simplified. (For a more detailed description of the respective rock formations, see the Summary of Rock Formations included in this report.)

In addition, it should be realized that occasionally rocks belonging to the same formation and exhibiting similar characteristics (i.e., color, texture, etc.) may produce different abrasion results due to different physical and chemical properties. Therefore, in no case should satisfactory test results of an area be construed to mean that the same formation, even in the same area, will not later produce unsatisfactory material. This is especially true of metamorphic rocks.

Rocks in the town of Danby consist of metamorphic slates, phyllites, and quartzites of the Taconic Mountains, and carbonate rocks, quartzites, and slate and phyllite of the Vermont Valley Sequence. The Taconic metamorphics occur as a thrust-faulted body of rocks overlying the Hortonville and Bascom formations of the Vermont Valley Sequence. The Bascom, in turn, has been thrust over the younger Hortonville on the lower north slope of Dorset Peak.

The Taconic rocks are often well-exposed in the very hilly terrain in the west part of Danby. However, the predominant slates and phyllites do not produce material suitable for Item 204, Sub-base of Crushed Rock. For this reason, no samples of the Taconic rocks were taken.

The Hortonville slates and phyllites underlie a large area in the central part of town, north of Mill Brook, and are occasionally exposed. This formation was not sampled for the same reason as above.

Marbles, dolomites, and quartzites of the Vermont Valley Sequence are fairly well-exposed on the east and northeast flanks of Dorset Peak, and are occasionally exposed northward along the west slopes of the Vermont Valley, in the east part of the town. The formations of this Sequence are repeated

in the area between Danby Hill and Dutch Hill, north of Danby Four Corners. Map Identification Number 7, located on the lower east slope of Dutch Hill, is a pasture exposure of the Shelburne marble of the Vermont Valley Sequence. The marble is fairly well-exposed, has good relief, but is too soft to meet abrasion requirements for Item 204, Sub-base of Crushed Rock.

Numerous quarries, among them the Imperial, Bluff, Norcross and Cullen quarries, have been opened in the Shelburne Formation on the northeast flank of Dorset Peak. All but the Cullen, which is inaccessible to all vehicles, but bulldozer and jeep, were visited by the Materials Survey Party. The Norcross is in terrain such that it could not be feasibly operated as a crushed rock quarry. Its grout pile is remote from existing roads and is surrounded by woods.

The Imperial grout pile was sampled as Map Identification Number 3. Huge marble blocks up to 4 or 5 cubic yards in size are in the pile. Working the material would be very difficult. The samples of marble taken met AASHO T-3 abrasion requirements for Item 204, Sub-base of Crushed Rock, but failed to meet the AASHO T-96 abrasion requirements. The quarry superintendent for the Vermont Marble Company stated that the grout pile could not be worked as long as the Imperial Quarry was operated as it is presently, because the top of the pile is used for parking, and for loading marble. The Bluff Quarry north of the Imperial Quarry was sampled as Map Identification No. 4. The samples of marble taken here failed to meet abrasion requirements (either AASHO T-3 or AASHO T-96) for Item 204, Sub-base of Crushed Rock.

Material meeting the AASHO T-3 and AASHO T-96 abrasion requirements for that Item was sampled in Map Identification No. 1, a hill on the Danby-Mount Tabor Town Line; and rock meeting the AASHO T-3 abrasion requirements was sampled in Map Identification No. 2, a pasture on the northwest side of Town Highway No. 35, east of the Bluff Quarry. Both of these locations have area

enough to set up a crusher and would be available for sources of crushed rock. Both are owned by the Vermont Marble Company. Number 1 probably has less than 200,000 cubic yards of rock; but additional suitable material may be found to underlie the pasture adjacent to the hill, if test drilling were done. Test drilling would also be necessary to determine the extent of the rock in Number 2, because it is not well-exposed over a large area. Additional testing would determine also, if any of the rock would meet AASHO T-96 abrasion requirements.

As potential sources of crushed rock, Map Identification Numbers 1 and 2 rank second and third respectively behind Map Identification No. 5. This area is open pasture with exposed dolomite and quartzite, and has sufficient area for a quarry operation. It is located about 0.4 mile west of Town Highway No. 27. Three samples of the dolomite were taken, and although they failed to meet AASHO T-96 abrasion requirements, they met the present abrasion requirements for Item 204, Sub-base of Crushed Rock (AASHO T-3). There is only about 20' of relief across the dolomite outcrops, but the terrain continues to rise to the quartzite outcrops. Some stripping would be required, especially in the barren expanse of about 300' between the outcrops of dolomite and quartzite.

Map Identification No. 6 is a small pasture of scattered dolomite exposures with woods on the south and west sides. Both samples taken met AASHO T-3 abrasion requirements for Item 204, Sub-base of Crushed Rock; one sample met the AASHO T-96 abrasion requirements. A brook limits the north extension of the outcrops, and no exposures were seen in the woods to the west of the pasture. Probably much stripping would be required to uncover a large area of rock. There is ready access into this area from Town Highway No. 27

Other rock exposures were seen along the west side of the Vermont Valley, but they are either of very low relief and are widely scattered, or are covered by glacial deposits.

SURVEY OF SAND AND GRAVEL SOURCES

Procedure for Sand and Gravel Survey

The method employed by the project in a survey of possible sources of sand and gravel for highway construction is divided into two main stages; office and field investigations.

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 the recognition and location of physiographic features indicating glacial deposits and in the study of drainage patterns. In addition, the locations of existing pits are mapped when known. The locations in which samples were taken by other individuals are noted and mapped when possible.

The field investigation is begun by making a cursory preliminary survey of the entire town. All pits and other areas which show physiographic features that give evidence of glacial or fluvial deposition are noted. These locations are later investigated by obtaining samples of pit faces and other exposed materials. Tests pits, dug with a backhoe to a depth of approximately 11 feet, are also sampled. The samples are submitted to the Materials Testing Laboratory where they are tested for gradation and stone abrasion, the latter by the Deval Method (AASHO T-4).

Discussion of Sand and Gravel Deposits

Granular materials in the town of Danby consist predominantly of ice contact gravels and sands deposited as kame terraces. The terraces or their remnants occur extensively along the west side of the Vermont Valley, and are scattered and small in size along the hillsides in the Taconics.

Fluvial gravels have been mapped by D. P. Stewart along either side of Mill Brook in the vicinity of Town Highway No. 26 as far east as the junction of brooks near the junction of Town Highways No. 26, No. 29, and No. 30. These gravels underlie flat to gently rolling farm land which generally slopes toward Mill Brook. The gravel contains mainly tabular constituents, has high silt content, and has somewhat high wears. Gravels of this type were sampled in Map Identification Numbers 19, 20, 22, and 25. No samples of this gravel met requirements for Item 201, Sub-base of Gravel.

D. P. Stewart has mapped an esker with a west-northwest/east-southeast orientation located in gently southeast-sloping terrain above the north side of State Aid Highway No. 1. Samples taken in Map Identification Numbers 10 and 11 represent the type of material in this feature. Number 10 is a depleted pit; Number 11 is a pit which the owner is not interested in developing. Far more important as a source of Sub-base of Gravel, Item 201, is the shorter, more sinuous ridge located about 750' north of Map Identification No. 10, and designated as Map Identification No. 9. Possible the features are crevasse fillings.

A fairly large area south of Danby Pond and surrounding Danby Four Corners has been mapped as kame moraine. The terrain is rolling, with small knolls, and the surface of many fields shows small to large stones in profusion. Permission to sample any of the fields was denied. However, Map Identification No. 30, a small pit in which a very shallow sandy gravel, unacceptable for Item 105, was encountered, probably indicates the general

type of material to be found in those fields. The gravel found in Map Identification No. 31, another small pit, barely fails to meet requirements for Item 201. This gravel clearly has been water-sorted and deposited. The sample taken probably represents only a small deposit.

Most of the granular material in Danby is found in kame terraces. Those terraces or remnants thereof which occur on the steep hillsides in the Taconics are small, and are probably due to local deposition by streams whose volumes and supplies of source material were relatively small and short-lived. In many cases their courses are now followed by small streams. The gravels of these deposits contain many tabular pieces, showing their derivation from the slates and phyllites of the Taconics.

Material sampled in Map Identification Numbers 13, 17, 18, 23, 24, 28, 32, 36, 40, and 41 met Highway Department Specifications for construction materials. Numbers 23, 24, 28, and 36 are pits whose potential is good for Item 201, Sub-base of Gravel. Small quantities of gravel suitable for Item 201 are to be found in Numbers 13, 17, and 18. Sand acceptable for Item 202, Sub-base of Sand, was sampled in Map Identification Numbers 32, 40, and 41. The sand in the latter two areas is associated with gravels in knolls and ridges south of Harrington Hill. The samples of gravel failed to meet Item 201 specifications mainly because of high wears. There are fairly large amounts of granular materials on the slopes of the hill. Exploitation of this material calls for construction of an access road into a point where material bulldozed down from the upper slopes can be loaded. (See remarks in Table I.)

Map Identification Numbers 1 through 7, and 52 through 60, represent two large centers of kame terrace deposition. (See Plate I.) The southerly center, owned mainly by John B. Griffith, probably owes its origin to its location at the junction of the Vermont Valley and the valley occupied by

Mill Brook. This would have been a favorable deposition site for material derived from bedrock of the Vermont Valley and from the lower north slopes of Dorset Peak. The parent rock of most of the constituents of the sand and gravel found in the southerly kame terrace was carbonates and quartzites.

Map Identifications Numbers 2, 4, 5, and 7 are pits whose depths and west extensions are limited by bedrock. Map Identification Numbers 2, 3, 5, and 6 contain much cobbly and bouldery material. Map Identification No. 2 is currently active and has the best potential for future gravel supplies.

A second favorable site for deposition of ice contact material apparently was the junction of Baker Brook and the Vermont Valley, near the northeast corner of town. A large pasture and woodland owned by William Cressy and Albert Teer is a classic example of a kame terrace. Immense quantities of sand and gravel in this vicinity are represented by numerous samples that met Highway Department Specifications for either Item 202 or Item 201.

Map Identification Numbers 52 through 56 generally have fine gravels with few boulder-size. Numbers 59 and 60, on the east edge of the terrace, have sand acceptable for Item 202. Map Identification No. 54 is a pit; the remaining areas in the vicinity are its extensions.

SUMMARY OF ROCK FORMATIONS IN THE TOWN OF DANBY

VERMONT VALLEY SEQUENCE

Hortonville Formation - Black, carbonaceous, and pyritic slate and phyllite, locally sandy; brown-weathered limy beds are common near base.

Glens Falls-Orwell Formation (undifferentiated) - Combined where deformation has made the two lithologies indistinguishable. Thick-bedded sublithographic to lithographic dove-gray weathered limestone cut by white calcite veins (Orwell) is generally succeeded by thin-bedded, dark blue-gray, coarsely granular limestone. Both lithologies are fossiliferous.

Bascom Formation - Interbedded dolomite, limestone or marble, calcareous sandstone, quartzite, and limestone breccia; irregular dolomitic layers, thin sandy laminae, and slaty or phyllitic partings characterize limestone and marble of lower, middle, and upper parts of the Bascom, respectively; south of West Rutland it includes some of Chipman Formation.

Shelburne Formation - Chiefly a white marble or gray limestone characterized by raised reticulate lines of gray dolomite on the weathered surface; includes Columbian marble of the marble quarries, and the Intermediate dolomite, a massive gray-weathered rock.

Clarendon Springs Dolomite - Fairly uniform, massive, smooth-weathered gray dolomite characterized by numerous geodes and knots of white quartz; quartz sandstone and irregular masses of chert are near the top.

Danby Formation - Comprised of interbedded quartzite and dolomite. White quartzite beds more than a foot thick are separated by 10 to 12 feet of dolomite in eastern areas.

Winooski Dolomite - Buff-weathered, pink, buff, and gray dolomite; beds 4 inches to 1 foot thick separated by thin, protruding, red, pink, green, and black siliceous partings.

Monkton Quartzite - Distinctively red quartzite interbedded with lesser buff and white quartzite and relatively thick sections of dolomite like that of the Winooski; the quartzites thin to the east, and they become gray and phyllitic to the east and south.

Dunham Dolomite - Buff-weathered siliceous dolomite, pink and cream mottled or buff to gray on fresh surface; lower part is massive and upper part is sandy and resembles the Winooski dolomite.

Cheshire Quartzite - Very massive, white to faintly pink or buff vitreous quartzite near the top in west-central and southwestern Vermont; predominantly a less massive-appearing mottled gray, somewhat phyllitic quartzite; dolomitic sandstone and conglomerate near the base of the formation in west-central Vermont apparently grades southward into the Dalton formation.

Dalton Formation - Schistose quartzite containing pebbles of feldspar and blue quartz; impure dolomite containing pebbles of quartz and feldspar occurs locally; conglomerate common near base. Occurs in southwestern Vermont.

TACONIC SEQUENCE

St. Catherine Formation - Purple, gray-green, and variegated slate and phyllite containing minor interbeds of white to green quartzite; locally albitic.

Brezee - Dark gray to black phyllite with beds of blue-gray marble, dark gray dolomite, sandy dolomite, and dolomitic sandstone, in upper part; beds of massive quartzite as much as 20 feet thick occur locally and in places contain pebbles of blue quartz. Phyllites are locally highly albitic. A quartzose green phyllite is mapped separately in parts of the Taconics between Rupert and Timmouth.

GREEN MOUNTAINS

MOUNT HOLLY COMPLEX

Gneiss - Mainly fine- to medium-grained biotitic gneiss, locally muscovitic; massive and granitoid in some localities, fine-grained or schistose and compositionally layered in others; also abundant amphibolite and hornblende gneiss and minor beds of mica schist, quartzite and calc-silicate granulite, includes numerous small bodies of pegmatite and gneissoid granitic rock.

GLOSSARY OF SELECTED GEOLOGIC TERMS

Alluvial - Pertaining to material carried or deposited by running water.

Calcareous - Pertaining to or containing calcium carbonate.

Carbonate Rocks - Rocks composed of the molecule CO_3 combined with calcium, magnesium, etc. Includes limestones and dolomites.

Crevasse Filling - A ridge of water-sorted material originally deposited in a large glacial crevasse or fissure and left standing after the ice melts.

Delta - A predominantly alluvial deposit built by a stream entering the sea or other body of water. Usually it has the form of the Greek letter delta.

Dolomite - A rock consisting predominantly of the mineral calcium magnesium carbonate (dolomite), containing carbon dioxide 47.7%, lime 30.4%, and magnesia 21.9%.

Esker - A long, narrow winding ridge of mixed sand and gravel deposited by a stream of meltwater flowing in a tunnel or crevasse in stagnant glacial ice.

Fluvial - Pertaining to streams.

Gneiss - Originally meaning a more or less banded metamorphic rock with the mineral composition of granite. The term now designates a foliated metamorphic rock with no specific composition implied, but having layers that are mineralogically unlike and consisting of particles visible to the eye. Usually gneiss displays an alternation of granular minerals and schistose minerals with the rock tending to split along the schistose bands.

Ice Contact - Refers to sediments which have accumulated in contact with stagnant or wasting glacial ice. They assume the varied topographic forms expressed by eskers, kames, and kame terraces.

Kame - A conical hill of generally poorly stratified drift deposited in contact with glacial ice by streams flowing in or on the ice.

Kame Terrace - Stratified sands and gravels deposited by streams between a glacier and an adjacent valley wall.

Kame Moraine - An accumulation of material deposited directly from the frontal portion of the glacial ice and partially sorted by water action. The deposits may take the form of coalescent knolls, hummocks, and ridges.

Limestone - A bedded sedimentary rock consisting chiefly of calcium carbonate. The most important and widely distributed of the carbonate rocks.

Marble - A soft, white rock being the metamorphic form of limestone in which the calcium carbonate (calcite) is recrystallized and the calcite crystals are overgrown and interlocked with additional calcite. Commercially it is a trade name applied to any carbonate rock of good color and texture and hard enough to take a polish.

Metamorphic Rocks - Rocks that owe their distinctive characteristics to the transformation of preexisting rocks through intense heat or pressure or both.

Phyllite - A fine-grained, foliated metamorphic rock intermediate between the mica schists and slates into which it may grade. The foliation is made possible by the development of a large amount of potash mica, sericite, which also gives the rock a distinctive silvery appearance.

Physiographic - Pertaining to the physical divisions of the earth.

Quartzite - A compact metamorphic rock composed of quartz grains so firmly cemented that fracture takes place across the grains and the cementing material with equal ease

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.

Siliceous - Containing or pertaining to silica (silicon dioxide, SiO_2).

Slate - A very fine-grained homogeneous metamorphic rock which splits smoothly along parallel cleavage planes and yields roughly similar slabs.

Thrust Fault - A low-angle, or horizontal, plane of displacement along which one block of rocks has been pushed, or thrust, up and over another block. A lateral displacement of tens of miles along a fault plane of scores of miles is not uncommon.

Till - An unsorted, unstratified, and unconsolidated heterogeneous mixture of clay, silt, sand, gravel, and boulders deposited directly by glacial ice.

BIBLIOGRAPHY

- A survey of the glacial geology of Vermont being conducted by D. P. Stewart, the partial results of which are published in Vermont Geological Survey Bulletin No. 19; 1961.
- Soil Survey (Reconnaissance) of Vermont, W. J. Latimer; 1930; Bureau of Chemistry and Soils, United States Department of Agriculture.
- Soil Exploration and Mapping; 1950; Highway Research Board, Bulletin 28.
- Survey of Highway Aggregate Materials in West Virginia; December, 1959; Engineering Station, West Virginia University, Morgantown, West Virginia.
- Materials Inventory, Bangor Quadrangle, South Half; September, 1959; University of Maine.
- Glacial Geology and the Pleistocene Epoch, R. F. Flint; 1947; John Wiley and Sons, Inc.
- A Handbook of Rock, J. F. Kemp; June 1946; D. Van Nostrand Company, Inc.
- Rock and Rock Minerals, L. V. Pirsson; June, 1949; John Wiley and Sons, Inc.
- Glossary of Selected Geologic Terms, W. L. Stokes and D. J. Varnes; 1955; Colorado Scientific Proceedings, Vol. 16.
- Centennial Geologic Map of Vermont, C. G. Doll; 1961.
- Bedrock Geology of the Pawlet Quadrangle, Vermont; Robert C. Shumaker and James B. Thompson, Jr.; 1967; Vermont Geological Survey Bulletin No. 30.
- Pawlet Quadrangle, Vermont; Geological Survey, United States Department of the Interior.

PARTIAL SPECIFICATIONS FOR HIGHWAY CONSTRUCTION MATERIALS

Listed below are partial specifications for Highway Construction Materials as they apply to this report at date of publication. For a complete list of specifications see Standard Specifications for Highway and Bridge Construction, approved and adopted by the Vermont Department of Highways in April, 1964.

Item 105, Granular Borrow

"Article 105.02 - Materials. The granular borrow shall be obtained from approved sources and shall consist of satisfactorily graded, free-draining, hard durable stone and coarse sand practically free from loam, silt, clay, and organic matter.

"The sand portion (material passing the No. 4 screen) shall have not more than ten percent (10%) passing the No. 270 mesh sieve and shall show a color of not more than three and one-half ($3\frac{1}{2}$) as determined by the colorimetric test described in AASHTO Method of Test, Designation T-21.

"When used in connection with fine grading or in fills where piling is to be driven, the granular material shall all pass the nine-inch (9") square-opening screen."

Item 201, Sub-base of Gravel

"Article 201.02 - Materials. The gravel shall consist of material reasonably free from silt, loam, clay or organic matter. It shall be obtained from approved sources and meet the following requirements:

"Not less than forty percent (40%) stone shall be retained on No. 4 sieve.

"The percent of wear shall be not more than twenty-five (25) when tested by laboratory methods using Method T-4 or more than forty (40) when tested by AASHTO Method T-96.

"The stone portion of the gravel shall be uniformly graded from coarse to fine, and the maximum-size particles shall not exceed two-thirds (2/3) of the layer being spread.

"The sand portion, when tested by laboratory methods using Method AASHO T-27, shall meet the grading requirements set up in the following table:

Minimum Percent of Stone	Percent Passing Square Openings	Percent Passing Square Openings
	No. 100	No. 270
40	0-15	0-3
50	0-15	0-4
60	0-15	0-5
70	0-15	0-6

"The sand shall show a color of not more than three and one-half (3½) as determined by the colorimetric test described in the AASHO Method of Test, Designation T-21."

Item 202, Sub-base of Sand

"Article 202.02 - Materials. The sand shall consist of material reasonably free from silt, loam, clay, or organic matter. It shall be obtained from approved sources and meet the following requirements:

"The sand, when tested by laboratory methods using Method AASHO T-27, shall meet the grading requirements set up in the following table:

Square Openings	Percent Passing
1½"	95-100
5/8"	80-100
No. 4	70-100
No. 100	0-16
No. 270	0-5

"The sand shall show a color of not more than three and one-half (3½) as determined by the colorimetric test described in the AASHO Method of Test, Designation T-21."

Item 204, Sub-base of Crushed Rock

"Article 204.02 - Materials. The materials for sub-base, filler, and sand cushion shall be obtained from approved sources and meet the following requirements:

A - Crushed Rock. "The crushed rock shall be uniformly graded, crusher-run material and shall be free from dirt. The ledge from which this material is obtained shall be stripped and cleaned before blasting. Conical stockpiling, or any other method of stockpiling which causes segregation of aggregates, will not be permitted.

"The crushed rock, when tested by laboratory methods using Method AASHO T-27, shall meet the grading requirements set up in the following table:

Square Openings	Percent Passing
4"	95-100
1½"	25-50
No. 4	0-15

"The percent of wear shall not be more than eight (8) when tested by laboratory methods using Method AASHO T-3 or more than forty (40) when tested by AASHO Method T-96."

Item 205, Sub-base of Crushed Gravel

"Article 205.02 - Materials.

A - Crushed Gravel. "The crushed gravel shall consist of material reasonably free from silt, loam, clay, or organic matter. It shall be obtained from approved sources and produced by a crusher adjusted to deliver a product uniformly graded from coarse to fine.

"When tested by laboratory methods using Method AASHO T-27, it shall meet the grading requirements as set forth below:

		Square Openings	Percent Passing
Sub-base of Crushed Gravel	Coarse-Graded	4"	100
	Item 205-A	No. 4	25-50
	Fine-Graded	1½"	95-100
	Item 205-B	No. 4	30-60

"At least thirty percent (30%) by weight of the stone content of the crushed gravel, that is, the material retained on the No. 4 screen, shall have a minimum of one (1) fractured face as determined by actual count from the sample submitted to the laboratory.

"The percent of wear shall not be more than twenty (20) when tested by laboratory methods using Method AASHTO T-4 or more than thirty-five when tested by AASHTO Method T-96.

B - Sand. "The sand content of the crushed gravel, that is the material passing the No. 4 screen, when tested by laboratory methods using Method AASHTO T-27, shall meet the grading requirements set up in the following table:

Square Openings	Percent Passing
No. 100	0-18
No. 270	0-8

"The sand shall show a color of not more than three and one-half ($3\frac{1}{2}$) as determined by the colorimetric test described in the AASHTO Method of Test, Designation T-21."

TABLE I

DANBY GRANULAR DATA SHEET NO. 1

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
1	1	1968	N	O	T	S	A	M	P	L	E	D	Owner: John Griffith. Area is "terrace" hillside with knoll located between deep gullies south to southwest of the large pit (Map Ident. No. 2). Access into area would be from south along present pit road or if a face were to be opened higher up on the slope, the pasture hillside would have to be negotiated obliquely. The hillside near the top has some large trees; the gullies have many more. Test #1 was dug on the gentle slope of the lower hillside 30'-40' above the elevation of the haul road and near the corner of a small field. A six-foot hole dug in silt with some stones. No sample taken.	
	2	1968	1.5-11	0-1.5	No	77.7	70.0	56.2	13.0	3.5	1	16.2%	Gran. Borrow (Grav.) Test #2 was dug 125' northwest of and about 20' above Test #1 on nearly flat top of knoll extending out of the terrace's east slope. The test is only a few feet higher than the top of the pit's north face, and probably this knoll is the counterpart of the feature in which the pit was opened. The material is interbedded gravelly sand and sandy gravel,	

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 2

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	3	1968	1.5-11.5	0-1.5	No	85.4	79.2	71.0	7.8	3.8 3.2*	1	---	Gran. Borrow (Sand)	<p>both with a few small cobbles. Material looks cleaner below 7'.</p> <p>Test #3 was dug 135' west of Test #2 and 4'-6' above its elevation. Material is a cobbly, somewhat silty sand from 1.5'-2.5'; from 2.5'-10.5' it is a pebbly or gravelly sand with quite stony lenses here and there. Beds and lenses have a slight dip to the southeast. The sand has excess +1½" pebbles for Item 202, Sub-base of Sand. Additional sieve analysis follows:</p> <p>Passing #10 - 85.5% Passing #40 - 39.1% Passing #80 - 13.6% Passing #200 - 4.5%</p> <p>From 10.5' to below depth material is a gravelly sand. Possibly deeper material is a gravel.</p>
	4A	1968	1.5-8	0-1.5	No	95.5	92.7	89.4	8.9	4.0 3.6*	1-	---	Sand	<p>Test hole #4 was dug in amongst a few trees about 110' northwest of and 30'-35' above Test #3. This test is about 15' below top of terrace. Material is a pebbly grayish brown sand to 8.5', and was sampled as Test #4A. Additional sieve analysis follows:</p> <p>Passing #10 - 89.9% Passing #40 - 38.5%</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 3

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	4B	1968	8-11.5	---	No	69.1	63.9	47.3	9.0	3.3	1	---	Gran. Borrow (Grav.)	Passing #80 - 13.6% Passing #200 - 5.9% Test #4B was sampled from a gravel with a few small cobbles between 8' and 11.5'. Too few proper-size stones were included for a wear test. The material continues as gravel below the depth of test. Test holes #3 and #4 are beside a steep trail negotiable by backhoe to the top of the terrace.
	5	1968	1.5-10	0-1.5	No	93.4	90.3	85.5	6.8	2.0 1.7*	1-	---	Gran. Borrow (Sand)	Test #5 was dug atop terrace slope on quite level pasture 80' west of and a few feet above #4. Bedrock outcrops 60' to the west, so deposit tested in Numbers 2-5 would be fairly narrow. Top 2.5' of hole is overburden over a foot of stones and silty sand going to beds or lenses of sand and pebbly sand. Material doesn't stand well in the hole. A lens of fine gravel with -2" stones hit from 8'-10'. Sample had excess +1½" stones for Item 202. Bottom of hole is pebbly gray sand. Additional sieve analysis follows: Passing #10 - 94.0% Passing #40 - 51.7% Passing #80 - 12.2% Passing #200 - 3.0%

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 4

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	6	1968	1-8.5	0-1	No	84.3	82.1	76.8	20.7	7.8 6.0*	1-	---	Gran. Borrow (Sand)	<p>Test #6 dug 170' north of #5 near top of slope above deep gully. The test hole was dug on a slight roll in the pasture between two shallow sags. Layers of pebbly sand, silty sand, sand, and a silt seam were encountered. About 2.5' of sandy gravel overlies the sand. Boulders or bedrock hit at 8.5'. Overall, the material does not look good. The sample had excess fines and excess +1½" stones to meet Item 202 requirements. Additional sieve analysis follows:</p> <p>Passing #10 - 95.0% Passing #40 - 69.3% Passing #80 - 33.4% Passing #200 - 11.2%</p> <p>Generally speaking, this area has sand over gravel. The knoll that extends out of the hillside could probably be worked for gravel in a fairly high face. As the vicinities of Tests #3 and #4 were approached, there should be somewhat more sand atop the face. The underlying bedrock probably comes up quite quickly, appearing as it does within about 75' of the top of the slope.</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 5

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
2	1A	1968	2-21	0-2	Yes	77.6	72.7	57.8	6.0	3.0	1	12.8%	Gravel	<p>Owner: John Griffith.</p> <p>This area is 200-foot x 160-foot pit with west and north extensions into open pasture. Access is about .22 mile along the access road leading north from Town Highway No. 35. The pit was active at the time sampled, and material from the pit has been used for previous highway construction projects.</p> <p>When sampled in 1960, the north and west faces were 20' high; in 1968 they were 36' and 54' in height respectively. Gravels acceptable for Item 201, Sub-base of Gravel, were sampled from the pit in 1960 and in 1964.</p>
	1B	1968	21-31	---	Yes	65.3	55.8	42.7	7.0	1.5	1-	13.0%	Gravel	<p>Test #1A and 1B were hand samples taken in 1968 from the north face. The top 8' or 10' is gravelly sand going to a mainly fine gravel with an occasional cobble. From 21'-31', sampled as #1B, gravel is somewhat coarser with more stones. Both samples met Item 201 requirements. The bottom 5' of the face has much slough concealing gravel or gravelly sand hit at the bottom of #1B. These test are representative of extension into broad flat</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 6

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
	2A	1968	2-15	0-2	Yes	91.2	79.5	63.1	10.0	3.0	1	---	Gran. Borrow (Grav.)	area north of pit. Tests #2A and #2B were hand samples taken on the west face which is about 54' high. The top 15' is a fine gravel, shy on +4" stones, with occasional small cobbles and seams of fine sand. This section was sampled as Test #2A and had too few stones for Item 201. Further, too few proper-size stones were included for the wear test.
	2B	1968	15-45	---	Yes	69.7	59.9	48.6	7.0	2.0	1	8.8%	Gravel	Test #2B, from 15'-45' is in gravel from 15'-20' and continues in beds of pebbly sand. The bottom 8' or 9' of the face has a big boulder and much slough. The Town of Danby was working this face when it was sampled. Composite material of west face would meet Item 201 requirements. Bedding in the pit is evident, and dips eastward at a shallow angle. The faces stand quite well - too well, reports our backhoe operator. There is apparently the danger that a large mass of material will come down suddenly.
	3	1968	1-10	0-1	No	65.0	57.3	43.4	7.0	3.3	1	15.3%	Gravel	Test #3 was dug about 80' west of and 22' above top of west face of pit, atop the north side of the deep gully separating the pit from Map

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 7

Map Ident. No.	Field Test No.	Year Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
	4	1968	1.5-11.5	0-1.5	No	66.2	58.4	51.5	16.0	4.5	2	16.0%	Gran. Borrow (Grav.)	<p>Ident. No. 1. Material is a good looking gravel, quite well graded with an occasional 3"-6" cobble. Same material continues in bottom.</p> <p>Test #4 dug 110' north of Test #3 at the east side of a fairly large flat area used as pasture. Sixty feet north of Test #4 the flat area ends atop a steep-sided deep gully. There are a few cobbles and boulders scattered about the surface, and these continue with silty sand to about 2.5' in the test hole. Material then goes to a sandy gravel, and at 5' to a fairly clean fine gravel.</p> <p>This test, and Test #5, represent an area of about 200' E-W x 135' N-S underlain by sandy cobbly gravel.</p>
	5	1968	1.5-8.5	0-1.5	No	45.9	37.6	29.7	18.0	7.5	1	18.0%	Gran. Borrow (Grav.)	<p>Test #5 was dug in middle of flat pasture 125' west of #4. Material is a cobbly sandy gravel. Two layers are exclusively cobble-size. + 10% of material exceeds 6"; many stones are sub-angular. From Test #5 west to property line is about 240', but it is expected that material becomes increasingly cobbly and poorly sorted west from test hole.</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 8

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
	6	1968	1.5-10.5	0-1.5	No	76.6	69.1	57.7	10.0	2.5	1	---	Gran. Borrow (Grav.)	<p>Test #6 was dug on east side of flat area 70' north of the pit. This level lies below the upper pasture level where Tests #4 and #5 were sampled. The lower flat measures about 200' N-S x 180' E-W. The slope going up to the upper level shows cobbles and boulders.</p> <p>Material in Test hole #6 is a fairly fine gravel from vaguely stratified layers of fine gravel, fine sand, gravelly sand, and pebbly sand. Below 9' is gravel. Grading meets requirements for Item 201, but too few proper-size stones were included for the wear test. However, wears have been well below the maximum in this area.</p>
	7	1968	1.5-11.5	0-1.5	No	79.0	74.8	62.5	10.0	3.3	1	17.8%	Gran. Borrow (Grav.)	<p>Test #7 dug 120' N30°W of Test #6, 40' south of top of slope down to gully. Test hole is beneath telephone lines which run north-south across the area. Material is a gravelly sand from steeply dipping layers or lenses of pebble gravel and gravelly sand. One large boulder noted. Beds dip east, and below 3' on west end of hole material is exclusively gravel. Sample had too few stones (+ #4) for Item 201.</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 9

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
	8	1968	0-11	---	Yes	83.4	74.0	55.4	12.0	9.0	1	9.2%	Gran. Borrow (Grav.)	Test #8 dug in pit floor at east end. Material is a fine gravel with a few +3" cobbles, and overall having a low stone content. Is more stony and coarser below 6', and has many cobbles in the bottom. Gravel itself looks pretty good, but two 6" silt seams produce a sandy gravel having excess silt for Item 201.
	9	1968	0.5-9.5	0-0.5	Yes	86.3	78.3	58.7	2.0	1.0	1	19.8%	Gravel	Test #9 dug on north side of pit floor, 100' west of Test #8. Material is a fine stratified gravel with very few cobbles, and looks very clean. Bedding dips east. Bottom of hole is silt-clay, and this may mean that the bottom, whether glacial till or weathered bedrock, will limit depth that pit can be worked westward.
	10	1968	1-10.5	0-1	Yes	84.7	77.4	62.2	10.0	4.0	1	---	Gran. Borrow (Grav.)	Test #10 was dug just south of pit floor at east edge of pit road. Overall, material is a gravelly sand with excess silt and too few stones for Item 201. Also, too few proper-size stones were included for the wear test. Some silt seams occur with the gravel. Hole has a gravel bottom. This area has a large quantity of gravels, both fine and cobbly. It may be well to

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 10

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
														work the upper terrace, represented by Tests #3, #4, and #5, separately to avoid having too high a face. Also, the bottom of the gravel deposit will soon appear at the west side of the pit, and the floor will have to come up accordingly.
3	1	1968	1.5-10	0-1.5	No	92.1	77.8	64.0	10.0	3.3	1	10.6%	Gran. Borrow (Grav.)	<p>Owner: John Griffith.</p> <p>Area is steep-sided pasture land with a gently eastward-sloping top located north of the deep gully north of Map Ident. #2. Present access is northward past east side of pit, through gully bottom, then up slope. A road could easily be bulldozed along this route. Pasture is about 0.4 mile north of Town Highway No. 35. Possibly an access up through the owner's fields from Town Highway No. 36 would be better. Telephone lines cross the upper pasture at a little west of north.</p> <p>Test #1 was dug 30' north of top of gully slope near edge of top of pasture slope down to east. The material resembles that of Tests #2-6 and #2-7, being fine gravel, gravelly sand, and sand in vague layers and lenses. Below 6' is a fine, fairly clean</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 11

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	2	1968	1-7	0-1	No	86.2	76.8	60.9	8.0	3.5	1-	17.4%	Gran. Borrow (Grav.)	<p>gravel. Sample had too few stones for Item 201, and barely excess passing the #270 for that Item.</p> <p>Test #2 dug on rounded top of pasture's east slope, 175' northeast of and 4'-6' below elevation of Test #1. A fairly clean looking fine gravel hit at 1'. There are very few cobble-size. Pebbly sand hit at 5.5', and silt found at 7'. Material is shy on stones and has excess passing the #270 mesh sieve for Item 201.</p>
	3	1968	1.5-11.5	0-1.5	No	78.9	71.4	57.0	14.0	3.8	1	---	Gran. Borrow (Grav.)	<p>Test #3 dug 225' northwest of Test #2, near north property line fence, and 50' east of telephone lines. The top 3' of the test hole is "dirty" looking with a few stones. Below 3' is gravel with a low stone content; from 5'-8' is a clean gravel; 8'-11.5' - gravelly sand. Vague bedding has vague eastward dip. Too few proper-size stones were included for the wear test.</p> <p>Generally, the gently eastward sloping pasture would have gravels marginal on stone content for Item 201, and with slightly excess silt for that Item.</p> <p>East slope of pasture is too steep to get a backhoe</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 12

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
	4	1968	1.5-10	0-1.5	No	49.4	40.4	32.0	7.0	2.8	1-	17.7%	Gravel	<p>test, and bottom of slope near fence does not look like granular material.</p> <p>Test #4 dug on small rounded area in northwest corner of pasture a few feet above elevation of #3. Test #4 is at about same elevation as Test #2-4 and #2-5. Material in test hole is a cobbly, quite stony gravel with a few +6" sub-angular boulders. Gravel is less cobbly below 4.5', and is a fine gravel below 10'. This material would extend to west into Lynn Corey property, but the feature terminates at the north property line (Griffith-Nichols).</p>
4	1	1968	2.5-25	0-2.5	Yes	100	100	65.0	6.5	3.0 2.0*	1	---	Gran. Borrow (Sand)	<p>Owner: Burton Nichols.</p> <p>This is a small pit in a wooded area north of the Griffith pasture and southeast of and below large Griffith pit (formerly Nichols).</p> <p>There are 2 or 3 small old diggings in the woods between the present pit and Griffith's pasture. These have been used as a dump.</p> <p>One hand sample was taken on the top 25' of the 34-foot high face.</p> <p>Material is poorly graded overall, consisting of sand and pebbly sand, and goes to</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 13

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Over-burden (Ft)	Exist-ing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
														<p>gravelly sand or gravel at 2 5'. The bottom 9' of the face was not sampled because of fallen trees. Composite material of face would probably have stone enough to meet requirements for Item 201. The pit is only 35' wide. Access is up a rutted haul road for about 0.13 mile from Town Highway No. 36, at the south edge of Danby Village.</p> <p>Material in this pit probably represent north extension of deeper material in Tests #3-1 and #3-3. It probably is also indicative of the material below and south-east of the south end of Griffith's large pit (Map Ident. No. 4), which is located about 175' upslope and to the north-west.</p>
5	1A	1968	2.5-16	0-2.5	Yes	65.5	54.3	35.8	9.0	5.0	1	18.0%	Gravel	<p>Owner: John Griffith.</p> <p>This is an immense pit, long and deep, whose lower floor rises to the west to stay above bedrock. It was owned formerly by Burton Nichols who sold to Rossi, who in turn used gravel from it on the U. S. Route 7 Project and later sold to Griffith. Presently Griffith does not have an access into his pit. Burton Nichols</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 14

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
	1B	1968	17-32	---	Yes	52.2	41.0	26.7	5.0	3.0	1	7.6%	Gravel	owns the east haul road; the road to the west is owned by Lynn Corey, and is practically arched by pines. An access could be constructed along the telephone line from the north-west corner of Griffith's pasture, if a right-of-way could be obtained from Corey. Little extension of the upper south face remains. The Corey-Griffith fence line runs along the face. Much material remains, however in the lower level and in the floor in the east one-third of the pit. A north extension is prevented by a water line and reservoir. Test #1A was a hand sample of upper part of upper south face, about 180'-200' from its east end. The top 10' is "dirty" looking and not well sorted with many cobbles and 1 or 2 boulders. From 10'-16' gravel is well sorted and looks pretty good. Test #1B, sampled on the lower part of the upper south face, encountered a clean gravel above a 3-4-foot thick bed of silt-coated stones with little sand size grains. Bottom 10' or 12' of face is a clean gravel with much coarse sand and a few cobbles.

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 15

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	2A	1968	1-11	0-1	Yes	72.7	60.7	46.1	8.0	2.0	1	16.4%	Gravel	<p>Test #2A was a hand sample of the upper 11' of the lower level's south face taken at a point about 85' northeast Test #1B. Intervening floor or level of pit pinches out against upper south face about 150' west of Test #1B, and averages about 70' in width between Test #1B and the east end of the pit, a distance of 180'. Therefore, Test #2A, and #2B as well, represent quite a large quantity of gravel.</p> <p>Test #2A was of interbedded gravels and pebbly or gravelly sand.</p>
	2B	1968	11-24	---	Yes	84.4	75.0	52.7	7.0	2.0	1	13.0%	Gravel	<p>Test #2B on the lower part of the face, was of very clean looking fine gravel with occasional thin beds of exclusively pebble-size stones. Beds appear to dip east or northeast.</p>
	3A	1968	2.5-13	0-2.5	Yes	73.4	63.1	47.4	13.0	6.0	1	16.4%	Gran. Borrow (Grav.)	<p>Test #3A was a hand sample on top of 35-foot high south face at a point about 240' west of Test #2. Top 4' is a silty or sandy poorly sorted gravel with some angular cobbles and boulders. From 4'-12' are pockets of clean gravel and poorly sorted gravel, and at 12' is a gravelly sand. Bottom of face was not sampled</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 16

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	4	1968	2-13	0-2	Yes	58.9	44.9	26.8	12.0	5.0	1-	15.5%	Gravel	<p>because of its apparent resemblance to material in Test #2A or #2B.</p> <p>Test #4 was a hand sample taken on upper north face just west of telephone lines. Material varies from a silty gravel to quite clean, very stony fine gravel. Test bottoms in a sand bed. A few cobbles and boulders also present in sampled interval, and many can be seen along the foot of the north face.</p> <p>Test #4 represents a north extension which can not be developed until a water line is relocated.</p>
	5	1968	0-12	---	Yes	64.4	55.3	43.7	6.0	2.0	1½	18.8%	Gravel	<p>Test #5 was dug in floor level below upper south face in pit. Test hole was dug at the foot of the face, about 100' from extreme east end of pit.</p> <p>This test and Tests #2A and #2B represent about 12,000 cu. yds. of gravel acceptable for Item 201.</p> <p>Material in Test #5 is a gravel on the fine side.</p> <p>Log of test hole: 0-3' - gravel 3'-7' - stony sand 7'-12' - gravelly sand or fine gravel.</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 17

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Over- burden (Ft)	Exist- ing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
						6	1968	0.5-11	0-0.5	Yes				
7	1968	0-6.5	---	Yes	64.2	55.6	35.8	5.0	2.0	1½	14.3%	Gravel	Test #7 dug in floor in middle part of pit where it rises quite abruptly into west end of pit. Test hole #7 is about 220' west of #6, and here floor is about 90' in width. Gravel with cobbles near the top. It gets progressively finer to 6.5' where silt is hit.	
8	1968	N O T S A M P L E D											Test hole #8 was dug in west end of pit near where bedrock shows through. Material is silt and stones or rocks going to bedrock at about 1'. Pit still has quite a lot of gravel left for about 300' in its east (lower) end. The gravel extends south into the Corey property. At present, the owner must depend on the good will of Burton Nichols for access. An access from the west would follow a private road owned by Lynn Corey.	

*Percentage of Total Sample.

TABLE I

DANBY GRANULAR DATA SHEET NO. 18

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
6	1	1968	N	O	T	S	A	M	P	L	E	D	Owner: John Griffith. Area is flat rough pasture north of pit. Danby Village owns a water line that runs along the north face of the pit, and has a small reservoir located near the east end of the pasture. Test #1 dug beneath telephone lines 120' from the north face of the pit. Only huge boulders, and silt hit in top 3'. Very hard digging. Did not sample.	
	2	1968	1.5-9	0-1.5	No	51.9	39.8	29.1	15.0	8.0	1	19.4%	Gran. Borrow (Grav.) Test #2 dug 55' east of Test #1, and about 120' north of the pit. Silty, unsorted bouldery gravel was hit in the top 3'; gravel below that is at best sandy, and has some boulders. 10%-15% exceeds 6".	
	3	1968	N	O	T	S	A	M	P	L	E	D	Test hole #3 dug 160' north-east of Test #2, about 150' north of the pit face, and 100' from the reservoir. Huge boulders prevented digging below 3'. No gravel was seen and no sample was taken. There are a few granular-looking patches quite near the pit face that seem more promising than it does further back. But the buried water line is in that area and no test holes were dug.	

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 19

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
7	1	1968	1-8.5	0-1	Yes	100	98.0	86.6	26.0	16.8 14.5*	1-	---	---	Owner: Lynn Corey. Area is small pit located about 240' south of the west end of the Griffith Pit (Map Ident. #6). This pit exposes material representative of south extension of Griffith Pit. The owner has set out small trees over much of his property. An area southeast to southwest of his pit had not received them at the time sampling was done. Test #1 was dug at edge of stripped area 40' south of pit. Fine gravel at 8.5' underlies beds of pebbly sand, medium sand, and silty sand. Overall, material is a silty sand unacceptable for Granular Borrow.
	2A	1968	0-6.5	---	Yes	70.0	60.9	38.0	7.0	2.8	1	17.8%	Gravel	Test #2A was a hand sample of top part of pit's south face. Material is a fine, very stony gravel which looks pretty good.
	2B	1968	6.5-18	---	Yes	81.0	70.6	53.8	15.0	4.5	1	18.2%	Gran. Borrow (Grav.)	Test #2B was a hand sample on the lower face. Material is gravel with some silt-clay coating on the stones, fewer and smaller stones, and more sand. There are pockets of pebbles exclusively. The material is stratified. Composite material of face would probably meet Item 201

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 20

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
														requirements. Pit extension to the south has unsuitable material overlying the gravel. Pit's west extension would be in grove of pine trees; its north to east extension is probably represented by Test #5-3, on south face of Griffith Pit, and was being set to small trees in 1968.
8	1	1968	N	O	T	S	A	M	P	L	E	D		Owner: Edward Raiche. Area is atop wooded pasture slope south of Town Highway No. 33, west and uphill from owner's buildings. One test hole was dug just north of field whereon a knoll showing a granular surface is located. Permission could not be obtained to sample field, so test was dug to learn if granular material extended out of field. It doesn't. Material is a stony till down to 5', and no sample was taken. Aerial photos of the field show a thin layer of granular material at the surface overlying perhaps poorly sorted and poorly drained material.
9	1	1968	1-15.5	0-1	Yes	64.8	52.1	38.5	8.0	3.3	1-	18.1%	Gravel	Owner: Edward Raiche. Area is a long, narrow ridge, trending NW-SE, in which small pits have been opened, but not recently worked.

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 22

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	3B	1968	12-23	---	Yes	90.5	82.6	69.4	8.3	3.0 2.1*	1	---	Gran. Borrow (Sand)	<p>Pit face is 26' high and 50' in width (north-south). Test #3A from upper 12' of face was of beds of sand, pebbly sand, and fine gravel. Few stones exceed 2½".</p> <p>Test #3B was of sand with lenses of very fine gravel. From 19'-23' is a fine gravel, bottoming in boulders or bed-rock. Sample had too many pebbles for Sand, Item 202.</p> <p>A composite material from this face would be marginal on stone content for Item 201. The face's west extension is into a knoll for only about 60'; then the feature trends northward toward Test #1.</p>
	4	1968	1-9	0-1	Yes	80.1	67.1	49.6	5.0	2.5	1	20.6%	Gravel	<p>Test #4 dug in the floor of the old pit 220' south 75° east of Test #3. Beds of gray-brown sand alternate with thin layers of gravel with small cobbles and fine gravel. Below 4.5' is a fine gravel. Water was hit at 9', but fine gravel continues.</p>
	5	1968	1.5-9.5	0-1.5	Yes	67.7	59.2	41.6	10.0	5.3	1	19.6%	Gran. Borrow (Grav.)	<p>Test #5 dug in the pit floor 130' southeast of and 4' below elevation of Test #4. This hole has sandy gravel with a few 3"-8" stones over a gravel with a high sand content. Overall, does not look as well</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 23

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Over-burden (Ft)	Exist-ing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
	6	1968	N	O	T	S	A	M	P	L	E	D	<p>graded and clean as previous tests.</p> <p>Test #6 dug 140' north of Test #4 in pine grove. This test is outside the trend of the granular ridge. The ground surface has a few boulders and looks like till. A test hole was dug to 5' in stony or rocky silty clay. No sample was taken.</p> <p>The area was mapped by D. P. Stewart as a kame terrace, but any water-sorted deposits were confined by some means to winding channels whose courses are now marked by the ridges in Map Identification Numbers 9, 10, and 11.</p>	
10	1	1968	1.5-13.5	0-1.5	Yes	80.5	64.6	46.7	10.0	4.5	1	20.2%	<p>Gran. Borrow (Grav.)</p> <p>Owner: Edward Raiche.</p> <p>Area is an old pit that was opened in a low ridge. The ridge trends west-northwest by east-southeast, and is located about 750' south across a field from Map Ident. No. 9. The field was in hay and could not be tested. However, on aerial photos it does not look granular.</p> <p>Test #1 was dug on 7.5-foot high south face and continued in floor. Water stands on the floor about 30' west of the test.</p> <p>Pockets, lenses, and beds of</p>	

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 24

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
	2	1968	2.5-10.5	0-2.5	Yes	100	92.9	84.5	6.8	2.2 2.0*	1-	---	Sand	<p>pebbly sand and fine gravel were encountered. Bottom is at 13.5' in a wet stony silt-clay whose contact with the gravel dips south. At the north end of the hole, 12' from the face, the same silt-clay was hit at 3'.</p> <p>Test #2 was dug 140' east of Test #1 in lower part of pit. This is probably where pit was started. An old haul road leads northeast down through the woods toward the pasture east of Map Identification No. 9.</p> <p>There is much loose surface material in this part of pit, and the floor is sloping and very irregular. Possibly much scraping around with a bulldozer or farm tractor has been done.</p> <p>The pit floor is no more than 40' wide.</p> <p>The top 2' or so may not be in place in Test #2 and was not sampled. The material below that is lenses or pockets of fine sand and pebbly sand. Large cobbles and silt-clay hit at 10.5'.</p> <p>Test #3 was dug 100' south of Test #1 near west edge of woods. Material is very stony and organic above bedrock at</p>
3	1968													

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 25

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Over-burden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	4	1968	N	O	T	S	A	M	P	L	E	D		4.5'. No sample was taken. Test #4 dug mid-way between west end of pit and field north of pit. Material from 2'-5' is silty gravel going to silt-clay and cobbles. Dug to 7' and did not sample. Pit is about depleted save for small quantities for farm use. Material is confined to the low ridge which extends indistinctly to the northwest toward Map Identification No. 11.
11	1	1968	0.5-8	7.5	Yes	68.7	60.3	44.3	8.0	4.0	1	23.6%	Gravel	Owner: Paul Hopper. The owner lives out of state and gave permission only to take a hand sample in his pit. A small working, 15' x 30', with an 11-foot face is located at the east end of a previously worked pit. The material appears to be confined to a ridge perhaps 75' wide and 10'-15' high. The ridge can be traced easterly through the woods for a short distance, but then becomes hard to follow. One hand sample was taken on the aforementioned face. Material is a cobbly gravel with some sub-angular stones, and does not seem well sorted and stratified. ± 10% of material exceeds 6", and, of

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 26

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						% Passing								
						1½"	5/8"	#4	#100	#270				
														course, was not included in the sample. Area would not be a source of material.
12	1	1968	1-7	0-1	Yes	68.1	58.8	42.5	16.0	8.0	1½	32.5%	Gran. Borrow	<p>Owner: Richard and Polly Hall. This is a small pit or bank located east of a small brook northwest of the junction of Town Highway No. 15 and State Aid Highway No. 1.</p> <p>A feature standing about 8' above surrounding wet ground has an exposure of large cobbles and "dirty" tabular finer material. It is unsorted and unstratified, probably glacial till.</p>
13	1	1968	2-10	0-2	Yes	86.7	73.1	51.5	9.0	4.0	1	16.8%	Gravel	<p>Owner: Hugh Bromley. This is a small pit located in rolling, north-sloping topography about 0.25 mile north of Town Highway No. 32. D.P. Stewart has mapped hillside as a kame terrace. The pit measures 55' long x 25' wide and has 6-foot to 10-foot faces. Test #1 was dug on the face in the southwest corner. From 2'-10 is interbedded gravels and pebbly sands.</p>
	2	1968	0-6.5	---	Yes	71.9	66.2	42.7	23.0	8.0	1½	15.6%	Gran. Borrow (Grav.)	<p>Test #2 was dug in floor below #1. Three feet of sandy fine gravel overlies sand. At 6.5' sand is wet above silt to clay. Bedding was observed dipping to the southwest. Material appears to extend</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 27

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
														south and east, but no further testing was allowed. Access is by a field road. The area around the pit is used for growing hay.
14	1	1968	1.5-12	0-1.5	No	67.7	57.8	40.5	18.0	9.0	1	29.4%	Gran. Borrow	<p>Owner: Hugh Bromley.</p> <p>An elongate knoll just west of the owner's barn on the south side of Town Highway No. 32 was sampled on its south end.</p> <p>D. P. Stewart mapped feature as a kame moraine. Indications point to a largely dumping origin. There is very little sorting and no stratification.</p> <p>The material sampled consisted of angular fragments of rock, some sub-angular stones, and silt or silty sand. Bottom 6' of end of knoll had too much slough to dig through, but it appears that the material is somewhat more stony with more coarse sand. There are a few huge rocks on the southwest side of the knoll.</p> <p>The feature is about 100' NW-SE x 60' NE-SW. The surrounding land is on ground moraine - very rough and rocky.</p> <p>The material would be good only for fill, and no doubt the owner would be glad to have it removed.</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 28

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
15	1	1968	0.5-6	0-0.5	No	100	100	81.9	20.5	13.0 10.7*	1½	---	---	<p>Owner: Smokey House Farm, and leased by N. McClellan.</p> <p>The area is a gently north-sloping hayfield and cornfield south of and above Town Highway No. 29.</p> <p>Based probably on position, D. P. Stewart mapped a kame terrace on the hillside, following the 1560-foot contour. One test hole was dug about 500' south of the town highway in a field road at the edge of a woods.</p> <p>Cobbles, boulders, and silt was encountered. No +6" material sampled. All else was a pebbly silty sand, too fine for Granular Borrow, Item 105. Material shows no sorting. It is probably glacial till.</p>
16	1	1968	1.5-12	0-1.5	No	100	100	100	83.0	44.0	1	---	---	<p>Owner: George Keeler.</p> <p>This area is a small knoll surrounded by pine woods, located southwest of and above Map Identification No. 17.</p> <p>One test hole was dug and a uniform silt was hit. Again, very general mapping by D. P. Stewart placed this area in a kame terrace. Possibly only very fine material was available for deposition, and the knoll tested could have been deposited in contact with glacial ice. The material is too</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 29

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
17	1	1968	1-6	0-1	Yes	57.5	43.7	31.5	19.0	10.0	1	13.0%	Gran. Borrow (Grav.)	fine for highway use. Owner: George Keeler. Area is vicinity of old small diggings in low knolls south of and above Town Highway No. 30. Only about 150' in width between a brook to the southeast and a hay meadow to the northwest is available for working. About 200' in length (NE-SW) could be worked. The northeast part seems nearly depleted. Test #1 was a hand sample of the 6-foot face on the north side of the area. The top of the face is about 10' above the level of the meadow north of the pit. There is perhaps 10'-15' remaining in a northward extension. The material is a sandy gravel with excess silt for Item 201. The hole bottoms in same material.
	2	1968	1.5-11	0-1.5	Yes	100	100	93.6	4.7	2.0 1.9*	1-	---	Sand	Test #2 dug atop pit face south of Test #1. Top 3' is quite fine, and overlies 4' of pebbly sand. From 7'-11' is fine sand. Upper contact dips to northeast.
	3	1968	2-9.5	0-2	No	55.2	50.4	42.5	6.0	3.0	1½	8.8%	Gravel	Test #3 dug in a small sag between two knolls, 75' southwest of Test #2. The material

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 30

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Over-burden (Ft)	Exist-ing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	4	1968	N	O	T	S	A	M	P	L	E	D	<p>is mainly a fine gravel with many +4" cobbles, but no stones exceeding 6" were included in the sample. The bottom of the test hole is hard-packed cobbly gravel. A power line crosses the southwest end of the area, and then turns to follow the southeast side of the feature toward the owner's house.</p> <p>Test #4 dug 150' southwest of Test #3 in flat area of pasture. Test is about 75' beyond knolly topography of pit area. A huge boulder prevented digging below 2', but material looks like till. No sample was taken.</p>	
18	1	1968	N	O	T	S	A	M	P	L	E	D	<p>Owner: Fred Lewis.</p> <p>This area is a large, south-sloping field between Town Highway No. 31 and State Aid Highway No. 1. An old grown-in pit is located on a fairly flat area about 400' north of the State Aid Highway.</p> <p>All tests were dug in an old cornfield north and up-slope from the old pit. Standing hay prevented sampling around the old pit.</p> <p>Owner alledged that the Town of Danby had looked around a little on the upper side of the field for a gravel source. They found only thin</p>	

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 31

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	2	1968	N	O	T	S	A	H	P	L	E	D		gravel over "hardpan". Test hole #1 dug 130' south of Town Highway No. 31, near the east end of the field, hit hard-packed stony silt-clay under 3' of silty overburden. Hole was not sampled. Test hole #2 was dug about 250' south-southwest of Test #1, about 80' from east end of field. Only silt-clay was uncovered, and no sample was taken.
	3	1968	1-9.5	0-1	No	100	85.2	62.1	22.0	10.2	1½	---	---	Test #3 dug on low ridge on slope about 300' northwest of the old pit. Test is about 150' west of Test #2. Many surface stones show on ridge. A tan fine gravel hit at 1', tan sand at 5'; fine gravel occurs from 7'-9.5'. Boulders hit in bottom. Beds dip to the south and also appear arched from east to west. Material probably water-sorted, and confined to the ridge, but excess silt rejected the material for Item 105.
	4	1968	1-7.5	0-1	No	81.7	67.4	51.8	6.0	3.0	1½	18.8%	Gravel	Test #4 dug about 110' northwest of and 6'-8' above elevation of Test #3. Test is about 250' south of Town Highway No. 31. Material is fine gravel overlying sand with a gravel pocket. Hole bottoms

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 32

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
														in silt-clay. Granular material in this property is probably in small pockets and generally would not be thick. West of Test #3 and along the ridge southeast of Test #3 should be sites of further testing.
19	1	1968	1.5-9.5	0-1.5	No	62.4	50.0	34.2	13.0	6.0	1	25.6%	Gran. Borrow (Grav.)	Owner: George Keeler. Area is flat field south and east of Town Highways No. 30 and No. 29. D. P. Stewart has mapped vicinity lying west of a small brook as fluvial gravel. Owner would not consider area as a source of gravel. He had recently seeded the field and would allow only one test which was dug at the edge of the field. Material is a "dirty"-looking somewhat tabular gravel with many +4" cobbles. There is no well defined stratification. Water enters at 9.5'.
20	1	1968	N	O	T	S	A	M	P	L	E	D		Owner: Smokey House Farm. Two tests were dug in an old cornfield on the west side of Town Highway No. 26, south of trail into old pit. Test #1, dug at edge of trail, hit 5' of silt clay. No sample was taken.

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 33

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
	2	1968	2-4.5	0-2	No	82.9	70.6	47.8	13.0	6.3	1 1/2	---	Gran. Borrow (Grav.)	<p>Test #2 was dug 150' south of #1, about 75' from the Town Highway. Material is a "dirty" looking fine gravel with a clean pebble layer from 4'-4.5'. Bottoms in clay.</p> <p>East part of the field south of the pit road was mapped as fluvial gravel by D. P. Stewart. The surface shows scattered stones, but the deposit is not thick, nor is it as extensive as is mapped.</p>
21	1	1968	1.5-9.5	0-1.5	Yes	70.1	54.1	31.0	12.0	6.2	2	31.4%	Gran. Borrow (Grav.)	<p>Owner: Smokey House Farm.</p> <p>Area is old pit and vicinity located about 750' west of Town Highway No. 26, and south of Hilliard property. Pit is grown in with trees and has been used as a dump. It is about 90' x 140'. Pit is in feature mapped by D. P. Stewart as a kame terrace. The terrain is low and gently rounded, and does not show terracing.</p> <p>Test #1 was dug atop face at southwest corner of pit. The material is a fine somewhat "dirty" looking gravel tending toward tabularism in the stones. Water, flowing in from southwest, hit at 9'. Sand underlies the water level.</p> <p>The pit very nearly marks the south and east limits of</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 34

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Over-burden (Ft)	Exist-ing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	2	1968	1.5-6	0-1.5	Yes	79.3	68.2	49.3	15.0	7.6	1	36.4%	Gran. Borrow (Grav.)	<p>the rise or broad ridge in which it is located. The west edge of the feature is about 85' west of Test #1.</p> <p>Test #2 dug 135' north of Test #1 atop north face of pit.</p> <p>The top 4' has many large tabular stones and is unsorted. Silty sand over silt to clay occurs in the bottom.</p>
	3	1968	1-8.5	0-1	No	87.7	77.1	59.8	20.0	8.0	1	---	Gran. Borrow (Grav.)	<p>Test #3 dug 150' north of Test #2 in site of old test trench at Hilliard property line. Test #3 is above #2. Material consists of silty sand with pebbles and silty fine gravel in lenses with cobbles. Goes to a silty sand with a lens of clean sand at 8', and hole bottoms in silty sand.</p> <p>This area is characterized by tabular gravels with high wears, and having excess silt. They are mainly poorly sorted.</p>
22	1	1968	N	O	T	S	A	M	P	L	E	D		<p>Owner: Smokey House Farm, and leased by G. Keeler-N. McClellan.</p> <p>Area tested was a north-northeast -sloping corn field on the south side of Town Highway No. 26. It has been designated as kame terrace by D. P. Stewart. A fluvial gravel has been mapped a short distance east at a lower</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 35

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
	2	1968	2.5-11	0-2.5	No	94.7	79.0	53.5	18.0	8.0	1	30.0%	Gran. Borrow (Grav.)	<p>elevation. The cornfield shows many surface stones.</p> <p>Test #1 was dug 450' south of the town road beside a field road.</p> <p>Material is cobbly and rubbly and fills spaces among huge angular blocks and boulders. Dug only to 5'.</p> <p>Over 50% of material estimated to exceed 6". No sample was taken.</p> <p>Test #2 was taken at north edge of cornfield beside the town highway.</p> <p>Top 4' is a silty sand with a few pebbles; from 4'-11' is a quite stony gravel with silt seams. Most stones are tabular. Overall, does not look good, either area-wise or material-wise.</p>
23	1A	1968	3-25	0-3	Yes	64.3	53.9	40.0	8.0	5.0	1	20.0%	Gravel	<p>Owner: Smokey House Farm.</p> <p>This was formerly the Freeman pit and was sampled in 1960 as the Currier pit.</p> <p>It is a 250-foot long pit on the northwest side of Town Highway No. 26.</p> <p>Its northwest to west extensions are limited by the very steep mountainside; its southwest to south extensions are limited by the town highway. The pit measures 250' NE-SW x 85'-100' NW-SE.</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 36

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Over-burden (Ft)	Exist-ing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
	1B	1968	25-48	---	Yes	67.3	53.8	38.7	12.0	6.0	1	17.2%	Gran. Borrow (Grav.)	<p>Its northwest faces have much slough and vegetation.</p> <p>Test #1A was a hand sample on upper face in southwest corner of pit. Beds of fine gravel and pebbly sand down to 25' were included. Face is about 70' high at this point and it is about 60' north-northwest to very steep mountainside where gravel probably ends.</p> <p>Gravel and gravelly sand beds sampled on the middle portion of the face, below Test #1A, had excess silt for Item 201.</p>
	1C	1968	48-59	---	Yes	79.8	67.6	47.0	25.0	14.0	1-	15.2%	---	<p>Test #1C was sampled from beds of gravelly sand and sand with silty layers.</p>
	1D	1968	58-70	---	Yes	70.6	54.7	34.8	23.0	12.0	1	16.8%	---	<p>Test #1D was of bottom 12' of face. All but bottom 3', which is a clean gravel, is a hard-packed silty gravel with 2 or 3 silt clay seams.</p>
	2	1968	1.5-20	0-1.5	Yes	100	100	61.9	10.0	4.0 2.4*	1	---	Gran. Borrow (Sand)	<p>Test #2 was taken in south-east corner of pit (on south end of southwest face). Gravelly sand overlies coarse sand, which has graded from gravel a few feet to the north-west. Composite material is a pebbly very coarse sand.</p>
	3	1968	1.5-23	0-1.5	Yes	88.7	63.3	44.0	9.0	5.0	1	14.8%	Gran. Borrow (@rav.)	<p>Test #3 was of interbedded gravels, sands and gravelly sands taken midway along 40-</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 37

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	4	1968	0.5-11	0-0.5	Yes	73.6	69.3	42.9	22.0	9.0	1	15.6%	Gran. Borrow (Grav.)	<p>foot long southwest face. Material grades southeastward to finer gravelly sands and sands sampled as Test #2.</p> <p>If this face could be worked so as to include both the gravels and sands, it would probably meet Item 201 requirements. Possibly it would have a slight excess of silt. An area of about 150' west-southwest x 130' north-northwest remains as an extension to the west between the mountainside and the town highway.</p> <p>This area is wooded and should be worked from the west to avoid having too high a working face. An upper slope, represented by Tests #1A and #1B, should be removed before working the lower material represented by Tests #2 and #3.</p> <p>Test #4 dug in floor of pit near southwest end. Material is a hard-packed sandy gravel with some tabular stones. Hole bottoms in fine gravel.</p>
	5	1968	2-24	0-2	Yes	67.9	56.9	39.9	11.0	6.0	1-	17.3%	Gran. Borrow (Grav.)	<p>Test #5 dug on 24-foot northwest face, 125' northeast of Test #1. Material is a sandy gravel with only a few +3" cobbles. It has much apparent silt-clay coating on the stones.</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 38

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
	6	1968	0.5-10.5	0-0.5	Yes	66.6	52.5	29.0	11.0	7.0	1	16.3%	Gran. Borrow (Grav.)	<p>Test #6 dug in floor 60' from northwest end. Material is a fairly "dirty" looking sandy gravel with some cobbles. There is no apparent stratification.</p> <p>A few boulders and cobbles are scattered around the pit floor. There is also a large pile of them which have been dumped over the lower face at the pit's northeast end.</p> <p>Material in pit has some tabular stones and a fairly high silt content. Northwest faces have many silt or silty clay layers.</p> <p>Overburden varies from 2'-3'.</p> <p>The northwest and southeast faces were sampled by Laboratory Personnel in 1960 and samples had slightly excess silt for Item 201.</p>
	7	1960	0-30	---	Yes	69.5	56.6	42.5	9.0	5.5	1	15.8%	Gran. Borrow (Grav.)	
	8	1960	2-30	0-2	Yes	73.0	61.3	42.6	11.0	5.3	2	23.0%	Gran. Borrow (Grav.)	
24	1A	1968	1-11.5	0-1	Yes	75.2	58.1	36.5	10.0	4.0	1	16.2%	Gravel	<p>Owner: Smokey House Farm.</p> <p>This is lower, northeast portion of Map Identification No. 23.</p> <p>The pit floor is 140' NE-SW x 75'-85' NW-SE. Its northwest face trends N45°E; there is about 110' of wooded extension which drops down toward the northeast, and the northeast pit face is quite low. Probably there is no north to</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 39

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	1B	1968	11.5-24	---	Yes	85.4	72.5	49.3	13.0	7.0	1-	---	Gran. Borrow (Grav.)	<p>northeast extension.</p> <p>Test #1A was a hand sample of top of 35-foot northwest face 25' from its southwest end. The material is a fairly clean gravel.</p> <p>Test #1B was a hand sample of sands and silty sands with stones. There is quite a bit of slough, and little stratification could be seen. Insufficient proper size stones were included for the wear test.</p>
	1C	1968	24-30	---	Yes	63.3	49.8	30.7	5.0	1.5	1½	27.7%	Gran. Borrow (Grav.)	<p>Test #1C was of 6' of hard-packed silt-coated stones. Bottom 5' of face is silt-clay with stones. No floor tests were dug because bottom of face was so poor.</p>
	2	1960	0-20	0-2	Yes	62.7	55.0	44.6	15.0	4.0	---	22.2%	Gravel	<p>Composite of face probably would have slightly excess silt for Item 201.</p> <p>The pit was also sampled by Laboratory Personnel in 1960. Its southwest face was sampled and met Item 201 requirements.</p> <p>The best chance for Item 201 gravel would be from the upper northwest face.</p> <p>Access to an upper, narrow northwest level would be up around north end of pit. This level could be extended into Map Ident. No. 23.</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 40

Map Ident. No.	Field Test No.	Year Field Test	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
25	1	1968	2-10	0-2	No.	67.1	51.6	31.1	15.0	8.0	1½	25.6%	Gran. Borrow (Grav.)	<p>Owner: Smokey House Farm leased to Henry Williams.</p> <p>Area is a southeast-sloping cornfield, southeast of Town Highway No. 26. Mill Brook lies southeast of the field. D. P. Stewart has mapped area along the brook as a fluvial gravel. Only one test hole could be dug at edge of the road across from small barn. Material is a "dirty" looking gravel nearly all tabular stones. Sorting and stratification is very vague. The tabular stones found in the gravels in the central and west parts of town are derived from the slaty or schistose rock of the Taconic Hills or Mountains</p> <p>The gravels in this area would be confined to the north side of the field. Surface stones would show generally the limits of the gravel. The stones would be tabular and quite soft.</p>
26	1	1968	0.5-8	0-0.5	Yes	82.1	62.6	33.4	11.0	6.2	2	28.4%	Gran. Borrow (Grav.)	<p>Owner: Smokey House Farm.</p> <p>This is a pit which had been recently closed and smoothed over at the time sampled. It is located about 0.3 mile northwest of the Smokey House Farm buildings on a private road.</p> <p>The deposit is a ridge or</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 41

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
														knoll extending out of mountainside and is not extensive. The gravel is tabular. The northwest to north extension is wooded. One test hole was dug atop what had been the north face. The material is a quite stony, sandy fine tabular gravel. The material caved easily. Only a very few boulders seen around the pit, and a few cobble size.
27	1	1968	1.5-9.5	0-1.5	No	70.1	56.7	38.6	19.0	11.7	1	30.7%	---	Owner: Smokey House Farm. This is a large flat field located north to northeast of buildings. It looks like a kame terrace, but only east to southeast margins of field have been mapped as such by D. P. Stewart. The surface of the field shows many tabular stones. Test #1 was dug on east side of field, west across fence from Hilliard property, about 800' northeast of buildings. The material is a "dirty" ill sorted, unstratified material with no clean or sharp sand. All size particles from sand to cobbles are tabular. It looks terrible. It is not a glacial till, but probably represents poor sorting of tabular material dumped or

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 42

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
														melted from the margin of glacial ice.
28	1	1960	1-10	0-1	Yes	66.1	54.9	45.0	7.0	3.5	2½	24.4%	Gravel	Owner: A. W. Hilliard. Area is a pit located east of and below Map Ident. No. 27, and west of Town Highways No. 25 and No. 26. Access is from Town Highway No. 25. The pit was sampled by laboratory personnel in 1960; permission to sample in 1968 was denied.
	2	1960	1-10	0-1	Yes	58.6	48.8	36.3	8.0	4.0	2	---	Gran. Borrow (Grav.)	A sample taken on the north side met Item 201 requirements. A sample of coarse, cobbly gravel from the south face of the pit met grading requirements for Item 201. Too few proper size stones were included for the wear test. The feature in which pit is located is separated from the terrace sampled in Map Ident. No. 27 by a lower area. A connection with the terrace appears to exist north of the pit, and possibly the pit would have an extension in that direction as well as south toward Map Ident. No. 21. Somewhat tabular, not well sorted gravels with occasional high wears should be expected. The pit vicinity is wooded.
29	1	1968	N	O	T	S	A	M	P	L	E	D		Owner: Smokey House Farm. Area is a flat hilltop west

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 43

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
														<p>of Town Highway No. 25, and above the brook from Danby Pond. This feature is included in a large area mapped by D. P. Stewart and designated as kame moraine.</p> <p>The surface of this property shows a few stones, and there are many large stones in the rock wall at the north end. One test hole was dug in an old cornfield, 90' west of slope down to road. Only silt to silt-clay with a few stones was found. The hole was dug to 6' and not sampled. Material looks like glacial till.</p>
30	1	1968	2-9	0-2	Yes	71.1	63.8	49.0	28.0	17.7	1½	---	---	<p>Owner: Smokey House Farm.</p> <p>This is a small depleted pit used as a dump. It is located 300' west of State Aid Highway No. 1 south of Danby Four Corners.</p> <p>South and west sides of the pit drop off to a brook. Only extension would be to north. A low north face was sampled.</p> <p>Log of Test:</p> <p>0-2' - overburden 2'-4' - silt and stones 4'-6' - sandy gravel 6' - stony silt clay.</p> <p>Large blocks or boulders seen in pit floor. Field to north of pit shows some stones, but</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 44

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
														holds water at the surface in rainy spells.
31	1	1968	0.5-9.5	0-0.5	Yes	50.7	37.5	27.8	9.0	4.8	1½	25.4%	Gran. Borrow (Grav.)	<p>Owner: Lawrence White.</p> <p>Area is a small pit at the northeast corner formed by State Aid Highway No. 1 and Town Highway No. 4. The terrain slopes from west to east. Water occurs in the pit floor about 10' below level of roads. Pit extension would be to north along the town road, and east down into hay meadow. Pit is about 30' x 40'. One test hole dug atop west face. Material is a fairly clean looking cobbly gravel with a small boulder or two. Many stones are round or sub-round.</p> <p>Water flows into hole at 9.5' in boulders and sand.</p> <p>There is a small, grown-in old pit on the south side of State Aid Highway No. 1 which wasn't sampled because its extension was into the road. Probably the immediate vicinity of the two pits is site of local sorting and deposition of ice-transported materials, and deposit would not be large or thick. Permission to dig in hay land east of Test #1 could not be obtained.</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 45

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
32	1	1968	2-16	0-2	Yes	88.6	80.3	65.0	22.0	7.0	1	---	Gran. Borrow (Grav.)	<p>Owner: Dr. R. J. Rushmore.</p> <p>The property was owned formerly by Goodwin Crosby. A pit located about 0.3 mile north of State Aid Highway No. 1, atop so-called Parris Hill, was sampled. Access is by a pasture road leading from east of the buildings. The pit is about 180' east-west by 65'-75' north-south, and is in two levels. It has an east to northeast extension into a low knoll or ridge. Its north extension is limited by a small brook 70' beyond and below north face. It is wooded all around save to the northeast.</p> <p>Test #1 was a hand sample on top 16' of 23-foot north face. Material is a badly sorted sandy fine gravel on the top 5'. From 5' to at least 16' is a clean coarse sand and fine gravel interval in which the beds dip west. There are many tabular stones, especially on the top of the face.</p> <p>Overall, there are too few stones for Item 201.</p> <p>Too few proper-size stones were included for the wear test. The test bottomed in gravelly sand.</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 46

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	2	1968	1.5-11	0-1.5	Yes	97.8	91.8	77.3	13.0	5.0 3.9*	1	---	Sand	Test #2 was a hand sample of upper level face in north-east end of pit. There are some tabular cobbles on top of face, but mainly material is a pebbly sand over a fine sand. Face is 16' high; bottom 5' has too much slough to dig through.
	3	1968	0-8	---	Yes	80.6	79.1	69.1	13.1	5.0 3.5*	1	---	Gran. Borrow (Sand)	Test #3 was dug on lower level face on east side of pit. Top 8' of 14-foot face was sampled. Material is very clean fine gravel with tabular stones and some gravelly sand lenses going at 7' to fine sand. Face bottoms in fine sand mostly concealed by slough. Sampled interval has too many stones for Item 202; composite of face would probably meet requirements for Sub-base of Sand.
	4	1960	2-10	0-2	Yes	87.6	67.8	44.0	20.0	8.0	1½	30.9%	Gran. Borrow (Grav.)	Two samples taken from the pit in 1960 by laboratory personnel were tested for Item 201.
	5	1960	2-20	0-2	Yes	72.3	62.4	46.0	12.0	5.0	1	30.0%	Gran. Borrow (Grav.)	The upper face and lower face were sampled. Both samples had excess fines, and excessive wears for Item 201. Generally speaking, pit has too few stones for Item 201.
33	1	1968	N	O	T	S	A	M	P	L	E	D		Owner: Mrs. Kenneth Wilson. This area is old pasture located south across State Aid

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 47

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
34	1	1968	N	O	T	S	A	M	P	L	E	D	<p>Highway No. 1 from Town Highway No. 11. A large area in the general vicinity has been mapped by D. P. Stewart as a kame terrace. However, it appeared from field observations and from viewing material in test hole, that any granular material would probably be in the hill east of Town Highway No. 11, and the test hole. Permission could not be obtained to sample on this hillside.</p> <p>One test hole was dug at the west foot of the hillside, beside a poplar grove 500' south of the State Aid Highway. Material is boulders, cobbles, and rocks with unsorted silt. It looks like till, and was not sampled.</p> <p>Gravel should be sought in the hillside east of and above the poplar grove, or in the knolls further east, and south of the small brook.</p> <p>The present owner, however probably would not be willing to open a pit on her property.</p> <p>Owner: Mrs. Kenneth Wilson.</p> <p>This area is a large flat field on the south side of State Aid Highway No. 1, about a mile east of the Pawlet - Danby Town Line. D. P. Stewart</p>	

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 48

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHTO T-21	Abrasion AASHTO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
														has mapped the field within a kame terrace. The top 3.5' of one test hole dug was organic, quite silty, and cobbly. It overlies silt-clay. The hole was dug to 5.5', and no sample was taken.
35	1	1968	0.5-6	0-0.5	No	98.4	91.9	67.2	2.5	1.5 1.0*	1½	---	Gran. Borrow (Sand)	Owner: Corey Brown. This area is the south edge of a kame terrace located south of Town Highway No. 5. The land is used to grow hay, and permission was given to take only one test. A narrow lobe or spur on the southeast corner of the terrace above a broad swale was sampled. The test hole was dug about 0.35 mile south of the town highway. Access is by a field road. Material is a very pebbly coarse sand with few +1½" pebbles. Hole bottoms at 6' in at least 2' of silty sand to silty clay. An additional sieve analysis follows: Passing #10 - 70.8% Passing #40 - 19.9% Passing #80 - 6.8% Passing #200 - 2.6%

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 49

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
	2	1968	N	O	T	S	A	M	P	L	E	D	Two tests were dug in a plowed field below the terrace to the southwest. Both tests hit silt-clay at least 5' thick. No samples taken. There is probably much granular material in the terrace on the south side of Town Highway No. 5. There is a quite gravelly surface near the town highway. Owner would not allow further testing at the time, and was not interested in opening any part of this area as a pit.	
	3	1968	N	O	T	S	A	M	P	L	E	D		
36	1A	1968	3.5-16	0-3.5	Yes	88.2	71.2	47.3	15.0	8.0	1 1/2	27.2%	Gran. Borrow (Grav.)	<p>Owner: Corey Brown (formerly owned by George Brown).</p> <p>A medium-sized pit located about 300' northeast of and above Town Highway No. 5, southeast of owner's buildings. The pit is in two levels: a smaller lower level has a frog pond in its floor and has been abandoned; an upper level 150' northwest/southeast x 50' southwest/northeast was opened to get above silt-clay and probably bedrock. The northeast face of the upper level varies from about 55'-60' in the center to about 25' on the ends.</p> <p>There is some sloughing of gravel and vegetation on upper face (trees grow right to the</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 50

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
														edge of the top). There are only a few large stones scattered around pit. Many tabular stones show on face. Bedding is fairly distinct, but is lensed in places, or is cut off by inclined beds. On the whole, it looks like fine gravel. Test #1A was of top 16' of upper face taken about 60' from north end. Material is hard-packed fine gravel and much apparent silt-clay binder. It is not well sorted and has some tabular stones. Roughly, face has interlayered gravel, and gravelly sand or pebbly sand.
	1B	1968	16-28	---	Yes	66.2	56.8	36.5	4.0	2.0	1½	9.2%	Gravel	Test #1B was of middle portion of upper face from beds of quite stony pebbly gravel with an occasional cobble. There is some silt-clay coating or binder and a few tabular stones. It looks good. More sand content in gravel below 25'.
	1C	1968	40-56	---	Yes	65.2	55.3	34.6	10.0	5.0	1	24.2%	Gravel	Test #1C was dug on bottom of face. Unsampled interval had too much silty slough to dig through, and was too high for backhoe to reach. Material of Test #1C was in beds and lenses of fine and cobbly gravel with some fine

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 51

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Over-burden (Ft)	Exist-ing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
	2	1968	N	O	T	S	A	M	P	L	E	D		<p>sands and some silt-clay coatings.</p> <p>Composite of face looks pretty good for Item 201. Extension would be northeast to east. It is wooded on top.</p> <p>Test #2 was dug in floor 50' from south end. About 2.5' of "dirty" fine gravel was encountered bottoming in hard-packed silt clay. No sample was taken.</p> <p>The silt-clay layer hit in the upper floor means that if the pit is extended further to the east, a higher level will have to be opened to keep above the layer.</p>
	3	1968	2-25	0-2	Yes	74.4	52.9	35.4	6.0	3.0	1	---	Gran. Borrow (Grav.)	<p>Test #3 was sampled on south end of pit face. There is some sloughing. Beds of fine gravel and stony sand with isolated cobbles were sampled. The beds dip west. The test indicates that the pit could be extended to the south as well as eastward. Too few proper-size stones were included for the wear test.</p>
	4	1968	0.5-7	0-0.5	Yes	68.0	60.1	45.9	6.0	3.0	1 1/2	29.6%	Gran. Borrow (Grav.)	<p>Test #4 dug beside haul road at north end of pit. A north extension of the pit is limited by a brook. The material is a fairly fine gravel with 1 boulder and a few cobbles. Water hit at about 5',</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 52

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	5	1959	3-30	0-3	Yes	84.2	68.1	40.3	4.0	2.0	1½	29.4%	Gran. Borrow (Grav.)	and hole dug to 7' still in gravel. The sample met grading requirements, but had excessive wear for Item 201. The north, east, and south sides of the pit were sampled by laboratory personnel in 1959 and 1960.
	6	1959	3-20	0-3	Yes	68.1	57.8	41.9	5.0	2.0	1	25.4%	Gran. Borrow (Grav.)	Two samples had excessive wear for Item 201; all samples met the grading requirements.
	7	1960	2-20	0-2	Yes	54.2	48.5	34.8	7.0	3.0	1	22.6%	Gravel	The samples were taken before the upper level had been started. Test #8 was taken on the then 40-foot face near the north end; Tests #6 and #7 were taken at the south end; Test #5 was taken on the east side.
	8	1960	3-40	0-3	Yes	65.7	51.1	29.6	6.0	2.5	1½	21.8%	Gravel	
37	1	1968	N	O	T	S	A	M	P	L	E	D		Owner: Corey Brown.
	2	1968	N	O	T	S	A	M	P	L	E	D		The same terrace mapped by D. P. Stewart as extending north between Mount Hoag and Walnut Hill was also sampled north of owner's buildings on the east side of Town Highway No. 5. Pasture knolls above an old cornfield were sampled in two locations. Only glacial till was found and no samples were taken.
38	E	1968	0.5-15	0-0.5	Yes	87.5	72.8	45.9	17.0	9.0	1	29.4%	Gran. Borrow (Grav.)	Owner: Andrus Brothers. (Pawlet) This is formerly the

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 53

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
39	1	1968	1-11	0-1	No	86.9	72.9	46.4	6.0	3.0	1	30.6%	Gran. Borrow (Grav.)	<p>Skelly property. The Andrus Realtors had it up for sale and would allow only a hand sample of the pit to be taken.</p> <p>The pit is in a mapped kame terrace, and specifically, is in a long, low, broad ridge extending to the south-south-east along the southwest foot of Harrington Hill. The ridge merges with the hillside, and at the Harrington property line, about 700'-800' south of the pit, there are a few granular patches showing on some low knolls. The pit was opened in the north end of the ridge. Access is by a pasture road coming south under a power line from the buildings for about 0.1 mile. Pit is about 60' wide and has fairly flat, badly sloughed, and somewhat gullied faces. Maximum height of faces is about 22', the bottom 6'-8' of which is silt to silt-clay.</p> <p>A 15-foot section sampled is a hard-packed sandy gravel with tabular stones. There is a silt-clay seam at about 4'-5'.</p> <p>Owner: Sylvester Harrington. This area is a small, low knoll on the lower, southwest slope of Harrington Hill. The</p>
						*Percentage of Total Sample								

TABLE I

DANBY GRANULAR DATA SHEET NO. 54

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Eixst-ing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	2	1968	1-9.5	0-1	No	86.3	82.7	43.6	5.0	3.0	2	27.0%	Gran. Borrow (Grav.)	<p>feature, with a 30-foot wide old pit in its downhill side, is located just above the power line and just east of the Skelly (Andrus) farm. Access would be difficult up from the town highway, through the woods and up the hillside.</p> <p>The feature is about 150' northeast/southwest x 100'-110' northwest/southeast. Its upper end merges with the general slope of the hill. It is 20'-25' high on its down hill side.</p> <p>Test #1 was dug on its south side, atop the bank above the old pit.</p> <p>Stratified fine gravels and pebbly sand encountered. There are very few +3" stones. Beds dip to the southwest and also appear slightly arched.</p> <p>Test #2 was dug 100' north-east of Test #1. The material is a very fine gravel with few +1½" stones. It doesn't stand well in hole.</p> <p>Gravel in this feature is characterized by its fineness and its somewhat high wears. The gravel is confined to the ridge. The hillside generally looks non-granular. Feature was probably formed by deposition from glacial melt waters.</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 55

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
40	1	1968	2-11	0-2	No	72.9	61.3	44.5	13.0	7.0	1	35.7%	Gran. Borrow (Grav.)	<p>Owner: Sylvester Harrington.</p> <p>This area is a shelf or terrace on the southwest to southeast flank of Harrington Hill. On the shelf or terrace are a number of granular features - a conical hill and winding ridges extending outward and down from the conical hill.</p> <p>If granular material were to be worked in this area (and anywhere on upper slopes below this area), it would be well to bulldoze the material down to where trucks could get in to be loaded. Hillside below the shelf is high and very steep.</p> <p>Test #1 was dug atop the eastward extending ridge at the point where that ridge merges with a fairly flat area on the northeast side of the conical hill. The test is about 180' east of the base of the hill.</p> <p>The material is a sandy gravel with many sub-angular stones. There were a few +6" stones.</p> <p>The sample had excess silt and excessive wear for Item 201.</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 56

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	2	1968	2-9.5	0-2	No	77.7	67.2	42.2	22.0	10.0	1½	29.0%	Gran. Borrow (Grav.)	Test #2 was dug about 140' west of and 10' above Test #1 on east slope of the conical hill. The material is sandy gravel with a few +6" stones. Some of constituents are angular to sub-angular. There are thin beds or lenses of predominantly pebbles.
	3	1968	1.5-9.5	0-1.5	No	100	100	83.0	14.1	2.0 1.7*	1-	---	Sand	Test #3 dug on south or southwest flank of high conical hill where broad, southward-extending ridge begins to emerge. The material is brown very fine sand with one thin layer of pebbly sand. An additional sieve analysis follows: Passing #10 - 92.9% Passing #40 - 87.7% Passing #80 - 50.1% Passing #200 - 13.9%
	4	1968	1-6	0-1	No	65.1	49.2	27.1	13.0	7.0	1	29.3%	Gran. Borrow (Grav.)	Test #4 dug 150' south 20° east of and 10'-12' below elevation of Test #3 on same low, broad ridge. East end of hole shows brown silty sand; west end was westward-dipping beds of very stony sandy gravel which was sampled. A silt or silty clay is at 6', but gravel bed appears to get thicker to the west. More testing is needed in this area. Backhoe could

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 57

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
														not get up on conical hill to test that feature, and there is quite a large area between Test #1 and #4 that may be granular. Hilltop can not be reached by truck, but foot of hill, where granular material could be bulldozed from top, is reached by crossing a brook from Town Highway No. 10 near owner's house. Gravels in this area have high wears or a high silt content or both.
41	1A	1968	1.5-5.5	0-1.5	No	87.4	75.0	47.8	5.0	2.0	1½	26.0%	Gran. Borrow (Grav.)	Owner: Sylvester Harrington. This area is located atop the southeast slope of Harrington Hill. It consists of ridges and knolls, south and east of and below Map Ident. No. 40. A broad low ridge winds down the steep southeast hillside to vicinity of old diggings at the bottom.
	1B	1968	5.5-11	---	No	100	100	84.3	4.1	2.0 1.7*	1½	---	Sand	Test #1 was dug on a knoll out of which the hillside ridge emerges. From 1.5'-5.5' is a gravel sampled as #1A; from 5.5'-11' is a pebbly coarse sand, sampled as #1B. An additional sieve analysis follows: Passing #10 - 80.5% Passing #40 - 27.5% Passing #80 - 6.4% Passing #200 - 2.0%

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 58

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
	2	1968	1-11.5	0-1	No	79.4	66.3	49.7	9.0	3.0	3	28.3%	Gran. Borrow (Grav.)	<p>The knoll on which Test #1 was dug is joined to another knoll located 150' to the southwest by a ridge 35' wide. The ridge then bends south and drops in elevation to a low winding ridge that extends down the south side of the hill.</p> <p>Test #2 dug on a small knoll 200' west across intervening low area from Test #1.</p> <p>Test #2 is about 200' southeast of Test #40-4.</p> <p>The material is a gravel that looks a little on the "dirty" side and having an occasional +4" cobble. The sample met grading requirements, but had excessive wear for Item 201. The test bottomed in the same material. The knoll is quite small, and represents only a local site of deposition within a large area of similar small features.</p>
	3	1968	1.5-8	0-1.5	No	81.9	64.7	48.8	10.0	4.0	1	25.6%	Gran. Borrow (Grav.)	<p>Test #3 was dug on the east end of a ridge about 200' north 20° east of Test #1. The ridge is about 40' above the elevation of Tests #1 and #2.</p> <p>Test #3 is about 130' east of Test #40-1, and is on the same ridge. The material is a fairly clean fine gravel with very few +3" cobbles.</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 59

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	4	1968	1-11	0-1	No	100	78.6	66.7	24.0	11.0 9.7*	1	---	---	<p>Stones are fairly round (like Tests #1A and #2). Hole goes to sand at 7' and to silty sand at 8'.</p> <p>The ridge averages 20' to 30' wide, and including the vicinity of Test #40-1, has quite a bit of gravel. Again, the wear rejected the sample of Test #3 for Item 201.</p> <p>Test #4 was dug on the low ridge which bends southward from the ridge in which Test #1 was taken. The test is about 280' southwest of and 15'-20' below elevation of Test #1.</p> <p>The ridge is 40'-50' wide, merges gradually with the east slope of the hillside, while its contact on the west with the bouldery south hillside is quite abrupt and definite.</p> <p>Log of test hole: 0-1' - overburden 1'-6.5' - fine sand 6.5'-8.5' - silty sand 8.5'-11' - gravel</p> <p>The gravel continues below the depth sampled. An additional sieve analysis follows: Passing #10 - 88.0% Passing #40 - 69.2% Passing #80 - 47.1% Passing #200 - 18.6%</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 60

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
														The sample had excess passing the #270 mesh sieve for Item 105, Granular Borrow.
42	1	1968	1-10.5	0-1	No	100	100	70.4	40.0	16.0	1 1/2	---	---	<p>Owner: Sylvester Harrington.</p> <p>This is the ridge extending down the south slope of Harrington Hill from Map Identification No. 41. The ridge broadens and flattens to a knoll whose east to south sides stand very steeply above a brook at the base of the hill.</p> <p>Test #1 was dug on the ridge about half-way down the hillside. The material is a pebbly silty sand, going at 9' to a gravel with some angular stones.</p> <p>Woodchuck holes on the east side of the ridge show many stones, some tabular. Gravel contact dips to the east. The gravel has many carbonate stones. Sample had excess silt for Item 105. An additional sieve analysis follows:</p> <p>Passing #10 - 93.7%</p> <p>Passing #40 - 71.2%</p> <p>Passing #80 - 43.1%</p> <p>Passing #200 - 20.7%</p>
	2	1968	1.5-8	0-1.5	No	58.8	45.5	31.1	23.0	13.0	1	30.8%	---	<p>Test #2 was dug on knoll at base of ridge. The surface is bouldery. The material in hole is a silty or sandy gravel, poorly sorted, and with about 15% exceeding 6". Most stones</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 61

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Over-burden (Ft)	Exist-ing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
														are angular to sub-angular. Were this material to be used for anything, it would be accessible from Town Highway No. 10 along the lower east slope of the hill.
43	1	1968	2-11	0-2	No	82.1	66.4	46.6	18.0	9.0	2	35.3%	Gran. Borrow (Grav.)	Owner: Sylvester Harrington. Area is vicinity of old hand dug pits at the foot of the east slope of Harrington Hill. The diggings are near the lower end of the broad, low ridge that winds down from Test #1 of Map Identification No. 41. Test #1 was dug atop old pit. The material is a somewhat "dirty" looking gravel with some +6" boulders. Hole bottoms in silt at 11'.
	2	1968	1.5-12	0-1.5	No	84.0	74.0	54.0	9.0	4.0	1½	23.8%	Gran. Borrow (Grav.)	Test #2 was dug 125' west of and 20'-25' above elevation of Test #1. This test hole is at the lower end of the hillside ridge. The material is a fine, but fairly well graded gravel with occasional small cobbles. Extension of material appears to be confined to immediate vicinity of pit and westward to the ridge. Granular material on the hillside is probably confined to the ridge. The present access to this

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 62

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
														area and to the material on the hilltop involves two small bridges on Town Highway No. 10, and a tight turn into the pasture. An access could be built straight in from the road with a pipe placed in the brook that flows between the road and the hillside.
44	1A	1968	0.5-13	0-0.5	Yes	75.2	67.6	47.0	11.0	4.0	1	25.9%	Gran. Borrow (Grav.)	<p>Owner: Sylvester Harrington.</p> <p>This area is the lower or more westerly of two pits located southeast of and above owner's buildings on the east side of Town Highway No. 10. Access is about 0.08 mile up through owner's dooryard. Pit is about 70' long and has a 20-foot face in its northeast end. The bottom of the faces have much slough.</p> <p>Southeast side of top of pit has been stripped for about 30'-40' in width. Pit's extension is east toward upper pit, southeast, and south to southwest onto flat knoll under power line.</p> <p>Test #1A was a hand sample of top 13' of face of pit in northeast end. The material is mainly a fine gravel with a few small cobbles. There are also beds of gravelly sand. At 12' is fine sand. About one-half of stones are tabular.</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 63

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
						N O T S A M P L E D								
	1B	1968	14-20	---	Yes	N O T S A M P L E D							<p>The sample barely failed to meet abrasion requirements for Item 201.</p> <p>Test #1B was exposed by the backhoe on the lower face. The fine sand at 13' goes at 14' to silty clay which continues to the floor. No sample was taken.</p>	
	2	1968	2-6.5	0-2	Yes	78.6	67.6	48.3	12.0	5.0	2	30.6%	Gran. Borrow (Grav.)	<p>Test #2 was dug 40' south of southwest end of pit, just outside of stripped area, and beside road over to the upper pit. Top 2' or 3' is very "dirty" with a few cobbles. Below 3" is fairly clean gravel, going to silty sand at 6', and to silt of clay at 8'.</p> <p>Apparently there is not much material left in a south extension. It also appears that the silt or clay bottom is rising toward the east, and that little gravel is left in the east extension toward the upper pit.</p>
45	1	1968	0.5-11	0-0.5	Yes	89.5	75.8	52.9	10.0	4.0	1½	28.6%	Gran. Borrow (Grav.)	<p>Owner: Sylvester Harrington. Area is upper pit about 90'-100' east of Map Identification No. 44. The pit has trees around floor and at top of faces. It is about 100' square and faces vary up to 28' high. The floor has junk cars.</p> <p>Test #1 was sampled on the</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 64

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	2	1968	N	O	T	S	A	M	P	L	E	D		top 11' of the east face. The material is a gravel with many tabular stones and has much clean sand. Test #2 dug about 40' southwest of pit, and about 100' southeast of the lower pit. Silty clay and stones were found in 6' of digging.
	3	1968	0-9.5	---	Yes	85.5	70.7	45.7	11.0	7.0	1-	25.0%	Gran. Borrow (Grav.)	Test #3 dug atop southeast face of pit, 30' south of Test #1. A narrow area atop this side of pit was once stripped, but is growing in to trees again. The terrain is rough. Material in the test hole is a somewhat "dirty" looking gravel with about half of stones tabular. There are a few angular small boulders. There is some silty clay coating. This eastward extension is wooded and rises into Map Identification No. 46.
	4	1968	2.5-11	0-2.5	No	95.5	85.1	62.2	9.0	4.3	1-	28.7%	Gran. Borrow (Grav.)	Test #4 dug about 100' southwest of Test #3 on upper edge of pasture slope next to trees. Log of test hole: 0-2.5' - overburden 2.5'-6.5' - pebbly silty sands 6.5' -9' - gravelly sand 9'-11'+- gravel The material looks good in the bottom. Sample had too few stones

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 65

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
														<p>retained on the #4 sieve for Item 201. Also the sample had excess silt and excessive wear for that item.</p> <p>Apparently the silty clay hit on the face of the pit in Map Identification No. 44 and in Test #2 of Map Identification No. 45 will force excavations for gravel to come up above the level of Test #2. The lower east face of the upper pit, below Test #1, could not be reached with the backhoe, and had excess slough to hand sample. So it is not known how deep the gravel represented in Tests #1 and #3 would be.</p> <p>Generally speaking, a southeast to east extension of the upper pit would have to be at a higher elevation.</p>
46	1	1968	1-10.5	0-1	No	64.0	49.6	31.5	11.0	6.0	2	31.8%	Gran. Borrow (Grav.)	<p>Owner: Sylvester Harrington.</p> <p>This area is above the wooded slope which rises above the east side of Map Identification No. 45. The woods are about 100'-125' wide and extend east-northeast/west-southwest.</p> <p>Test #1 dug about 100' south to south-southeast of and above Test #45-4. The material is a fairly clean looking gravel with mostly somewhat tabular stones.</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 66

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
	2	1968	0.5-10.5	0-0.5	No	74.2	63.0	43.5	10.0	5.0	1 1/2	28.0%	Gran. Borrow (Grav.)	<p>Only very few exceed 4". No distinct bedding could be seen. The sample had excess silt and excessive wear for Item 201.</p> <p>Test #2 dug about 100' west-southwest of and 8'-10' below elevation of Test #1 in old test scar or small excavation. From 0.5'-3' is a "dirty" looking pebbly sand over somewhat cleaner fine gravel. From 8'-9' is a cobbly zone; from 9' to below depth of test is gravel.</p> <p>The southwest trending grove of trees appears to be following a very narrow rounded terrace or ridge of granular material. From Test #1 the slope is gently eastward for 60' where a change to a gentle westerly slope is evident.</p>
	3	1968	N	O	T	S	A	M	P	L	E	D		<p>Test #3 dug on this slope near upper side of pasture encountered glacial till.</p>
	4	1968	3-12	0-3	No	100	88.1	52.1	36.0	8.0	1	23.8%	Gran. Borrow (Grav.)	<p>Test #4 dug about 200' west of Test #2 near southwest end of the ridge. There is 3' of silty top overlying sand, pebbly sand, and gravel. Few stones exceed 1 1/2". The beds dip shallowly west. Gravels in this area are fine, have generally high wears and excessive silt. There are</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 67

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
														probably 15,000 to 20,000 cu. yds. of tabular sandy fine gravels in this area and in the east extension of Map Identification No. 45. Item 201 would have to be appropriately modified in order to use gravel in this area.
47	1	1968	2.5-8	0-2.5	No	100	96.1	83.0	25.7	9.0 7.5*	1½	---	Gran. Borrow (Sand)	Owner: Sylvester Harrington. A small lobate feature on the upper side of a pasture northeast of the owner's buildings was tested. Bedding is present. The material is thin, clean gravelly sand layers within thicker silty sand beds. A large boulder hit at 8'. An additional sieve analysis follows: Passing #10 - 86.1% Passing #40 - 58.1% Passing #80 - 37.0% Passing #200 - 14.6%
48	1	1968	N	O	T	S	A	M	P	L	E	D		Owner: Oscar Taylor. Feature is terrace-like and is located above the east side of Town Highway No. 10, about 0.7 mile northeast of Sylvester Harrington's. Feature was formerly pasture, now growing to small pines, white birch, poplar, and hardhack. It is gently rounded and slopes toward the west. A few stones show in the road up from the town highway. Material in

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 68

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Over-burden (Ft)	Exist-ing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks	
						1½"	5/8"	#4	#100	#270					
49	1	1968	1.5-5.5	0-1.5	Yes	64.6	53.5	36.2	12.0	7.0	1-	23.2%	Gran. Borrow (Grav.)	test hole is silty clay with a few stones. The hole was dug to 4' and was not sampled. Owner: Paul Hoisington. Area is vicinity of small, shallow old pits. Deposit is very thin and local. Glacial till rises from east to west. Area is east of junction of Town Highways No. 4 and No. 13. Test #1 was on face of 20-foot x 60-foot easterly diggings. A sandy cobbly gravel goes to a stony and clayey till at 5.5'. One or two shallow diggings south and east of the one sampled have been abandoned and filled with stumps and junk.	
	2	1968	N	O	T	S	A	M	P	L	E	D			Test #2 dug 100' west of Test #1, and 60' south of Town Highway No. 13. The test hole was dug to 4' in stony clay till and was not sampled. Terrain on north side of Town Highway No. 13 is similar with similar tree cover, but no samples were taken.
50	1	1968	0-3	---	No	75.8	61.2	40.9	14.0	8.0	1	17.0%	Gran. Borrow (Grav.)	Owner: Elizabeth White. Area is a cornfield that is very stony, but with heavy soil. A broad, south-sloping knoll lies in the center of the cornfield. Extending north-south down its slope is a narrow band of quite stony, granular	

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 69

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
														material which can be traced easily on a plowed surface. At + 330' south of the field road is an area 40' x 75' that is quite granular. Test #1 was dug by hand. Only 3' of sand and gravel was encountered, bottoming in silty sand and stones. Backhoe testing was not allowed. Origin of material not determined; but the deposit is very narrow and apparently not deep.
51	1	1968	0.5-5.5	0-0.5	No	67.9	55.9	35.2	11.0	6.0	1-	17.7%	Gran. Borrow (Grav.)	Owner: Arthur Sherman. This area is a pasture above the north side of Baker Brook, beside Town Highway No. 9. The pasture is 0.27 mile east of Town Highway No. 12. A power line crosses the area at its east end. Test #1 dug in a partially excavated area under the power line atop the steep bank down to the brook. Surface is cobble and bouldery. The material is a sandy gravel from beds of gravel and pockets of pebbles. A huge boulder hit at 5.5', overlying silt to clay.
	2	1968	0.5-4.5	0-0.5	No	43.6	35.4	24.6	30.0	11.0	1	19.2%	---	Test #2 was dug 140' west of Test #1 on crest of very low roll in pasture surface. The material is very stony and

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 70

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
	3	1968	0.5-8	0-0.5	No	65.7	48.1	27.5	11.0	5.0	1	22.8%	Gravel	<p>has much silt. The hole is hard to dig. Very large boulders forced a halt to digging at 4.5'.</p> <p>Test #3 was dug about 220' southwest of Test #2 at south edge of pasture. The gravel is cobbly and looks fairly clean. About 20% of material exceeds 6". Some stones are angular; most others are sub-round. Hole goes to silty clay at 8'.</p> <p>The place to dig for gravel in this area is in the vicinity of Test #3, and westward for a maximum of 300'. The deposit is probably of ice-contact origin. Its maximum width does not exceed about 175'.</p>
52	1	1968	1.5-10	0-1.5	No	59.0	47.7	38.5	6.0	3.0	1	22.2%	Gravel	<p>Owner: William Cressy.</p> <p>This is a large flat area east of and above Town Highway No. 16, north of the Albert Teer pit. For the sake of convenience, the Cressy property west of the northeast-trending telephone lines was designated as Map Identification No. 52.</p> <p>The feature is a large kame terrace located at the juncture of the valleys occupied by Baker Brook and Otter Creek, and it drops off very steeply on its west and south sides.</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 71

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	2	1968	1.5-10	0-1.5	No	54.1	42.5	31.8	14.0	7.0	1½	23.6%	Gran. Borrow (Grav.)	<p>Test #1 was dug in southwest corner of flat area atop steep slope down to Teer pit. Overburden in the test hole varies from 1.5'-3'. Below that is a fairly clean cobbly gravel with a small boulder or two. An estimated 10% exceeds 6" (not sampled).</p> <p>Test #2 dug 250' north of Test #1 at west edge of terrace, directly above access road from Town Highway No. 16 into the property. The material is a cobbly gravel with more cobbles than Test #1. It is hard digging. A cobbly sand continues from 9'.</p>
	3	1968	1.5-7.5	0-1.5	No	50.3	33.1	25.8	22.0	11.0	1	20.6%	---	<p>Test #3 dug 200' north of Test #2 at northwest corner of flat pasture, above old sand diggings through which access road leads. Material is a poorly sorted gravel with angular stones and much silt. An estimated 20% exceeds 6". Silty sand hit at 7.5'.</p> <p>Very likely north end of the terrace is poorly sorted and cobbly. Bedrock is exposed 200' northeast of Test #3, and lies 10'-12' below top of terrace.</p>
	4	1968	2-9.5	0-2	No	76.0	66.9	50.3	5.0	3.0	1	14.4%	Gravel	<p>Test #4 was dug 180' south 45° east of Test #3 in center</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 72

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
	5	1968	1.5-10	0-1.5	No	52.9	38.7	26.7	12.0	6.0	1	21.0%	Gravel	<p>of flat pasture, at a point 240' from north end of deposit.</p> <p>The material is a fine gravel with few +3" stones. The gravels looks clean and the stones seem hard. Vaguely stratified as shown by segregated stone sizes. The material caved easily so hole was dug only to 9.5'. Bottom is the same material.</p> <p>Test #5 was dug 180' due east of Test #4, and 80' from north end of flat terrace. The test is 75'-80' west of the telephone lines. The material is a very stony gravel with many cobbles. It looks fairly clean and appears to dip west. About 10%-15% of the material exceeds 6". There are a few small boulders from 6'-7'. The hole continues in gravel to below depth of test.</p>
	6	1968	1.5-11	0-1.5	No	80.0	66.0	50.5	5.0	3.0	1-	17.2%	Gravel	<p>Test #6 dug 180' southwest of Test #5 at the north end of a broad, shallow swale that drops down toward the Teer pit. The material is a clean looking gravel with few +3" stones. Below 7' is a very fine gravel or pebbly sand.</p> <p>There is probably 35,000 cu. yds. of gravel acceptable for Item 201 in the area represented by Tests #1, #4, and</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 73

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						% Passing								
						1½"	5/8"	#4	#100	#270				
													#5, and #6. Access into area is up from Town Highway No. 16 around the northwest end. The land is pastured, and has grass cover.	
53	1A	1968	2.5-10	0-2.5	Yes	62.2	52.0	32.7	16.0	9.0	1½	22.3%	Gran. Borrow (Grav.) Owner: William Cressy. That part of the Albert Teer pit north of the east-west property line between Teer and Cressy is designated as Map Identification No. 53. It consists of the upper sloughed north faces of the pit. Atop the faces the terrain is very steep to quite gentle up to Map Identification Numbers 52 and 56, respectively. Two or three gullies extend eastward to northward from the pit top up into the Cressy pasture. Test #1A was a hand sample of the upper face 70' from its east end. The material is a cobbly gravel with fairly well rounded stones. About 10% of material exceeds 6". The sample had excess fines for Item 201.	
	1B	1968	10-19	---	Yes	60.8	47.8	31.5	8.0	4.0	1	8.6%	Gravel Test #1B, from below #1A, is cobbly but finer gravel going to a coarse pebbly sand or a fine gravel at about 18'. Material doesn't appear to be well sorted or stratified. Bottom of the test is about 50'	

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 74

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Over-burden (Ft)	Exist-ing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
						2A	1968	2-12.5	0-2	Yes				
2B	1968	12.5-23	---	Yes	100	70.5	58.4	18.0	5.0	1	---	Gran. Borrow (Grav.)	Test #2B, from below #2A, is a gravelly sand or fine gravel, going to interbedded coarse sand and pebbly sand to below depth of test. Sample had excess fines for Item 201.	
3	1968	15-32	0-3	Yes	79.6	67.6	48.9	4.0	1.5	1	8.6%	Gravel	Test #3 dug on north face between two larger gullies, west of Test #1B. Bottom 17' of 35' face sampled. An immense amount of slough on this face and bottom of face has some vegetation. Bottom of test is about 18' above pit floor. Material is a fine gravel interbedded with clean sharp sand, and pebbly sand. Overall, a very few +3" stones. Test bottoms in fine sand. The Cressy-Teer property line crosses the north face about at the foot of Test #3.	

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 75

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
54	1A	1968	3-16	0-3	Yes	74.9	59.4	43.7	6.0	3.0	1½	11.6%	Gravel	<p>Owner: Albert Teer.</p> <p>This is a high pit on the east side of town highway, the upper north faces of which were sampled as Map Identification No. 53. It is a pit that has been opened in the edge of the large kame terrace located where the valleys of Baker Brook and Otter Creek join. Its floor measures about 150' north-south x 100' east-west; its east face, showing several hardpan layers, varies from 85' on its north end to 40 or 45 feet on its south end. Top of the east face is wooded.</p> <p>Test #1A was a hand sample of the east face taken about 75' from the northeast corner. There is about 3' of silt and tree roots. The material is pebbly sand or fine gravel near the top, going to fine gravel with only an occasional +6" stone.</p>
	1B	1968	16-31	---	Yes	48.8	39.8	25.2	11.0	4.0	1	5.2%	Gravel	<p>Test #1B was of beds of cobbly, very stony gravel going to a fine, very clean gravel at 30'. The face below Test #1B had excess slough to dig through.</p>
	2A	1968	3-17	0-3	Yes	84.7	68.4	43.8	7.0	3.0	1	12.6%	Gravel	<p>Test #2A taken near south end of east face. Top of face at this point is about 10'-12'</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 76

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Over-burden (Ft)	Exist-ing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
	3	1968	N O T			S	A	M	P	L	E	D		<p>below bottom of Test #1B. The material is a horizontally bedded fine gravel all under 4". There is partial cementation at about 16'.</p> <p>Test #2B, from 17'-30', was of cobbly gravel to 21'; from 21'-25' is fine gravel; 25'-30' is pebbly sand. The test bottomed in sand, but bottom 15' of the face has too much slough to dig through to expose fresh material.</p> <p>The bottom of the east face was not sampled at any point.</p> <p>Test #3 dug mid-way across floor near south end of pit. Hard packed sub-angular stones and silty sand encountered down to 4'; there is more clay and fewer stones below that. No sample was taken.</p> <p>Test #4 dug on face of shelf on the bottom of the north face. This test begins at about the elevation of the bottom of Test #53-3, but a few feet out from it. From 0.5'-7' the material is a gravel with much coarse sand and a few +3" cobbles. It looks fairly clean. It is mainly a fine gravel from 7'-17'.</p> <p>The extension of this material is north onto Cressy</p>
	4	1968	0.5-17	0-0.5	Yes	64.6	56.1	43.8	7.0	3.0	1	15.9%	Gravel	

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 77

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	5	1968	0-11.5	---	Yes	100	100	96.3	5.8	1.0*	1	---	Sand	<p>property, as the line crosses the north face a few feet back from the top of the test.</p> <p>Test #5 was a floor sample at the base of Test #4. There is from 0.5'-2.5' of sandy gravel over a uniform sand with an occasional small pebble. The contact with the gravel layer dips south at about 45°. An additional sieve analysis follows:</p> <p>Passing #10 - 97.3% Passing #40 - 60.4% Passing #80 - 10.3% Passing #200 - 1.7%</p>
	6	1964	---	---	Yes	78.5	66.3	44.7	8.0	2.5	1	20.4%	Gravel	<p>Test #6 was a hand sample on 80-foot east face toward the south end, taken by laboratory personnel. Sand layers were noted. No +3" stones were sampled.</p>
	7	1964	2-50	0-2	Yes	77.9	61.3	48.0	5.0	2.0	1½	15.4%	Gravel	<p>Test #7 was taken at point on east face where it was about 50' high. A very few +3" stones were included.</p> <p>Pit would be gravel source. Trees should be cut atop east face. Telephone lines cross the pit just west of the west side of the pit floor. There is much slough on the lower east face. However, the wears are good and there aren't many fines, so possibly even the slough would be suitable for</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 78

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
														Item 201. The north faces have much vegetation in addition to the slough, and in general, the in-place gravels are somewhat more silty.
55	1	1968	1.5-11.5	0-1.5	No	80.2	71.0	57.9	12.0	4.0	1	14.8%	Gran. Borrow (Grav.)	<p>Owner: Albert Teer.</p> <p>This area is woods with clearings located east to southeast of Map Identification No. 54. It is bounded on the north by open pasture belonging to William Cressy. The area covers the top of the terrace, the east slope of which is owned by Mrs. Gwendolyn Montgomery.</p> <p>Test #1 was dug in a clearing about 200' east of the pit and 200' west of a corner of the Teer-Cressy property line. The test is on the north slope of a broad swale leading down toward the northeast corner of the pit. The material is 3' of sand over a section of pebbly sand, gravel, and gravelly sand in beds. The hole bottoms in pebbly sand. The sample had a slight excess of silt for Item 201.</p>
	2	1968	1.5-10	0-1.5	No	100	100	100	15.0	5.0*	1½	---	Sand	<p>Test #2 was dug 225' south of Test #1 in the southwest corner of the clearing. The test is 250' southeast of the pit at a point above Test #54-2A.</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 79

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	3	1968	2-11.5	0-2	No	63.8	49.7	38.7	6.0	3.0	2	14.0%	Gravel	<p>The material is brown sand over fine sand. The sand caves very easily. Bedding is indistinct, but appears to have a south dip.</p> <p>An additional sieve analysis follows:</p> <p>Passing #10 - 98.0%</p> <p>Passing #40 - 56.3%</p> <p>Passing #80 - 20.3%</p> <p>Passing #200 - 7.0%</p> <p>Test #3 was dug in the woods 110' southeast of and 15'-20' above elevation of top of pit. The top 3' is overburden and unsorted silty gravel. Below 3' is a fairly fine, good looking gravel with few +3" cobbles. The gravel continues to below depth tested.</p>
	4	1968	2-10.5	0-2	No	76.6	64.1	50.1	9.0	5.0	1½	16.1%	Gran. Borrow (Grav.)	<p>Test #4 was dug 180' east of Test #2 in a grove of birch and poplar. The test is 200' south of the Cressy property. The material is a fine gravel below 2' of unsorted silty top. The test hole bottoms in gravelly or pebbly sand.</p>
	5	1968	1.5-9.5	0-1.5	No	100	92.2	73.5	13.2	7.0 5.2*	1	---	Gran. Borrow (Sand)	<p>Test #5 was dug 140' south 10° east from Test #2 in small clearing. The material is a pebbly gray sand. Bedding is vaguely shown by thin layers of pebbles, and is horizontal.</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 80

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
	6	1968	1-10.5	0-1	No	48.5	41.4	33.6	5.0	2.0	1	12.7%	Gravel	<p>There is one thin seam of silt. An additional sieve analysis follows:</p> <p>Passing #10 - 81.0% Passing #40 - 29.7% Passing #80 - 14.6% Passing #200 - 6.4%</p> <p>Test #6 was dug about 220' south of Test #5 in a small opening near the south end of the feature. The east and west sides of the terrace come together about 270' south of Test #6.</p> <p>Material from 1'-7' is a gravel with much very coarse sand and an occasional +3" cobble. From 7'-10.5' is a quite stony layer with many +4" stones. Bedding is vaguely shown to be horizontal.</p> <p>Save for immediate vicinity of Test #6, the south end of the feature is wooded.</p>
	7	1968	2-11.5	0-2	No	100	88.5	79.2	2.4	1.0 0.8*	1-	---	Sand	<p>Test #7 was dug 185' south 35° east from Test #4 in thinly wooded area atop east slope or escarpment of the terrace. The material is horizontally bedded sand and pebbly sand overlying gravelly sand from 8' to below depth of the test.</p> <p>An additional sieve analysis follows:</p> <p>Passing #10 - 91.8% Passing #40 - 32.3%</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 81

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
														Passing #80 - 4.6% Passing #200 - 1.5% It is impossible to say for sure where either sand or gravel is to be found in this area. Generally speaking, the sand appears to lie in the center of the feature, its limits perhaps roughly shown by the outlines of the clearing. Gravel appears to be concentrated along either side of and in the south end of the terrace east and southeast of Teer's pit. Present access onto top of terrace is up from Town Highway No. 16 through the Cressy property. Possibly an access could be built at the south end of the terrace up the wooded slope from Town Highway No. 16. This would be quite steep.
56	1	1968	1.5-9.5	0-1.5	No	100	100	100	20.0	3.0*	1½	---	Gran. Borrow (Sand)	Owner: William Cressy. This area is pasture on the kame terrace north to north-east of the Teer pit. For convenience in sketching the test locations, this area was chosen as lying east of the telephone lines and west of a line north of the jog in the Teer-Cressy property line. The terrain is flat to gently rolling.

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 82

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	2	1968	1-8	0-1	No	73.3	67.2	56.2	9.0	4.0	1	---	Gran. Borrow (Grav.)	<p>Test #1 was dug on the gentle slope above the east part of the Teer pit, about 90' from the face. The material is sand going to gravel at 9.5'. It has a slight excess passing the #100 mesh sieve for Item 202.</p> <p>An additional sieve analysis follows:</p> <p> Passing #10 - 99.5%</p> <p> Passing #40 - 80.6%</p> <p> Passing #80 - 28.1%</p> <p> Passing #200 - 5.3%</p> <p>Test #2 was dug northeast of and above Test #1 on the slope at the head of the longer gully.</p> <p>Below 1' of overburden, and 1.5' of very fine sand is a gravel with some +3" sub-angular stones. It goes to pebbly sand at 6', and to a fine sand at 7.5'. The contacts seem to dip west or northwest. The material looked fairly clean, but had excess silt for Item 201. Also, too few proper-size stones were included for the wear test.</p> <p>Test #3 dug 160' north of Test #2 on flat pasture top, about 150' southeast of Test #52-5. The material is a pretty well graded gravel with 1 or 2 +6" boulders. It is</p>
	3	1968	1-11	0-1	No	65.3	50.8	37.7	5.0	3.0	2	16.0%	Gravel	

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 83

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	4	1968	1.5-10	0-1.5	No	53.9	43.7	30.7	10.0	6.0	1	13.6%	Gran. Borrow (Grav.)	finer and less stony at 6.5', and is a pebbly sand at 9.5'. The test hole bottoms in sand. This test represents the east extension of the Item 201 gravel encountered in Tests #52-5 and #52-6. Test #4 was dug 220' north 75° east from Test #3. It is on the east side of a broad shallow bowl or saddle sloping toward the north. Bowl is about 6' below the general level of the pasture. Test #4 is about 3' or 4' below Test #3. The material is gravel that appears quite clean below 2.5'. Silty sand from 1.5'-2.5' probably contributed to the sample's failure as Item 201. There are a few +6" boulders and some +3" cobbles. From 8' to below depth of test is gravelly sand.
	5	1968	1-10.5	0-1	No	67.7	52.3	33.9	10.0	5.0	1	14.8%	Gravel	Test #5 was dug about 250' south of Test #4 in a very broad saucer-shaped depression about 7'-9' below Test #3. The material is a stony, well-graded gravel with few +4" stones. If the base of the granular deposit is assumed to be more or less regular, Tests #5 and #3 indicate a depth of gravel of at least 17'-18'.

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 84

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						% Passing								
						1 1/2"	5/8"	#4	#100	#270				
	6	1968	1.5-11	0-1.5	No	63.6	49.0	35.2	8.0	3.0	1	15.0%	Gravel	<p>Test #6 was dug about 400' east of the Teer pit about 25' off the property line fence. The test was dug on a gentle southwest slope about 10'-12' below the top of the pasture. The material is gravel with only a few +3" stones. A thin silt seam hit at 10'. The material looks clean; the stones are round and hard.</p> <p>This is another area of good gravel. Only a few boulders seen in tests. Unless unacceptable material were encountered between the test holes sampled, it appears that an immense quantity of gravel could be worked from the irregularly shaped area surrounding Tests #3, #5, and #6. The thickness of the material would decrease from about 60' at the north face of the Teer pit, to perhaps 12'-15' at the north side of the pasture where there is a low north facing escarpment and bedrock exposed beyond it.</p>
57	1	1968	1.5-9	0-1.5	No	86.3	72.7	51.1	7.0	5.0	1	15.5%	Gran. Borrow (Grav.)	<p>Owner: William Cressy.</p> <p>This area is pasture on that part of the kame terrace that is between Map Identification No. 56 and the gullied east escarpment of the feature.</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 85

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
	2	1968	1-10	0-1	No	91.1	77.4	65.4	11.0	5.0	1	9.6%	Gran. Borrow (Grav.)	<p>Test #1 was dug on the Cressy-Teer fence 150' east of the Jogin property line. The material is a fine gravel with a few +3" cobbles and appears to be horizontally bedded. The hole goes to coarse sand at 7' and bottoms in coarse sand.</p> <p>The sample had excess passing the #270 mesh sieve for Item 201.</p> <p>Test #2 dug about 200' east of Test #1 on gentle east slope between property line fence and head of most southerly gully. It is about 7' below elevation of Test #1. From 1'-3.5' is sandy fine gravel overlying gravelly sand and sand. Bottom of test hole is coarse sand. Beds dip east. Very few +3" stones were seen; none were in the sample. This sample had too few stones and excess silt for Item 201.</p> <p>Test #3 dug about 350' northeast of Test #2. It is between 2 gullies, 150' west of the Cressy-Montgomery fence line on the gentle east slope about 25' below the top of the pasture.</p> <p>The material is stratified very fine gravel, gravelly sand, and pebbly sand</p>
	3	1968	1-10	0-1	No	88.7	77.4	61.2	8.0	2.0	1	7.6%	Gran. Borrow (Grav.)	

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 86

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	4	1968	1.5-10	0-1.5	No	77.8	63.1	51.6	9.0	4.0	1	8.0%	Gran. Borrow (Grav.)	<p>with typical ice contact bedding. The sample had too few stones for Item 201.</p> <p>Gravels on the gentle east slope of the feature are characterized by their low stone content. The material on the steep east slope is practically all sand. This indicates an overall eastward grading of the material from cobbly gravel to sand on the kame terrace, from Map Identification No. 52 to Map Identification Numbers 59 and 60.</p> <p>Test #4 was dug on east end of the broad knoll about 150' northwest of and above Test #3. Material is fine gravel from 1.5'-3'; from 3' to 7' is pebbly coarse sand; from 7'-10' is gravel with some +3" stones. The test hole bottoms in gravel.</p>
	5	1968	1.5-11	0-1.5	No	85.4	61.8	43.1	7.0	5.0	1	13.7%	Gran. Borrow (Grav.)	<p>Test #5 was dug 220' due west of Test #4 on the west side of the broad knoll. The material is a fine uniform gravel with few +2½" stones. Top 2.5' was colored by reddish brown silty sand, which probably contributed to the failure of this sample for Item 201. This test is about 250' east of Test #5 of Map Identification No. 56.</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 87

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
														Overall, the gravels in this 6 acre southeast portion of Cressy's property on the kame terrace are somewhat silty and have a low stone content. There are few cobbles and no boulders. The pasture is open with no trees or brush.
58	1	1968	1-9.5	0-1	No	67.0	55.1	37.4	8.0	5.0	1½	13.4%	Gravel	Owner: William Cressy. This is northeast part of pasture on the kame terrace. The west side of the terrace is terminated by a hill with exposed bedrock; the north end and east side of the terrace has steep, wooded, gullied slopes. Test #1 was dug on north side of broad low knoll about 350' north of Test #57-4. The test is 135' northeast of a solitary ash tree. The material is a cobbly fairly clean looking gravel with about 5% of stones exceeding 6". A fine gravel hit at 6'; sand was hit at 9.5'.
	2	1968	1-11	0-1	No	66.2	49.3	33.4	9.0	5.0	1½	15.8%	Gravel	Test #2 was dug 230' due east of and below Test #1. A large erosion gully that reaches down the steep east slope into the Taylor property, begins about 150' east of and 20'-25' below Test #2. The material is a cobbly fairly clean gravel down to 7.5' where a fine

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 88

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	3	1968	1-11	0-1	No	71.5	64.9	46.8	3.0	1.0	1½	8.4%	Gravel	<p>gravel was encountered. Top 2.5' was silty and cobbly, and an occasional small boulder was encountered from 2.5'-7.5'.</p> <p>Test #3 was dug about 230' northeast of Test #2, 70' southeast of a Highway Department bench mark. The material is a fine gravel with few stones over 3". It looks very clean. More cobbles hit in the bottom. This test hole was dug on the gentle east slope of a very broad and quite low knoll. The north side of the knoll is even more gentle and merges into the flat terrace near test hole #4 which was dug 325' northwest of Test #3.</p>
	4	1968	1-9.5	0-1	No	88.7	61.3	39.0	20.0	8.0	1½	11.8%	Gran. Borrow (Grav.)	<p>Test #4 is beside an erosion gully near the north end of the feature. The material is a fine, very stony gravel that goes to pebbly sand at 9.5'. The sample had excess material passing the #100 and #270 mesh sieves.</p>
	5	1968	1.5-10	0-1.5	No	52.2	36.3	24.3	8.0	5.0	2	12.6%	Gravel	<p>Test #5 was dug about 350' northwest of Test #4, between erosion gullies and the hill with exposed bedrock.</p> <p>Material is a lens of fine gravel within a cobbly gravel. The bottom appears to be a gravelly sand. This test represents</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 89

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	6	1968	3-11	0-3	No	53.8	40.3	24.0	17.0	10.0	1½	20.8%	Gran. Borrow (Grav.)	<p>material in north end of feature - an area of about 150' north-south x 200' east-west. This material, as well as that represented by Tests #4 and #3, could perhaps be worked from the north end of the feature. Access could be constructed from U. S. Route 7 south of Cressy's buildings up across pasture, and a pit opened in the end of the terrace. This escarpment is wooded in most places.</p> <p>Test #6 was dug 250' southwest of Test #5 in broad, saucer shaped area. In general, the material is a cobbly gravel with much silt-clay instead of the sand of previous tests. Log of test hole: 0-3' - brown silt 3'-5' - fine gravel with silt 5'-11' - sandy gravel</p> <p>This test is 5' below the elevation of Test #5, and 7'-8' below the elevation of Test #1. The test indicates that the positive features, the broad, low knolls, are the better sources of granular material in this part of the terrace. Possibly the underlying material in the east part of terrace is sand since it is sand that</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 90

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
														is encountered at lower elevations in the erosion gullies at Map Identification Numbers 59 and 60.
59	1	1968	2-20	0-2	No	93.4	87.0	84.5	10.1	3.0 2.5*	1	---	Gran. Borrow (Sand)	<p>Owner: Oakley Taylor.</p> <p>Area is small gullied pasture above the west side of U. S. Route 7 on the east side of the kame terrace below Map Identification No. 58.</p> <p>Test #1 was a hand sample taken on the north side of the southerly gully, 80' from the upper side of the pasture. The gully is "V"-shaped. The test is 35'-50' below the top of the Cressy pasture. A top layer of small cobbles and pebbles gives way to clean sand. The test bottoms in fine sand. A few too many +1½" stones failed the sample for Item 202.</p>
	2	1968	1-14	0-1	No	100	90.0	79.8	8.0	4.0 3.2*	1	---	Sand	<p>Test #2 was a hand sample dug on the south slope of the northerly "V"-shaped gully, 250' north of and about 25'-35' above Test #1.</p> <p>Test #2 is 50' from the Cressy fence line. The material is pebbly sand in the top 4' over 6' of gravelly sand. The bottom 4' of sample was fine sand. Where sampled, the gully was about 22' deep.</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 91

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
														Excess slough prevented digging deeper. There is much washed out fine sand on the lower hillside. The gullies begin beneath power lines and extend westward well up into Cressy's pasture.
60	1	1968	1.5-11	0-1.5	Yes	100	92.3	86.6	34.0	10.0 8.7*	1	---	Gran. Borrow (Sand)	Owner: Mrs. Gwendolyn Montgomery. Area is side hill pasture northwest of owner's buildings, south of Taylor's property, and east of and below the Teer and Cressy properties. There is a shallow old pit beginning a short distance north of the barn and extending up the hillside, beneath a power line and into an erosion gully. Test #1 was a hand sample taken on the north side of the gully about 20' above the elevation of the old pit. The material is a sand with pebbles, but with excess very fine sand and silt for Item 202. The gully slope shows many large pebbles and small cobbles. The gully widens upward and extends into Teer property. Owner did not want backhoe testing done; however, more testing of some sort should be done to determine if the old

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 92

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	2	1968	1.5-15	0-1.5	No	100	91.0	87.9	7.0	2.0 1.8*	1	---	Sand	<p>pit could be extended, and if the material would be satisfactory for Sub-base of Sand.</p> <p>Test #2 was a hand sample taken on the north side of a gully that is 125' north of Test #1. This gully is deeper and wider than the southerly one. Its slopes show scattered stones, apparently from only 1 or 2 isolated layers because sample was mainly of fine sand with a few small pebbles. The face on which Test #2 was taken varies from 25'-35' in height. This gully extends into Cressy property near the vicinity of Test #57-2.</p>
	3	1968	0-12	---	Yes	100	100	100	7.0	3.0*	1½	---	Sand	<p>Test #3 was dug on north-west face of what looks like old pit in the most northerly gully. The test was 90' west of the power line, and was near the Taylor property face. The pit measures 70' north-south x 60' east-west and has a face varying from 15'-35' high.</p> <p>The sample was of beds of fine sand, uniform save for an occasional silty sand seam about half-way down face. The sand is sharp and clean. This area and Map Identification No. 59 indicates that sands</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 93

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
61	1	1968	1-12	0-1	No	100	100	100	96.0	58.0	1-	---	---	occur below or grade easterly from the gravels on the kame terrace.
	2	1968	1-11.5	0-1	No	100	100	100	96.0	38.0	1½	---	---	Owner: Danby Cemetery Association. Area is a brown low knoll with a gentle east slope and a small terrace on its north-east flank. The area is located east across U. S. Route 7 from the cemetery and is mapped by D. P. Stewart as kame terrace. Test #1 was dug on top of knoll in open area in low brush and trees, about 215' east of Route 7. Twelve feet of uniform silt encountered. A thin lens of fine sand also noted.
	3	1968	1-11.5	0-1	No	100	100	100	97.0	38.0	1	---	---	Test #2 was dug 240' north-east of and 15'-20' below Test #1 on small terrace. The material below 1.5' of stony overburden is sandy silt to 11.5' where silty clay was hit. Test #3 was dug 280' south-east of Test #2 at east end of terrace above bank of Otter Creek. Material is sandy silt laminated with very fine sand. Top 1 or 2 feet is fine gravel.
62	1	1968	1-16	0-1	Yes	100	100	100	93.0	45.0	1-	---	---	Owner: Danby Cemetery Association. This is a small pit which was opened in the hillside

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 94

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
														<p>south of Map Identification No. 61. It is in feature mapped as kame terrace, and is across U. S. Route 7 from the cemetery.</p> <p>Test #1 was dug in face and continued in floor. The material is silt to silty sand. The pit's maximum dimension is about 30'. It is located about 475' from the highway.</p>
63	1	1968	1.5-18	0-1.5	Yes	63.4	50.5	32.4	11.0	5.0	1½	12.0%	Gravel	<p>Owner: Michael Halligan.</p> <p>Area is the old Cemetery pit located behind the cemetery between old Route 7 and high ledges. The pit floor is now used as a dump. To get at the material which is left atop the ledge, it would be necessary to come in from Town Highway No. 20, down across the owner's pasture. The owner said he plans to open a pit on top of the old pit.</p> <p>Test #1 was a hand sample of the face above the ledge at a point about 250' south of Harris Peel pasture. The material is a gravel with cobbles from beds of sandy gravel with some silt coating, and beds of clean sand and gravel. Ledge appears at about 24' down the face, and outcrops about 50' west of top of the test.</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 95

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
														It would be difficult to open a pit atop the face. A power line crosses the area parallel to the face. Also, there will be only a small quantity of gravel in a quite narrow deposit.
64	1	1968	2-12	0-2	No	100	92.8	92.4	51.7	13.0 12.0*	1	---	---	<p>Owner: Harris Peel.</p> <p>Area is pasture knolls south of Town Highways No. 16 and No. 20. The material would not be available.</p> <p>Test #1 was dug on east side of high knoll, and about 80' from road. The material is very fine to silty sand with occasional small pebbles.</p> <p>An additional sieve analysis follows:</p> <p>Passing #10 - 99.1%</p> <p>Passing #40 - 95.4%</p> <p>Passing #80 - 62.7%</p> <p>Passing #200 - 15.9%</p>
	2	1968	1.5-8.5	0-1.5	No	100	100	92.0	5.5	2.0 1.8*	1	---	Sand	<p>Test #2 dug on top of high knoll, west of and above Test #1. The material is pebbly sand with few +1" stones. Lenses of silty sand occur from 6'-7'. The sand caved easily so the hole was stopped at 8' still in sand.</p> <p>An additional sieve analysis follows:</p> <p>Passing #10 - 95.6%</p> <p>Passing #40 - 30.5%</p>

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 96

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	3	1968	0.5-8.5	0-0.5	No	73.3	57.7	36.3	6.0	3.0	1	14.7%	Gravel	Passing #80 - 6.1% Passing #200 - 2.3% Test #3 dug on small rounded area on lower south flank of high knoll. The material is a well graded fine gravel over pebbly sand at 7'. Fine sand hit at 8.5'. Vague bedding has slight dip to southwest. One angular boulder noted.
	4	1968	1-10.5	0-1	No	100	98.0	92.5	27.8	5.0 4.6*	1	---	Gran. Borrow (Sand)	Test #4 was dug on large knoll near southwest corner of pasture. This knoll extends up to west into M. Halligan's pasture. The south and east extensions of the feature merge into stony ground moraine overlying bedrock. The material is very fine sand with a few small pebbles. A 2-foot layer of silty sand occurs about half-way down. Area is in kame terrace as mapped by D. P. Stewart. An additional sieve analysis follows: Passing #10 - 95.8% Passing #40 - 73.0% Passing #80 - 38.1% Passing #200 - 8.7%
65	1	1968	1-11	0-1	No	97.2	83.6	58.1	10.0	4.0	1½	12.4%	Gran. Borrow (Grav.)	Owner: Michael Halligan. This is east-sloping pasture side hill west of Map Identification No. 64. Low knolls or mounds of granular material

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 97

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Over-burden (Ft)	Exist-ing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
	2	1968	1-8	0-1	No	100	100	100	12.0	5.0*	1	---	Sand	<p>occur on top of bedrock. The upper (west) side of the pasture has much exposed rock. Two hand samples were taken on the slope of a feature on the lower side of the pasture. The feature merges into the large knoll in Peel's pasture. The granular material is partly exposed in a patch about 80' x 50'. An 11-foot section of pebbly gravel and pebbly sand was sampled on upper slope of feature.</p> <p>Test #2 was of beds of fine and very fine sand sampled at the foot of the feature, 65' west of Peel's fence. An additional sieve analysis follows:</p> <p>Passing #10 - 99.8% Passing #40 - 84.3% Passing #80 - 21.6% Passing #200 - 6.0%</p> <p>This area would not be a source of large quantities of granular material. The deposits would be quite thin. Best access into vicinity of Tests #1 and #2 would be along bottom of quite steep pasture slope just west of Peel's fence, south from Town Highway No. 20.</p> <p>Owner: Daniel Raymond.Estate. There are a few rounded knolls and ridges on the</p>
66	1	1968	N	O	T	S	A	M	P	L	E	D		

*Percentage of Total Sample

TABLE I

DANBY GRANULAR DATA SHEET NO. 98

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Overburden (Ft)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
														easterly slope about 600'-800' east of and below Town Highway No. 20. D. P. Stewart has mapped entire slope between old U. S. Route 7 and Town Highway No. 20 as a kame terrace. One test hole was dug on a rounded ridge in the northwest corner of a meadow about 700' from the road. The material is unsorted rocks and silt. The rounded ridge extends north into another hay meadow, but no further testing could be done. If knolls or ridges are ice-contact in origin, there was little water available for sorting.

*Percentage of Total Sample

TABLE I
Supplement

DANBY PROPERTY OWNERS - GRANULAR	Map Ident. No.
Andrus Brothers	38
Bromley, Hugh	13, 14
Brown, Corey	35, 36, 37
Corey, Lynn	7
Cressy, William	52, 53, 56, 57, 58
Danby Cemetery Association	61, 62
Griffith, John	1, 2, 3, 5, 6
Hall, Richard & Polly	12
Halligan, Michael	63, 65
Harrington, Sylvester	39, 40, 41, 42, 43 44, 45, 46, 47
Hilliard, A. W.	28
Hoisington, Paul	49
Hopper, Paul	11
Keeler, George	16, 17, 19
Lewis, Fred	18
Montgomery, Gwendolyn (Mrs.)	60
Nichols, Burton	4
Peel, Harris	64
Raiche, Edward	8, 9, 10
Raymond, Daniel	66
Rushmore, R. J., M.D.	32
Sherman, Arthur	51
Smokey House Farm	15, 20, 21, 22, 23, 24 25, 26, 27, 29, 30
Taylor, Oakley	59
Taylor, Oscar	48
Teer, Albert	54, 55
White, Elizabeth	50
White, Lawrence	31
Wilson, Kenneth (Mrs.)	33, 34

TABLE II

DANBY ROCK DATA SHEET NO. 1

Map Ident. No.	Field Test No.	Year Field Tested	Rock Type	Existing Quarry	Method of Sampling	Abrasion AASHO T-3	Remarks
1	1	1968	Dolomite	No	Chip	2.8%	<p>Owner: Vermont Marble Company.</p> <p>This area is a wooded hill on the east side of which the Danby-Mount Tabor Town Line is located. The hill is about 400'-425' east of Danby Town Highway No. 35; it is about 375' north-south x about 285' east-west within which there is 50'-60' of relief on the east side and 25'-30' on the west side. Some rock is exposed at the east foot of the hill and in the pasture west of the hill.</p> <p>Test #1 was taken at random for 75' east-west across the strike beginning about 20' below the hilltop, about 150' west of the town line. The beginning of the test was in well-exposed rock, but scattered outcrops continue down the east slope for another 30'-40' in elevation. The rock is a craggy to gritty weathering siliceous light gray dolomite. It is mapped as the Shelburne Formation on the Centennial Geologic Map. The strike of the rock is a little east of north; the beds appear to be nearly vertical. The rock is quite hard, and breaks mainly angular with some sharp pieces. Quartz knots and veins occur frequently. The rock resembles that described as the Clarendon Springs Dolomite.</p> <p>The sample failed to meet the abrasion requirements of AASHO T-96, possibly because of the tendency of the rock to produce sharp pieces. Its abrasion value was 42.5%.</p>
	2	1968	Dolomite	No	Chip	2.9%	<p>Test #2 was begun a few feet north of the west end of Test #1 and continued for another 60' across the strike. The rock is still a hard siliceous dolomite. It breaks to many angular and blocky pieces with a few thin sharp fragments.</p> <p>This sample had an AASHO T-96 abrasion of 39.3%.</p> <p>The area is easily accessible. Tree clearing would be necessary to open a quarry here. The quantity of rock in the hill is probably less than 200,00 cubic yards. More testing would be necessary to determine if rock in pasture</p>

TABLE II

DANBY ROCK DATA SHEET NO. 2

Map Ident. No.	Field Test No.	Year Field Tested	Rock Type	Exist- ing Quarry	Method of Sampling	Abrasion AASHO T-3	Remarks
							to west of the hill would also be suitable for Sub-base of Crushed Rock, Item 204.
2	1	1968	Dolomite & Limestone	No	Chip	3.0%	<p>Owner: Vermont Marble Company.</p> <p>This area is an old pasture with brush and shrubs located on the northwest side of Town Highway No. 35 across from a small cemetery. A telephone line crosses the pasture from east to west.</p> <p>There are low scattered exposures with an overall relief of about 30'. The rock is a buff- to dark blue-gray-weathered white to light gray calcareous dolomite and limestone or marble.</p> <p>Test #1 was begun about 40' from the road, 40' from the telephone line, and continued for 75' at south 60° west across the strike. The rock strikes north 30°-40° east and appears to dip to the southeast.</p> <p>The rock is mapped as the Shelburne Formation, and failed to meet the AASHO T -96 abrasion requirements. There is plenty of room here to set up a crushed rock quarry, and the entire pasture is quite easily accessible. More testing, possibly by core drilling, would be necessary before it could be determined if a large quantity of rock in this area meets all abrasion requirements for Sub-base of Crushed Rock, Item 204.</p>
	1	1968	Marble	Yes	Chip	6.4%	<p>Owner: Vermont Marble Company.</p> <p>This area is the waste pile of the Imperial Quarry. The pile is between 150' and 200' high, and is probably 350'-500' around the base. Its present access is about 0.15 mile via an old pasture road; its old access is about 0.1 mile through a wet area, both to Town Highway No. 35.</p> <p>Test #1 was of random quarried blocks at the foot of the pile taken over an area of about 200 square feet. The rock is a gray streaked white marble, and much of it is coarsely crystalline calcite. This sample had an AASHO T-96 result of 55.7%.</p>

TABLE II

DANBY ROCK DATA SHEET NO. 3

Map Ident. No.	Field Test No.	Year Field Tested	Rock Type	Existing Quarry	Method of Sampling	Abrasion AASHO T-3	Remarks
	2	1968	Marble	Yes	Chip	4.0%	Test #2 was of broken blocks taken from the pile about 100' west of and 20' above Test #1. Again, the rock is a gray-streaked white marble. Its AASHO T-96 abrasion result was 64.0%.
	3	1968	Marble	Yes	Chip	6.0%	<p>Test #3 was sampled from an area about 200' northwest of and about 20' above Test #2. This sample had an AASHO T-96 abrasion of 55.7%. The grout pile has many 2-5 cubic yard blocks, and working the waste would be difficult because of them.</p> <p>The quarry superintendent stated that the Imperial Quarry waste pile could not be used as long as operations at the quarry continued as they are at present. A parking lot and the loading area are situated atop the pile.</p>
4	1	1968	Marble	Yes	Chip	25.6%	<p>Owner: Vermont Marble Company.</p> <p>Area is the Bluff Quarry located north of and below the Imperial Quarry. The old access was south along the foot of a steep wooded hillside from the Imperial Quarry access road. The best access would be west across open pasture for about 0.18 mile from Town Highway No. 35 to the base of the ledges.</p> <p>The top of the ledges in which the quarry was opened can be reached by an old woods road leading down from the Imperial Quarry road beginning at a point about 400' north of its waste pile.</p> <p>Test #1 was of random blocks in the 75-foot high grout pile beneath the east-west telephone lines. The vertical faces of the "Bluff" are well exposed southwest and northwest of and above the grout. The rock sampled is a sugary soft white marble. Some of it crumbles to powder, while some breaks fairly blocky. The rock is probably the Columbian marble of the Shelburne Formation. The AASHO T-96 abrasion was 53.0% for this sample.</p>
	2	1968	Marble	Yes	Chip	13.5%	<p>Test #2 was taken from the bottom 15' of the vertical ledge at a point about 200' north of the waste pile. The test was taken near the south end of a small clearing in</p>

TABLE II

DANBY ROCK DATA SHEET NO. 4

Map Ident. No.	Field Test No.	Year Field Tested	Rock Type	Existing Quarry	Method of Sampling	Abrasion AASHO T-3	Remarks
	3	1968	Marble	Yes	Chip	11.2%	<p>an area where some quarrying had been done. The rock is a soft sugary marble that is much weathered and difficult to sample. Its AASHO T-96 abrasion was 85.3%.</p> <p>Test #3 was sampled from the top 30' of ledge in a small old workings about 50' north of the telephone lines. The strike of the rock could be determined at this site and is north +20° east. The apparent dip is southeast, and the structure, as learned from a visit to the Imperial Quarry, is a syncline plunging shallowly to the southwest. The rock is a quite soft, dark-gray-to light cream-gray-weathering white marble with a sugary texture. Its AASHO T-96 abrasion in this sample was 57.9%.</p> <p>This area would not be a source of Sub-base of Crushed Rock, Item 204, as the rock does not meet the abrasion requirements.</p>
5	1	1968	Dolomite	No	Chip	4.2%	<p>Owner: Donald Nichols.</p> <p>Area is east-sloping open pasture with fairly good exposures located about 0.4 mile west of old U. S. Route 7 (Town Highway No. 27). The present access is through owner's dooryard and up through barnyard and pasture. A access could be built up the edge of a swale north of the buildings west from the town highway.</p> <p>The trend of the outcrops is north 25° west. There is about 20' of relief across the outcrops. Test #1 was a sample taken near the southeast end of the exposures. Its east end was at a point about 240' due south of a fence. The traverse was continued for 100' across the strike in a southwest direction. The rock is a dolomite breaking blocky to angular. The AASHO T-96 abrasion for Test #1 was 47.3%.</p>
	2	1968	Dolomite	No	Chip	4.0%	<p>Test #2 was taken at random for 75' across the strike on a traverse 175' northwest of and parallel to Test #1. The east end of the test is about 125' south of the pasture fence.</p>
	3	1968	Dolomite	No	Chip	2.4%	<p>Test #3 was sampled on two occasions from 75'-160' on</p>

TABLE II

DANBY ROCK DATA SHEET NO. 5

Map Ident. No.	Field Test No.	Year Field Tested	Rock Type	Existing Quarry	Method of Sampling	Abrasion AASHO T-3	Remarks
							<p>the continuation of the traverse for Test #2. The original sample had an AASHO T-96 abrasion of 40.9%. The resample had abrasion results of 3.8% (AASHO T-3) and 50.5% (AASHO T-96).</p> <p>The rock is generally a buff to pale gray, dark patchy weathering dolomite. Test #3 appeared to be in more siliceous rock than Tests #1 and #2.</p> <p>The hillside 300' southwest of and 40' above the dolomite outcrops has exposures of Monkton quartzite. No structure was discernible in the field, but the Centennial Geologic Map indicates a southwest-plunging anticline in which older rocks would be exposed west of the vicinity of Map Identification No. 5. The Monkton Quartzite is older than the Winooski Dolomite, and rocks of both formations should be dipping to the southeast.</p> <p>This area is easily accessible and could be easily worked. The little relief and the small area (about 300' northwest/southeast x 200' east/west) would mean only a small volume of available rock. More tests should be taken of the dolomite, since no AASHO T-96 abrasion result met the minimum requirement of 40%, and the quartzites should be drilled if this area is ever considered as a source of Sub-base of Crushed Rock, Item 204.</p>
6	1	1968	Dolomite	No	Chip	2.1%	<p>Owner: Bill Summer.</p> <p>This area is pasture located southwest of the junction of Town Highways No. 21 and No. 27. Power lines and telephone lines cross the pasture from southeast to northwest. The pasture is bordered on its south to west sides by woods in which there are few outcrops. Scattered exposures occur between the telephone lines and a point about 75' from the west woods.</p> <p>Test #1 was begun on the 8-10-foot ledge beneath the telephone lines and continued at random for 75' at south 35° west across the strike. The rock is not continuously exposed, so outcrops for 30' on either side of the traverse line were included in the sample.</p>

TABLE II

DANBY ROCK DATA SHEET NO. 6

Map Ident. No.	Field Test No.	Year Field Tested	Rock Type	Existing Quarry	Method of Sampling	Abrasion AASHO T-3	Remarks
	2	1968	Dolomite	No	Chip	4.0%	<p>The rock is a blue-gray to buff siliceous dolomite that weathers buff to gray-brown. There are some thin laminae 1"-2" thick. Some beds are highly jointed and folded and appear to plunge somewhat west of south. The outcrops trend about north/south.</p> <p>Test #2 was sampled from 75'-150' at random across the traverse.</p> <p>The AASHO T-96 abrasion results for Tests #1 and #2 were 44.7% and 38.8%, respectively.</p> <p>The relief and area of the exposures are not great. The maximum available area would be about 500' northwest/southeast by 200' or 250' east/west, with part of this wooded. It would be easily accessible from Town Highway No. 27. A brook limits the area's north extension.</p>
7	1	1968	Marble	No	Chip	28.4%	<p>Owner: Green Mountain Marble Company (The Job Phillips Lot).</p> <p>This area is a side hill pasture about 0.25 mile west of Town Highway No. 24. The Shelburne marble is exposed over a fairly large area with 30'-40' of relief. The rock is a smooth weathering, crumbly, soft, white marble that is difficult to get good samples from. The surface rock is weathered, and drilling and blasting probably should be done to get a truer sample. About 160' across the strike was sampled in two tests.</p> <p>The owning company has cored this area.</p> <p>The AASHO T-96 abrasion results of Test #1 was 90.4%.</p>
	2	1968	Marble	No	Chip	28.2%	

TABLE II
Supplement

DANBY PROPERTY OWNERS - ROCK

Map Ident. No.

Green Mountain Marble Company

7

Nichols, Donald

5

Sumner, Bill

6

Vermont Marble Company

1, 2, 3, 4

TABLE I

CLARENDON GRANULAR DATA SHEET NO. 8

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Over-burden (Ft.)	Exist-ing Pit	Sieve Analysis				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						% Passing							
						1 1/2"	5/8"	#4	#100	#270			
													Sub-base of Sand and Item 105, Granular Borrow.
8	1	1964	0-16	Stripped	Yes	55.8	45.4	41.2	36.0	10.0*	1	----	Gran. Borrow (Grav.) Owner: Ray Boynton Property is east of house which is located on East Road 1.6 miles east and south of North Clarendon. Test #1 is sandy gravel in northwest face of pit in open field. Acceptable for Item 105.
	2	1964	0-6.5	Stripped	Yes	100	100	48.1	42.0	12.5*	1	----	Test #2 is floor sample of silt with stones. Rejected for Item 105.
	3	1964	0.5-9.5	0-0.5	No	100	98.1	91.6	36.6	3.5 3.2*	1 1/2	----	Gran. Borrow (Sand) Test #3 is pebbly sand on center of long knoll east of house. Acceptable for Item 105.
	4	1964	1-9.5	0-1	No	100	100	82.6	57.0	9.0 7.4*	1	----	Gran. Borrow (Sand) Test #4 is fine sand and stones on north end of same knoll. Acceptable for Item 105.
9	1	1964	0-20	Stripped	Yes	49.5	38.2	31.0	13.0	3.0	1	----	Gravel Owner: Guido Carrara Pits are east of Boynton and northeast of Wilk Bros., on East Road in North Clarendon. Test #1 is sandy gravel in west face of pit. It meets grading requirements for Sub-base of Gravel-Item 201, but there was insufficient proper-size stone for percent of wear test.

* Percentage of Total Sample

TABLE I

CLARENDON GRANULAR DATA SHEET NO. 9

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Overburden (Ft.)	Existing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						% Passing								
						1 1/2"	5/8"	#4	#100	#270				
	2	1964	0-9	Stripped	Yes	100	100	74.8	15.7	5.0 3.7*	1	----	Sand	Test #2 is silt with stones in floor of same pit as Test #1. Acceptable for Item 202. Test #3 in floor of small pit up in woods east of first pit. It consists of silt with stones. Acceptable for Item 105.
	3	1964	1-8.5	Stripped	Yes	100	100	64.3	17.0	4.0*	1	----	Gran. Borrow	
10	1	1964	0.5-6.5	0-0.5	No	61.4	46.5	33.1	13.0	6.0*	3	15.0%	Gran. Borrow (Grav.)	Owner: Ray Boynton Property is in woods east of field for Area 8. Test #1 is coarse gravel on knoll. Acceptable for Item 105.
	2	1964	1-9.5	0-1	No	100	100	97.3	45.0	8.5*	1	----	Gran. Borrow (Sand)	Test #2 is sandy loam with stones. Between knolls in maple orchard. Item 105 is acceptable.
	3	1964	1-10	0-1	No	62.1	47.3	30.6	21.0	5.0*	2	14.2%	Gran. Borrow (Grav.)	Test #3, dirty gravel is on brow of northeast - southwest ridge across from maple orchard. Acceptable for Item 105.
	4	1964	1-10	0-1	No	64.9	52.7	41.6	30.0	10.0*	1 1/2	17.8%	Gran. Borrow (Grav.)	Test #4 is 400' northeast of Test #3 in same ridge is also dirty gravel. Acceptable for Item 105.
11	1	1964	0-10	Stripped	Yes	100	100	74.9	12.0	4.25 3.2*	2	----	Sand	Owner: Wilk Bros. Paving Company Pits on East Road 1.9 miles south and east of North Clarendon. Test #1 is coarse sand with

* Percentage of Total Sample

TABLE I

CLARENDON GRANULAR DATA SHEET NO. 10

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Over-burden (Ft.)	Exist-ing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
	2	1964	0-9	Stripped	Yes	68.7	45.8	35.1	4.0	0.75	1	8.0%	Grav.	stones on top of knoll within 140' x 75' pit. Acceptable for Item 202.
	3	1964	0-9.5	Stripped	Yes	72.9	61.7	46.8	7.0	2.0	1 1/2	16.2%	Grav.	Test #2 is gravel in center of large pit area, east of paving plant. Acceptable for Item 201.
	4	1964	0-8	Stripped	Yes	65.9	44.6	26.8	6.0	3.0	1	9.8%	Grav.	Test #3 on top of bank at far east side of pit consists of gravel. Acceptable for Item 201.
	5	1964	0.5-2.0	0-0.5	Yes	62.2	45.9	34.1	7.0	2.5	3	16.2%	Grav.	Test #4 is gravel in small pit just south of mix plant on knoll paralleling East Road. Acceptable for Item 201.
	6	1964	1-4.5	0-1	Yes	52.6	38.8	29.7	21.0	8.5	2	18.0%	Gran. Borrow	Test #5 is gravel in east face of same small pit. Acceptable for Item 201.
														Test #6 is coarse gravel on high east - west knoll (Grav.) south of pit area. Acceptable for Item 105.
12	1	1964	0-9	Stripped	Yes	100	97.6	86.5	4.3	0.5 0.4*	1	-----	Sand	Owner: Guido Carrara Pit and property are west of paving plant on East Road 1.9 miles south and east of North Clarendon. Test #1 is pebbly sand at entrance of pit. Acceptable for Item 202.
	2	1964	0-12	Stripped	Yes	58.4	42.2	30.0	24.0	7.0	1	13.4%	Gran. Borrow	Test #2 is gravel in face of southeast corner of pit. (Grav.) Acceptable for Item 105.

* Percentage of Total Sample

TABLE I

CLARENDON GRANULAR DATA SHEET No. 11

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Overburden (Ft.)	Exist- ing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						% Passing								
						1 1/2"	5/8"	#4	#100	#270				
	3	1964	0.5-10	0-0.5	No	92.5	79.7	64.6	6.0	4.0	2	15.0%	Gran. Borrow (Grav.)	Test #3 is sandy gravel on top of first knoll across road from paving plant entrance. Acceptable for Item 105.
	4	1964	1-9	0-1	No	100	98.9	94.2	26.4	5.0 4.7*	1	----	Gran. Borrow (Sand)	Test #4 is fine sand with stones on south end of knoll parallel to east road and across from paving plant. Acceptable for Item 105.
	5	1964	1-9	0-1	No	100	95.9	82.8	15.7	6.5 5.4*	1	----	Gran. Borrow (Sand)	Test #5 is pebbly sand on northeast end of same knoll, about 315 feet from Test # 4.
13	1	1964	0-10	Stripped	Yes	79.0	65.9	56.5	3.0	1.0 0.6*	1	16.2%	Grav.	Owner: Mrs. Burton Smith Pits and property are 2.6 miles east and south of North Clarendon on East Road. Test #1 is sandy gravel in floor of pit. Acceptable for Item 201.
	2	1964	0.5-23	0-0.5	Yes	64.9	52.9	42.6	3.0	1.0	2	17.1%	Grav.	Test #2 is sandy gravel in face of first pit on left when going east. Acceptable for Item 201.
	3A	1964	0.5-4.5	0-0.5	No	100	98.7	98.7	44.4	8.0 7.9*	1 1/2	----	Gran. Borrow (Sand)	Test #3A is on knoll north of log house and consists of fine sand. Acceptable for Item 105.
	3B	1964	4.5-10	0-4.5	No	69.5	60.4	54.1	23.0	3.0 1.6*	3	----	Gran. Borrow (Grav.)	Test #3B is pebbly sand. Acceptable for Item 105.
						*Percentage of Total Sample								

TABLE I

CLARENDON GRANULAR DATA SHEET NO. 12

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Overburden (Ft.)	Existing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
14	1	1964	4-10	0-4	No	100	100	99.5	88.6	8.5	1	----	Gran. Borrow (Sand)	Owner: Russell Powers Area tested on property is 4 miles east and south of North Clarendon and east of railroad tracks. Test #1 is fine white sand 175 feet east of right of way. Acceptable for Item 105.
	2	1964	0.5-9	0-0.5	No	100	96.4	87.4	2.6	1.25 1.1*	2	----	Sand	Test #2 is sand on top of large knoll south of Test #1. Acceptable for Item 202.
	3A	1964	0.5-5	0-0.5	No	83.2	72.7	63.0	11.0	2.25	1 1/2	----	Gran. Borrow (Grav.)	Test #3A is sandy gravel on end of knoll 400 feet south of Test #2. Acceptable for Item 105.
	3B	1964	5-9.5	0-5	No	88.5	80.5	76.2	12.2	2.0 1.5*	2	----	Gran. Borrow (Sand)	Test #3B is uniform medium sand. Acceptable for Item 105.
	4	1964	4-10	Stripped	No	100	100	100	62.0	20.3	1	----	----	Test #4 is fine sand to silt on knoll 50 feet south of Test #3. Rejected for Item 105.
	5	1964	0.5-11	0-0.5	No	100	100	99.5	96.5	29.0 28.9*	1	----	----	Test #5 is fine sand to silt 340 feet south of Test #4. Rejected for Item 105.
15	1	1964	0-10	Stripped	Yes	100	100	98.5	77.8	14.3 14.1*	1	----	----	Owner: Amherst Weeks Pit and property is south of S.A. #103, one-fourth mile west of junction with East Road in East Clarendon. Test #1 is fine sand to silt in floor of pit at

* Percentage of Total Sample

TABLE I

CLARENDON GRANULAR DATA SHEET NO. 13

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Over- burden (Ft.)	Exist- ing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	2	1964	0.5-18	0-0.5	Yes	100	100	99.5	72.6	6.25 6.2*	1	----	Gran. Borrow (Sand)	north end. Rejected for Item 105. Test #2 is fine sand in west face at north end of pit.
	3	1964	0.5-18	0-0.5	Yes	100	100	100	51.0	1.5	2½	----	Gran. Borrow (Sand)	Test #3 is fine sand in west face at south end of pit.
	4A	1964	1-5	0-1	No	82.5	71.9	58.0	9.0	2.0	2	9.8%	Gravel	Test #4A is sandy gravel north of pit in a clearing at end of logging road be- hind cemetery.
	4B	1964	5-10	0-5	No	100	100	96.7	39.6	4.0 3.9*	1	----	Gran. Borrow (Sand)	Acceptable for Item 201. Test 4B is medium sand. Acceptable for Item 105.
16	1	1964	1-10	0-1	No	100	100	95.4	20.0	2.25 2.1*	1	----	Gran. Borrow (Sand)	Owner: Irene Hill Property is northeast of school on S.A. #103, 0.4 mile west of junction with East Road in East Clarendon. Test #1 is pebbly sand in center of field. Acceptable for Item 105.
17	1	1964	0-10	Stripped	Yes	100	100	99.4	59.6	9.5 9.4*	1	----	Gran. Borrow (Sand)	Owner: Clayton Grover Pit and property off Sawmill Road in East Clarendon 0.3 - mile south and west of junc- tion with S.A. #103. Test #1 is sand in floor of pit at north end. Acceptable for Item 105.
	2A	1964	0.5-6	0-0.5	Yes	60.3	53.9	46.8	27.0	3.75	2	----	Gran. Borrow (Grav.)	Test 2A is a sandy gravel in south face of pit

*Percentage of Total Sample

TABLE I

CLARENDON GRANULAR DATA SHEET NO. 14

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Overburden (Ft.)	Exist- ing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						% Passing								
						1 1/2"	5/8"	#4	#100	#270				
	2B	1964	6-17	0-6	Yes	100	100	100	99.0	18.5	1	---	---	Acceptable for Item 105. Test #2 B is fine Sand. Rejected for Item 105.
	3	1964	0.5-10	0-0.5	Yes	100	100	96.4	33.7	2.5 2.4*	1	---	---	Test #3 is sand on terrace past south face of pit. Acceptable for Item 105.
	4	1964	0-10	Stripped	Yes	81.6	71.0	62.9	4.4	1.75 1.1*	1 1/2	---	Gran. Borrow (Sand)	Test #4 is pebbly sand at far west end of pit on top of bank in stripped area. Acceptable for Item 105.
18	1	1964	0.5-10	0-0.5	No	100	100	97.3	75.9	21.0 20.4*	1	---	---	Owner: Amherst Weeks Property east of railroad tracks 0.1 mile north of S. A. #103 on East Road. Test #1 is fine sand to silt on knoll under NET & T Co., powerline 25 feet from railroad tracks. Rejected for Item 105.
	2	1964	0.5-10	0-0.5	No	100	100	100	92.0	19.0	2	---	---	Test #2 is fine sand on small knoll adjoining railroad - tracks just north of gate- way. Rejected for Item 105.
19	1	1964	0.5-2.5	0-0.5	No	57.5	42.2	29.8	21.0	4.25	1	9.0%	Gran. Borrow (Grav.)	Owner: Irene Hill Property on south side of Mill River across from East Clarendon sawmill. Test #1 is coarse gravel next to river. Acceptable for Item 105.
20	1	1964	0.5-10	0-0.5	No	82.1	68.6	48.0	7.0	2.75	1	17.2%	Grav.	Owner: David Knipes Property is on Town Highway #37, 0.6 mile southeast of

* Percentage of Total Sample

TABLE I

CLARENDON GRANULAR DATA SHEET NO. 15

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Overburden (Ft.)	Existing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						% Passing								
						1 1/2"	5/8"	#4	#100	#270				
	2A	1964	6.5-10.5	0-6.5	No	69.5	59.1	47.4	23.0	6.25	1	15.0%	Gran. Borrow (Sand)	covered bridge in East Clarendon. Test #1 is coarse gravel in center of field south of house. Acceptable for 201. Test #2A is gravel at far west end of field. Acceptable for Item 105.
	2B	1964	0.5-6.5	0-0.5	No	100	100	100	80.0	16.0	1	----	----	Test #2B is sand. Rejected for Item 105.
	3A	1964	0.5-5	0-0.5	No	54.9	44.3	36.0	13.0	5.25	3	12.9%	Gran. Borrow (Grav.)	Test #3A is coarse gravel on top of knoll east of house. Acceptable for Item 105.
	3B	1964	5-10	0-5	No	100	100	96.9	26.2	2.25 2.2*	1	----	Gran. Borrow (Sand)	Test #3 B is medium sand. Acceptable for Item 105.
21	1	1964	0.5-9.5	0-0.5	No	100	94.5	79.4	4.0	1.75 1.4*	4	----	Gran. Borrow (Sand)	Owner: Warren Young Property and pits east of Town Highway #39, 0.5 mile south of covered bridge in East Clarendon. Test #1 is pebbly sand on top of knoll east of road at northwest corner of property. Acceptable for Item 105.
	2	1964	0.5-10	0-0.5	No	100	100	96.2	29.8	3.75 3.6*	1	----	Gran. Borrow (Sand)	Test #2 is medium sand at junction of dirt roads just west of sheds. Acceptable for Item 105.
	3	1964	0.5-10	0-0.5	Yes	100	100	100	25.0	2.8	i	----	Gran. Borrow (Sand)	Test #3 is fine sand to silt in floor of small pit on west edge of knoll behind buildings. Acceptable for Item 105.

* Percentage of Total Sample

TABLE I

CLARENDON GRANULAR DATA SHEET NO. 16

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Over-burden (Ft.)	Exist-ing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes MHD Spec.	Remarks
						% Passing								
						1 1/2"	5/8"	#4	#100	#270				
	4	1964	2.5-10	0-2.5	No	100	97.6	85.1	2.6	0.75 0.6*	1 1/2	----	Sand	Test #4 is pebbly sand on north slope of knoll south of powerline in hollow. Acceptable as Item 202.
	5A	1964	1-4.5	0-1	No	84.0	57.6	41.5	5.0	1.5	1	8.4%	Grav.	Test #5A is sandy gravel on top of large knoll south of dump-west of pit. Acceptable for Item 201.
	5B	1964	4-5-10	0-4.5	No	100	98.1	91.8	11.0	1.75 1.6*	1	----	Sand	Test #5 B is medium Sand. Acceptable for Item 202.
	6	1964	0.5-10	0-0.5	No	100	96.0	93.5	57.0	7.5 7.0*	1	----	Gran. Borrow (Sand)	Test #6 is fine sand on edge of knoll 155 feet northwest of second pit. Acceptable for Item 105.
	7	1964	0.5-9	0-0.5	Yes	100	100	97.6	28.3	3.25 3.2*	1	----	Gran. Borrow (Sand)	Test #7 is medium to fine sand at northwest corner of main pit area on top of an old pit. Acceptable for Item 105.
	8	1964	0.5-10	0-0.5	No	100	100	95.3	44.9	6.0 5.7*	1 1/2	----	Gran. Borrow (Sand)	Test #8 is medium sand on small knoll north of pit at edge of clearing. Acceptable for Item 105.
	9	1964	0.5-7	0-0.5	No	100	100	96.8	25.2	2.0 1.9*	1 1/2	----	Gran. Borrow (Sand)	Test #9 is medium sand at end of small knoll south of Knipes house and east of Town dump. Acceptable for Item 105.
	10	1964	0.5-10	0-0.5	No	100	100	95.1	28.5	1.0	2	----	Gran. Borrow (Sand)	Test #10 is medium sand at northeast end of knoll west of heavily wooded area south of Knipes field. Acceptable for Item 105.
	11	1964	0.5-9	0-0.5	No	94.4	85.9	53.2	8.0	3.0	3	----	Gran. Borrow (Gravel)	Test #11 is sandy gravel

* Percentage of Total Sample

TABLE I

CLARENDON GRANULAR DATA SHEET NO. 17

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Over-burden (Ft.)	Existing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						% Passing								
						1 1/2"	5/8"	#4	#100	#270				
	12A	1964	0.5-4.5	0-0.5	No	97.6	86.3	70.8	2.1	1.0 0.7*	3	----	Sand	at southwest corner of main knoll. Accept. Item 105. Test #12A is sand about 175 feet northeast of Test #11. Acceptable for Item 202. Test #12 B is fine sand. Acceptable for Item 202.
	12B	1964	4.5-9.5	0-4.5	No	100	100	90.9	13.6	2.0 1.8*	1	----	Sand	
22	1	1964	1-8	0-1	No	100	100	96.2	57.0	13.0	2	----	----	Owner: Bernard Spencer Property is east of Town Highway #39, 1.3 miles south of Town Highway #26. Test #1 is silt with stones on small knoll south of powerline, east of Spencer house. Rejected for Item 105.
23	1	1964	0.5-8	0-0.5	No	100	100	100	58.0	15.0	1	----	----	Owner: Laura Johnson Property on Otter Creek Road 1.8 miles south of Walker Mountain Road. Test #1 is on knoll 525 feet west of road and 125 feet south of fence. Rejected for Item 105. Test #2 is on knoll at south end of pasture by maple tree. Rejected for Item 105. Test #3 is gravel in floor of small pit at south end of knoll. Acceptable for Item 201. Test #4 is gravel south
	2	1964	0.5-8	0-0.5	No	100	100	100	90.0	50.25	1	----	----	
	3	1964	1-16.5	0-1	Yes	63.8	52.4	31.7	6.0	4.0	1 1/2	12.2%	Gravel	
	4	1964	1-8	0-1	Yes	68.7	53.4	40.3	3.0	1.75	1	9.0%	Gravel	

* Percentage of Total Sample

TABLE I

CLARENDON GRANULAR DATA SHEET NO. 18

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Overburden (Ft.)	Exist- ing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						% Passing								
						1 1/2"	5/8"	#4	#100	#270				
	5	1964	0.5-8.5	0-0.5	No	100	100	100	79.0	22.0	1	----	----	of Test #3 in same pit. Acceptable for Item 201. Test #5 is silt on knoll on east side of road, across from Test #3, and Test #4.
	6	1964	0.5-10	0-0.5	Yes	100	100	100	68.0	16.0	1	----	-----	Rejected for Item 105. Test #6 is silt to clay in floor of small pit behind house. Rejected for Item 105.
24	1	1964	1.5-8	0-1.5	No	47.2	39.0	33.0	39.0	10.0	1	----	Gran.	Owner: Russell Powers Borrow Property contains gravel (Grav.) bar in Clarendon Flats about 0.4 mile south on U.S. Route 7 from inter- section with Town Highway #25. Test #1 is coarse gravel on bank of dry stream between high railroad bridge and grade crossing. Acceptable for Item 105.
	2	1964	1-9	0-1	Yes	45.6	33.7	25.3	7.0	2.5	1	14.8%	Gravel	Test #2 is coarse gravel in face of small pit about 150 feet south of grade crossing and west of tracks. Acceptable for Item 201.
	3	1964	0.5-6	0-0.5	No	38.6	32.5	22.0	7.0	2.0	1	4.4%	Gravel	Test #3 is coarse gravel in old stream channel southwest of high rail- road trestle. Acceptable for Item 201.

* Percentage of Total Sample

TABLE I

CLARENDON GRANULAR DATA SHEET NO. 19

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Overburden (Ft.)	Existing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						% Passing 1 1/2"	% Passing 5/8"	#4	#100	#270				
	4	1964	3-10	0-3	No	75.9	59.7	41.5	10.0	2.5	2	5.4%	Gravel	Test #4 is sandy gravel at northeast end of 'island' between present stream bed and abandoned channel. Acceptable for Item 201.
	5	1964	2.5-8.5	0-2.5	No	52.5	39.0	27.2	10.0	2.5	1	4.8%	Gravel	Test #5 is coarse gravel on 'island' at southwest end. Acceptable for Item 201.
	6	1958	1-6	0-1	No	41.0	30.6	22.8	10.0	4.0	2	11.0%	Gravel	Test #6 was a hand shovel sample of 'river bar' at confluence of Mill River and Otter River. There were numerous cobblestones in the sample. Acceptable for Item 201.
25	1	1964	0.5-6	0-0.5	Yes	100	100	98.2	86.0	47.0	1	----	----	Owner: Congdon Bros. property. Contains a small pit west of S.A. #2, 0.3 mile south of S.A. #3 intersection in Clarendon Flats. Test #1 is silt to clay in floor of pit. Rejected for Item 105.
26	1	1964	0.5-9	0-0.5	Yes	100	100	58.6	39.0	8.25	1	----	Gran. Borrow	Owner: Cecil Ingalls Property contains a small pit south of S.A. #3 0.2 mile west of S.A. #2 intersection. Test #1 is silt with stones in floor of pit. Acceptable for Item 105.

* Percentage of Total Sample

TABLE I

CLARENDON GRANULAR DATA SHEET NO. 20

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Over-burden (Ft.)	Exist-ing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						% Passing								
						1 1/2"	5/8"	#4	#100	#270				
														Test #2 is in north face of pit. Rejected for Item 105.
27	1	1964	1-9	0-1	No	100	100	51.6	44.0	14.0	1	-----	----	Owner: Zigmont Grabowski Property is located west of S.A. #2 about 0.3 mile north of intersection with S.A. #3. Test #1 is silt with stones on top of knoll, about 400 feet from S.A. #2 behind barn. Rejected for Item 105.
	2	1964	1-10	0-1	No	100	100	100	99.0	45.0	1	-----	----	Test #2 is fine sand on top of knoll about 120 feet from S.A. #2 south of house. Rejected for Item 105.
28	1	1964	1-9	0-1	Yes	100	100	88.5	44.0	13.0	1	-----	----	Owner: Cecile Ingalls Pit is located west of S.A. #1 about 0.2 mile north of intersection with S.A. #3. Test #1 is silt with stones on top of knoll 75 feet from road at sharp bend. Rejected for Item 105.
29	1	1964	1-8	0-1	Yes	100	100	59.8	58.0	13.0	1	-----	----	Owner: Charles Powers Pit is east of U.S. Route 7 about 2.9 miles south of intersection with Town Highway #14. Test #1 is silt and stones

* Percentage of Total Sample

TABLE I

CLARENDON GRANULAR DATA SHEET NO. 21

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Overburden (Ft.)	Existing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						% Passing								
						1 1/2"	5/8"	#4	#100	#270				
	2	1964	1-8	0-1	Yes	100	100	65.6	33.0	7.5	1	----	Gran. Borrow	in floor of pit near south end. Rejected for Item 105. Test #2 is silt and stones on orchard side of pit northeast of Test #1. Accept. for Item 105.
30	1	1964	1-10	0-1	No	100	100	100	30.0	6.5	1 1/2	----	Gran. Borrow (Sand)	Owner: William Herrick Property lies east of S.A. #2 about 0.65 mile north of intersection with S.A. #3. Test #1 is fine sand on terrace like feature 1125 feet from road. Acceptable for Item 105.
	2	1964	1-10	0-1	No	100	100	100	89.7	45.4	4 1/2	----	----	Test #2 is silt about 300 feet from road across from large ledge. Rejected for Item 105.
	3	1964	1-10	0-1	No	100	100	100	62.0	8.0	1	----	Gran. Borrow (Sand)	Test #3 is medium sand about 120 feet from road across from large ledge. Acceptable for Item 105.
	4	1964	1-10	0-1	No	100	100	100	44.0	10.0*		----	Gran. Borrow (Sand)	Test #4 is sand on east end of terrace 325 feet from road behind building. Acceptable for Item 105.
	5	1964	1-10	0-1	No	100	95.9	85.2	26.4	6.25 5.3*	2	----	Gran. Borrow (Sand)	Test #5 is sand at south end of terrace 135 feet from road behind Herrick Residence. Acceptable for Item 105.
31	1	1964	0-10	Stripped	Yes	100	100	100	88.0	17.0*		----	----	Owner: Carroll Ketchum Pit and property west of S.A. #1 about 1.0 mile

* Percentage of Total Sample

TABLE I

CLARENDON GRANULAR DATA SHEET NO. 22

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Overburden (Ft.)	Existing Pit	Sieve Analysis					Color AASHTO T-21	Abrasion AASHTO T-4-35	Passes VHD Spec.	Remarks
						% Passing								
						1 1/2"	5/8"	#4	#100	#270				
	2	1964	0-12	Stripped	Yes	100	100	99.1	19.8	3.0	1	----	Gran. Borrow (Sand)	north of intersection with S.A. #3. Test #1 is silty sand in floor of small pit by railroad tracks. Rejected for Item 105.
	3	1964	0.5-10	0-0.5	No	100	100	97.8	33.3	8.0 7.8*	3	----	Gran. Borrow (Sand)	Test #2 is sand from east face of small pit. Acceptable for Item 105. Test #3 is sand on small knoll across railroad tracks from pit. Acceptable for Item 105.
	4	1964	1-9	0-1	No	100	100	58.8	29.0	11.0	1	----	-----	Test #4 is silt with stones on top of knoll 525 feet west of road behind Ketchum House. Rejected for Item 105.
32	1	1964	1-9	0-1	No	71.9	55.9	42.3	23.0	8.25	3 1/2	11.2%	Gran. Borrow (Grav.)	Owner: Elizabeth Caukins Property is west of S.A. #2 about 1.2 miles north of intersection with S.A. #3. Test #1 is sandy gravel in old orchard 420 feet west of road. Acceptable for Item 105.
33	1	1964	1.5-9.5	0-1.5	No	100	100	94.2	68.0	20.0	2 1/2	----	-----	Owner: George Squire Property is west of S.A. #1 about 1.3 miles south of Town Highway #14. Test #1 is silt 210 feet from road behind house. Rejected for Item 105.

* Percentage of Total Sample

TABLE I

CLARENDON GRANULAR DATA SHEET NO. 23

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Overburden (Ft.)	Existing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						% Passing								
						1 1/2"	5/8"	#4	#100	#270				
	2	1964	1-10	0-1	No	100	100	100	32.0	3.0*	2	----	Gran. Borrow (Sand)	Test #2 is sand on south end of terrace 540 feet southwest of Test #1. Acceptable for Item 105.
	3	1964	1-10	0-1	No	100	100	100	51.0	3.8*	1 1/2	----	Gran. Borrow (Sand)	Test #3 is fine sand on northwest end of terrace 165 feet from railroad tracks. Acceptable for Item 105.
34	1	1964	1-6	0-1	No	44.4	38.8	29.7	22.0	7.0*	3	----	Gran. Borrow (Grav.)	Owner: Wayne Adams Property is east of S.A. #1 about 1.15 miles south of Town Highway #14. Test #1 is coarse gravel on small knoll near small pit 60 feet from road opposite barn. Acceptable for Item 105.
35	1	1964	1-9.5	0-1	No	100	100	48.7	42.0	7.5*	1	-----	Gran. Borrow	Owner: Lendon Wilder Property is east of S.A. #1 about 0.95 mile south of Town Highway #14. Test #1 is silt with Stones on top of large knoll 1,725 feet east of Road. Acceptable for Item 105.
36	1	1964	1-10	0-1	No	100	100	100	61.0	5.3*	2	----	Gran. Borrow (Sand)	Owner: Milton Squires Property is west of S.A. #1 about 0.85 mile south of Town Highway #14. Test #1 is fine sand on knoll 50 feet west of railroad tracks.

* Percentage of Total Sample

TABLE I

CLARENDON GRANULAR DATA SHEET NO. 24

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Overburden (Ft.)	Existing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						% Passing								
						1 1/2"	5/8"	#4	#100	#270				
	2	1964	1-9	0-1	No	100	100	100	55.0	6.5*	2	----	Gran. Borrow (Sand)	Acceptable for Item 105. Test #2 is fine sand at north end of terrace 270 feet east of railroad tracks. Acceptable for Item 105.
37	1	1964	1-10	0-1	Yes	100	93.7	81.1	28.4	6.0 4.9*	1	----	Gran. Borrow (Sand)	Owner: Paul Austin Pit is on Horton Road 0.6 mile west of S.A. #2. Test #1 is stony sand 20 feet north of pit. Acceptable for Item 105.
38	1	1964	1-5	0-1	No	100	100	100	60.0	14.0	1	----	----	Owner: John Gilman Property is east of S.A. #1 about 0.65 mile south of Town Highway #14. Test #1 is silt on high, stoneless knoll about 1500 feet from road. Rejected for Item 105.
39	1	1964	1-8	0-1	No	100	100	92.4	14.0	6.0 5.5*	5	----	----	Owner: John and Richard Pratt Property is north of Town Highway #13 and east of Otter Creek. Test #1 was rejected for Granular Borrow. Specifications because of high color value. Rejected for Item 105.
40	1	1964	1-9	0-1	Yes	100	100	62.5	31.3	18.0 11.3*	1 1/2	----	----	Owner: Ray Nutting Pit is 300 feet west of

* Percentage of Total Sample

TABLE I

CLARENDON GRANULAR DATA SHEET NO. 25

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Overburden (Ft.)	Existing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						% Passing								
						1 1/2"	5/8"	#4	#100	#270				
														intersection of North Shrewsbury Road with U.S. Route 7. Test #1 was dirty sand with stones on knoll 95 feet west of face. Rejected for Item 105.
41	1	1964	0.5-7	0-0.5	No	100	100	70.2	33.7	12.0 8.4*	4	----	----	Owner: Guido Accorsi Property is east of U.S. Route 7 at point 0.2 mile north of intersection with North Shrewsbury Road. Test #1 is fine sand and stones located 800 feet east of the road and 125 feet south of Cold River. Rejected for Item 105.
	2	1964	0.5-7	0-0.5	No	60.4	51.8	45.2	38.0	10.0 4.5*	3 1/2	7.1%	Gran. Borrow	Test #2 is sand and stones in southeast corner of (Grav.) property with poplars, birches, alders. Acceptable for Item 105.
	3	1964	0-9	Stripped	Yes	62.2	46.0	34.9	12.0	4.0 1.4*	5	5.6%	---	Test #3 is coarse sand and stones immediately behind house and 340 feet from road. Test #3 was rejected for specifications because of high color value. Rejected for Item 105.
42	1	1964	0.5-6.5	0-0.5	No	34.3	28.4	21.8	11.0	2.25	3 1/2	----	Gran. Borrow	Owner: Charles Ruane Property is west of S.A. (Grav.) #1 and 0.5 mile north of intersection with Town Highway #13.

* Percentage of Total Sample

TABLE I

CLARENDON GRANULAR DATA SHEET NO. 26

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Overburden (Ft.)	Existing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
	2	1964	0.5-7.5	0-0.5	No	30.8	23.6	17.5	10.0	3.0	3 1/2	6.4%	Gravel	Test #1 is very coarse gravel in small pasture bordering Cold River, and 145 feet east of railroad tracks. Acceptable for Item 105.
	3	1964	0.5-7.5	0-0.5	No	39.5	32.0	21.6	15.0	5.0	3 1/2	7.0%	Gravel	Test #2 is coarse gravel in pasture 55 feet east of railroad track and 30 feet north of river. Acceptable for Item 201. Test #3 is coarse gravel 250 feet west of tracks and 35 feet north of river escarpment. Acceptable for Item 201.
43	1	1964	1-8	0-1	No	100	100	96.7	34.8	0.5*	1	----	Gran. Borrow (Sand)	Owner: Robert Chapman Property is east of S.A. #133 and 3.2 miles north of intersection of S.A. #3 and Town Highway #20 Test #1 is silt with stones in small field 45 feet east of road at point 580 feet north of Clarendon River crossing. Acceptable for Item 105.
	2	1964	1-7	0-1	No	100	100	59.6	58.0	23.0	1	----	----	Test #2 is silt with stones on top of large knoll east of Chapman farm across the Clarendon River. Rejected for Item 105.

* Percentage of Total Sample

TABLE I

CLARENDON GRANULAR DATA SHEET NO. 27

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Overburden (Ft.)	Existing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						% Passing								
						1 1/2"	5/8"	#4	#100	#270				
	3	1964	1-7	0-1	No	81.4	63.6	41.3	13.0	6.0	3 1/2	23.6%	Gran. Borrow	Test #3 is dirty gravel on lower ledge of knoll (Grav.) 125 feet west of rock wall. Acceptable for Item 105.
	4	1964	1-8.5	0-1	No	78.6	58.0	41.2	15.0	3.0	1	24.9%	Gravel	Test #4 is dirty coarse gravel at south end of large knoll on terrace just north of rock wall. Acceptable for Item 201.
	5	1964	3.5-8	0-3.5	No	68.6	53.0	30.4	6.0	3.0	1	26.0%	Gran. Borrow	Test #5 is gravel lies 75 feet east of the (Grav.) Clarendon River behind the Crossman house. Acceptable for Item 105.
44	1	1964	0-10	Stripped	Yes	74.2	64.0	45.7	18.0	2.25	1	12.6%	Gran. Borrow	Owner: Carl Ojala Pit is west of S.A. #3 (Grav.) and 2.0 miles north of intersection with Town Highway #20. Test #1 is gravel on floor at far west end of pit. Acceptable for Item 105.
	2	1964	0-25	Stripped	Yes	90.8	77.8	52.1	12.0	2.0	1	18.1%	Gravel	Test #2 is gravel in south face of far west end of pit. Acceptable for Item 201.
45	1	1964	0-12	Stripped	Yes	100	100	99.5	57.7	9.0*	1 1/2	----	Gran. Borrow (Sand)	Owner: Ed. Laliberte Pit is west of S.A. #3 and 1.75 miles north of intersection with Town Highway #20. Test #1 is sand in south face of small pit behind large brick house.

* Percentage of Total Sample

TABLE I

GEARENDON GRANULAR DATA SHEET NO. 28

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Overburden (Ft.)	Existing Pit	Sieve Analysis % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
														Acceptable for Item 105.
46	1	1964	0-10	Stripped	Yes	82.7	66.7	41.5	9.0	1.0	1	8.9%	Gravel	Owner: Carl Lanfear Pit is west of S.A. #3 and 1.3 miles north of intersection with Town Highway #20. Test #1 is gravel in floor of far south end of pit. Acceptable for Item 201.
	2	1964	0-10	Stripped	Yes	89.3	74.3	47.5	9.0	1.0	1	11.5%	Gravel	Test #2 is gravel in floor of pit at north near entrance. Acceptable for Item 201.
	3	1964	0-10	Stripped	Yes	89.3	77.1	54.1	12.0	3.0	1	13.5%	Gravel	Test #3 is coarse gravel in floor of center of pit. Acceptable for Item 201.
	4	1964	0-12	Stripped	Yes	72.7	48.7	35.8	14.0	4.0	1	14.2%	Gravel	Test #4 is gravel in face of pit at south end. Acceptable for Item 201.
47	1	1964	1-6	0-1	No	100	100	68.8	34.0	8.0	2	----	Gran. Borrow	Owner: Percy Tier Property is at end of gravel road which intersects S.A. #3 1.2 miles north of junction with Town Highway #20. Test #1 is silt with stones in pasture east of barn and south of gravel road. Acceptable for Item 105.
48	1	1964	1-9	0-1	Yes	100	100	68.9	33.0	8.0	1 1/2	----	Gran. Borrow (Sand)	Owner: Allen Hires Property is on S.A. #3 about 0.6 mile north of junction with Town Highway

* Percentage of Total Sample

TABLE I

CLARENDON GRANULAR DATA SHEET NO. 29

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Overburden (Ft.)	Existing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						% Passing								
						1 1/2"	5/8"	#4	#100	#270				
	2	1964	1-9	0-1	No	100	100	82.1	14.8	1.0 0.8*	1	----	Sand	No. 20. Test #1 is silt with stones on knoll on east side of road under powerline. Acceptable for Item 105. Test #2 is silt with stones on large knoll west of building and between powerlines and south end of pasture. Acceptable for 202.
49	1	1964	1-5	0-1	No	100	100	79.7	54.0	25.0	1	----	----	Owner: James Tiraboschi Property is west of S.A. #3 and 0.65 mile north of intersection with Town Highway #20. Test #1 is silt with stones in large field behind house and barn and 415 feet west of road. Rejected for Item 105.
50	1	1964	1-8.5	0-1	No	100	100	82.5	14.9	4.0 3.3*	1 1/2	----	Sand	Owner: Morris Kroffsik Property is east of Town Highway #9 about 1.0 mile north of intersection with S.A. #3. Test #1 is silt with stones on a very high knoll 500 feet north of Kroffsik Camp and 140 feet from Road. Acceptable for Item 202.
51	1	1964	0-8	Stripped	Yes	83.3	74.8	57.5	9.0	3.0	1	5.1%	Gravel	Owner: Carl Lanfear

* Percentage of Total Sample

TABLE I

CLARENDON GRANULAR DATA SHEET NO. 30

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Over-burden (Ft.)	Exist-ing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Soec.	Remarks
						% Passing								
						1 1/2"	5/8"	#4	#100	#270				
	2	1964	1-10	0-1	Yes	87.4	78.6	60.7	13.0	5.0	1 1/2	----	----	Pit is north of Town Highway #20 and 0.2 mile west of S.A. #3. Test #1 is sandy gravel in floor of pit. Acceptable for Item 201. Test #2 is dirty gravel on east side of pit. Rejected for Item 105.
52	1	1964	0.5-4.5	0-0.5	Yes	100	100	71.8	37.0	14.0	1	----	----	Owner: Francis McClellan Pit and property are north of S.A. #3 and about 1/4 mile west of intersection with Town Highway #9. Test #1 is silt with stones in floor of very small pit northeast of cemetery. Rejected for Item 105.
	2	1964	0.5-6	0-0.5	No	100	100	58.6	11.7	6.0 3.5*	1 1/2	----	Gran.	Test #2 is sandy silt with stones in center of maple grove in junk yard about 1000 feet north west of Test #1. Acceptable for Item 105.
53	1	1964	1-10	0-1	No	80.0	64.3	47.9	14.0	3.0	1 1/2	29.8%	Gran.	Owner: Mrs. Francis Colvin Borrow Property is in Chippenhook (Grav.) south of Town Highway #10 and east of S.A. #3. Test #1 is sandy gravel 305 feet south of S.A. #10 and 125 feet east of S.A. #3.

* Percentage of Total Sample

TABLE I CLARENDON GRANULAR DATA SHEET NO. 31

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Overburden (Ft.)	Existing Pit	Sieve Analysis				Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks	
						% Passing		#100	#270					
						1 1/2"	5/8" #4							
	2	1964	1-10	0-1	No	75.5	65.4	50.2	8.0	4.0	1 1/2	26.2%	Gran. Borrow (Grav.)	Acceptable for Item 105. Test #2 is sandy gravel located 210 feet south of Test #1. Acceptable for Item 105.
54	1	1964	0.5-4	0-0.5	Yes	87.4	79.6	43.4	8.0	4.0	1	----	Gran. Borrow (Grav.)	Owner: Elmer Parker Pit and property are south of S.A. #3 and west of Town Highway #11 in Chippenhook. Test #1 is gravel in floor of small pit 365 feet south of S.A. #3. Acceptable for Item 105.
	2	1964	1-10	0-1	No	78.1	65.1	46.7	10.0	4.0	2 1/2	23.0%	Gravel	Test #2 is sandy gravel about 80 feet south of pit and 10 feet north of rock wall. Acceptable for Item 201.
55	1	1964	0.5-11	0-0.5	No	70.8	67.1	54.9	20.0	7.0	1	----	Gran. Borrow (Grav.)	Owner: Steve Shimko Property is north of Town Highway #24 and west of S.A. #3 in Chippenhook. Test #1 is sandy gravel on knoll southwest of house. Acceptable for Item 105.
	2A	1964	0.5-5	0-0.5	No	65.9	49.1	38.3	11.0	4.0	1	17.2%	Gravel	Test #2A is sandy gravel 120 feet back of house. Acceptable for Item 201.
	2B	1964	5-10	0-5	No	94.4	94.4	88.8	47.1	5.0 4.4*	1	----	Gran. Borrow (Sand)	Test #2B is fine sand. Acceptable for Item 105.

* Percentage of Total Sample

TABLE I

CLARENDON GRANULAR DATA SHEET NO. 32

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Overburden (Ft.)	Existing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						% Passing								
						1 1/2"	5/8"	#4	#100	#270				
	3	1964	1-9	0-1	No	77.5	66.2	52.2	48.0	17.0	1	----	----	Test #3 is silt and stones on knoll north of cemetery along Town Highway #22. Rejected for Item 105.
56	1	1964	0-6	Stripped	No	100	100	65.7	24.0	3.0	1	----	Gran. Borrow (Grav.)	Owner: Ruth Ewing Property is north of Town Highway #24 and east of Town Highway #22 in Chippenhook. Test #1 is sandy gravel 95 feet north of entrance to Keyes Pit and 90 feet south of power-line. Acceptable for Item 105.
	2A	1964	0.5-4	0-0.5	No	94.7	83.0	58.9	12.0	5.0	1	----	Gran. Borrow (Grav.)	Test #2A is sandy gravel on top of knoll 80 feet north of power line. Acceptable for Item 105.
	2B	1964	4-8	0-4	No	100	100	95.1	23.8	5.0 4.8*	1	----	Gran. Borrow (Sand)	Test #2B is coarse sand on top of same knoll as Test 2A. Rejected for Item 105.
57	1	1964	0-10	Stripped	Yes	86.9	76.1	57.1	11.0	3.0	1	15.0%	Gravel	Owner: Daniel Keyes Pits are south of Town Highway #24 about 1/4 mile west of intersection with Town Highway #22. Test #1 is gravel in floor of pit at far northeast corner. Acceptable for Item 201.

* Percentage of Total Sample

TABLE I

CLARENDON GRANULAR DATA SHEET NO. 33

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Over-burden (Ft.)	Exist-ing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						% Passing								
						1½"	5/8"	#4	#100	#270				
	2	1964	0-10	Stripped	Yes	100	100	87.2	51.4	26.0 22.7*	1	----	----	Test #2 is sandy gravel in floor of northeast end of pit at west side of entrance.
	3	1964	0-10	Stripped	Yes	100	100	99.6	33.9	9.0 8.9*	1	----	Gran. Borrow (Sand)	Rejected for Item 105. Test #3 is fine sand with silt to stones in floor 80 feet from west face.
	4	1964	0-7	Stripped	Yes	72.6	44.2	19.6	6.0	4.0	1	13.6%	Gravel	Acceptable for Item 105. Test #4 is gravel in floor of far southeast corner.
	5	1964	0-10	Stripped	Yes	100	100	97.4	39.0	14.0 13.6*	1	----	----	Acceptable for Item 201. Test #5 is sandy silt 30 feet from face south-east of main pit. Rejected for Item 105.
58	1	1964	1-9	0-1	No	100	100	85.4	33.3	9.0 7.7*	1½	----	Gran. Borrow (Sand)	Owner: James Lawrence, Fred Lawrence, and Edwin Machia Pit and property are near intersection of S.A. #3 with Town Highway #11 in Chippenhook.
	2A	1964	1-4.5	0-1	No	88.2	65.4	51.3	8.0	3.0 1.5*	1½	21.8%	Gravel	Test #1 is silty sand 150 feet north of intersection. Acceptable for Item 105. Test #2A is pebbly sand on knoll 290 feet south of S.A. #3 and 225 feet west of fence behind buildings. Acceptable for Item 201.

* Percentage of Total Sample

TABLE I CLARENDON GRANULAR DATA SHEET NO. 34

Map Odemt. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Over-burden (Ft.)	Exist-ing Pit	Sieve Analysis					Color AASHO T-2!	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						% Passing								
						1 1/2"	5/8"	#4	#100	#270				
	2B	1964	4.5-10	0-4.5	No	100	100	99.6	85.7	22.5	1	----	----	Test 2B is silty sand. Rejected for Item 105. Test #3 is gravel 550 feet south of Test #2 and (Grav.) 40 feet west of old barn. Two abandoned pits are west and north of this Test. Acceptable for Item 105.
	3	1964	1-10	0-1	Yes	91.9	76.7	62.3	8.0	22.4*	1	18.8%	Gran. Borrow	
59	1	1964	1-10	0-1	No	100	100	100	81.0	21.0*	1	----	----	Owner: James Lawrence, Fred Lawrence and Edwin Machia Pit and property are on S.A. #3 and 0.3 mile east of intersection with Town Highway #11. Test #1 is silty sand on second knoll east of Walker House. Rejected for Item 105. Test #2 is silt in floor of small pit on top of knoll north of road. Rejected for Item 105. Test #3 is sand northeast of Test #2, 710 feet north of road and 85 feet south of woods. Acceptable for Item 105.
	2	1964	1-10	0-1	Yes	100	100	100	88.0	31.0*	1	----	----	
	3	1964	1-9.5	0-1	No	100	100	99.3	18.9	2.75 2.73*	1 1/2	----	Gran. Borrow (Sand)	
60	1A	1964	0-10	Stripped	No	93.7	69.1	27.5	22.0	11.0	1	12.8%	----	Owner: Thomas LaVictorie Property and pits are east of Town Highway #22, 1.4 miles south of inter-section with S.A. #3.

* Percentage of Total Sample

TABLE I

CLARENDON GRANULAR DATA SHEET NO. 35

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft.)	Overburden (ft)	Existing Pit	Sieve Analysis					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1 1/2"	5/8"	#4	#100	#270				
60 Continued														
	1B	1964	10-12	0-10	No	93.7	83.4	56.6	16.0	6.5	1 1/2	----	Gran. Borrow	Test #1A is gravel on west side of kno11 1250 feet from road. Rejected for Item 105.
	2	1964	0-6	Stripped	Yes	100	100	92.6	6.5	2.0 1.9*	1	----	(Grav.) Borrow	Test #1B is sandy gravel. Accepted for Item 105. Test #2 is medium to coarse sand in pit southwest of Test #1.
	3A	1964	0.5-13	0-0.5	Yes	94.2	77.7	47.2	4.0	2.0	1	14.0%	Gravel	Acceptable for Item 202. Test #3A is sandy gravel in face of small pit southeast of Test #2.
	3B	1964	13-21	0-13	Yes	100	100	100	5.0	1.5*	1	----	Sand	Acceptable for Item 201. Test #3B is coarse sand.
	4	1964	0-10	Stripped	Yes	100	100	61.3	14.7	5.0 3.1*	1	----	Gran. Borrow (Sand)	Acceptable for Item 202. Test #4 is silty sand with stones in floor of pit.
	5	1964	1-9	0-1	Yes	100	98.2	76.3	7.6	4.0 3.1	2	----	Sand	Acceptable for Item 105. Test #5 is coarse sand on top of small pit about 500 feet north of Test #2. Acceptable for Item 201.

* Percentage of Total Sample

TABLE I
Supplement

CLARENDON PROPERTY OWNERS - GRANULAR

	Map Ident. No.
Accorsi, Guido	41
Adams, Wayne	34
Austin, Paul	37
Boynton, Ray	8, 10
Carrara, Chet	2, 6, 7
Carrara, Guido	9, 12
Carrara, Joseph P.	5
Caulkins, Elizabeth	32
Chapman, Robert	43
Colvin, Francis (Mrs.)	53
Congdon Brothers	25
Ewing, Ruth	56
Gilman, John	33
Grabowski, Zigmont	27
Grover, Clayton	17
Herrick, William	30
Hill, Irene	16, 19
Hires, Allen	48
Ingalls, Cecil	26
Johnson, Laura	23
Ketchum, Carroll	31
Keyes, Daniel	37
Knipes, David	20
Kroffsik, Morris	50
Laliberte, Ed	45
Lanfear, Carl	46, 51
LaVictorie, Thomas	60
Lawrence, Fred	58, 59
Lawrence, James	58, 59
Machia, Erwin	58, 59
McLellan, Francis	52
Nutting, Ray	40
Ojala, Carl	44
Parker, Eimer	54
Pitts, Ralph	1
Powers, Charles	29

PROPERTY
OWNERS

Map Ident. No.

Powers, Russell	14, 24
Pratt, John H.	39
Pratt, Richard H.	39
Ruane, Charles	42
Sheehe, Michael	4
Shimko, Steve	55
Smith, Burton (Mrs.)	13
Spencer, Bernard F.	22
Squires, George	33
Squires, Milton	36
Squires, Willard	3
Tier, Percy	47
Tiraboschi, James	49
Weeks, Amerst	15
Wilder, Lendon	35
Wilk Brothers Paving Company (Lessee)	11
Young, Warren	21

CLARENDON ROCK DATA SHEET NO. 1

Map Ident. No.	Field Test No.	Year Field Tested	Rock Type	Exist-ing Quarry	Method of Sampling	Abrasion AASHO T-3	Remarks
1	1	1964	Marble	Yes	Chip	10.2%	<p>Owner: Robert Chapman (formerly Georgia Marble Company Quarry).</p> <p>This is an abandoned quarry of dark gray marble with black veins. Rock is marble, with many inclusions of Hortonville slate. Apparently the presence of slate was a big factor in closing down operations. Quarry face is 25'-30' high on the western end; water in floor of quarry. Quarry is approximately 150' by 350' long. Rock fails to meet abrasion requirements for Item 204, Sub-base of Crushed rock.</p>
2	1	1964	Marble	Yes	Chip	6.8%	<p>Owner: Robert Chapman (formerly Georgia Marble Company Quarry). This is the site of an abandoned marble quarrying operations, a large flat mountain top area, with buildings and machinery still intact. Quarry itself is small, 54' by 62' (almost square). Blocks of marble lie throughout area, from which a sample was taken.</p> <p>Rock is white-to cream-colored marble with some 'brownish' convolutions. Rock belongs to Sheburne formation.</p> <p>Meets abrasion requirements for Item 204, Sub-base of Crushed Rock.</p>
3	1	1964	Quartzite	No	Chip	2.6%	<p>Owner: William Rough and Mrs. John DeReyes</p> <p>Numerous wooded exposures of Cheshire quartzite outcrop all along quarterline road, at top of hill.</p> <p>Test #1 represents 0.1 mile along roadside, sampled from various outcrops.</p> <p>Rock is extremely hard, uniform gray quartzite with large quartz grains.</p> <p>Rock meets abrasion requirements for Item 204, Sub-base of Crushed Rock.</p>
4	1	1964	Quartzite	No	Chip	3.2%	<p>Owner: Raymond Gould</p> <p>A long outcrop which occurs along a dried-up brook bed, along Horton Road (between quarterline road and Creek Road). Sample 225' across strike.</p>

CLARENDON ROCK DATA SHEET NO. 2

Map Ident. No.	Field Test No.	Year Field Tested	Rock Type	Exist- ing Quarry	Method of Sampling	Abrasion AASHO T-3	Remarks
							Rock is Cheshire quartzite-hard, buff to gray in color with large vitreous grains of quartz. Rock weathers somewhat 'shaly'. Meets abrasion requirements for Item 204, Sub-base of Crushed Rock.
5	1	1964	Quartzite	No	Chip	1.8%	Owner: James Lawrence, Fred Lawrence and Irving Macia A large area of wooded outcrops. There are two main bodies of rock, with numerous smaller outcrops about, from which both samples were taken. Rock is Cheshire quartzite-extremely hard, gray in color, weathering rust-colored. Rock meets abrasion requirements for Item 204, Sub-base of Crushed Rock.
	2	1964	Quartzite	No	Chip	2.4%	Test #2 taken from northernmost outcrops for 250' across. Rock meets abrasion requirements for Item 204, Sub-base of Crushed Rock.
6	1	1964	Quartzite	No	Chip	5.8%	Owner: Augustus Charles Masin A roadside exposure of 6' height. Rock occurs in scattered outcrops uphill from road; slight soil cover throughout hillside area. Rock is light gray quartzite with some white pinstripe partings; quite massive rock belongs to the Danby formation. Sampled 225' along strike. Meets abrasion requirements for Item 204, Sub-base of Crushed Rock.
7	1	1964	Marble	Yes	Chip	13.6%	Owner: Thomas LaVictoire An old abandoned monumental marble quarry, uphill from house. Quarry is 30' by 70', with about 20' depth. Reason for halting operations was because rock split readily into small pieces-fairly soft, brittle rock. Rock is a white, 'loose-grained' or 'sugary' textured marble, with a greenish tinge near surface, and belongs to the Shelburne formation. Fails to meet abrasion requirements for Item 204, Sub-base of Crushed Rock.
8	1	1964	Dolomite to Quartzite	No	Chip	2.6%	Owner: Central Vermont Power Corporation A huge outcropping of ledge on both sides of Mill River -

CLARENDON ROCK DATA SHEET NO. 3

Map Ident. No	Field Test No.	Year Field Tested	Rock Type	Exist- ing Quarry	Method of Sampling	Abrasion AASHO T-3	Remarks
							locally called the "Gorge". Rock was sampled from bottom of face (about 35' height) for 225' across strike. Close to contact between Dunham dolomite and Monkton quartzite. Rock is light gray quartzite, hard, with bands of pinkish tinge color. Meets requirements for Item 204, Sub-base of Crushed Rock.

Clarendon Property Owners - Rock

TABLE II
Supplement

	Map Ident. No.
Central Vermont Power Corporation	8
Chapman, Robert (form. Georgia Marble Co.)	1, 2
Gould, Raymond	4
LaVictorie, Thomas	7
Lawrence, Fred	5
Lawrence, James	5
Machia, Irving	5
Masin, Augustus Charles	6
Rough, Wm. and Dereyes, John (Mrs.)	3



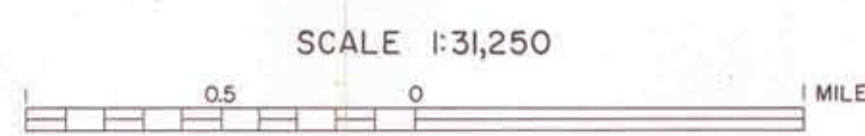
ARTERIAL HIGHWAY
PROPOSED LOCATION



LEGEND

- GRAVEL, ACCEPTABLE FOR ITEM 201 (sub-base of gravel)
- GRAVEL, DEPLETED OR NOT ACCEPTABLE FOR ITEM 201
- △ SAND, ACCEPTABLE FOR ITEM 202 (sub-base of sand)
- ▲ SAND, DEPLETED OR NOT ACCEPTABLE FOR ITEM 202
- GRANULAR BORROW, ITEM 105
- MATERIAL NOT ACCEPTABLE FOR ITEM 105
- ✕ EXISTING PIT
- SG SAND & GRAVEL DEPOSIT
- S SAND DEPOSIT
- 3 IDENTIFICATION NUMBER (refer to data sheets)

DANBY



CONTOUR INTERVAL 20 FEET

1969

GRANULAR MATERIALS MAP

BY
VERMONT DEPARTMENT OF HIGHWAYS
IN COOPERATION WITH
U.S. BUREAU OF PUBLIC ROADS

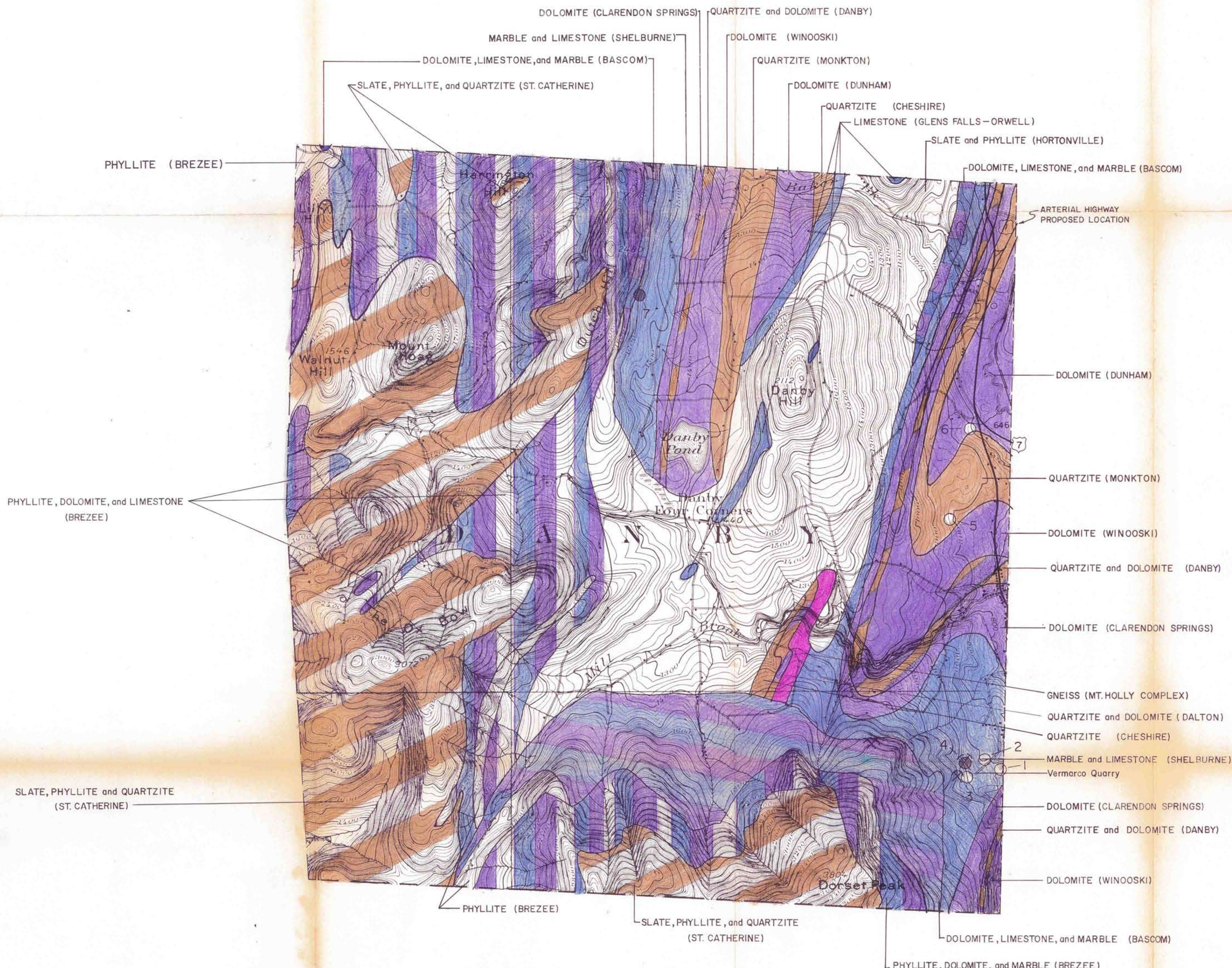
NOTE: BASED ON U.S.G.S. TOPOGRAPHIC MAPS

PLATE 1

GRANULAR

REVISIONS

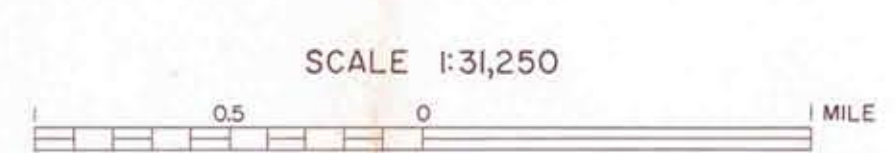
DATE					
BY					



LEGEND

- ROCK, ACCEPTABLE FOR ITEM 204 (sub-base of crushed rock)
- ⊗ ROCK, NOT ACCEPTABLE FOR ITEM 204
- ⊗ EXISTING QUARRY
- Orange box GRANITE TO DIORITE (light to intermediate igneous rocks)
- Green box AMPHIBOLITE, GABBRO, DIABASE, METADIABASE, GREENSTONE, TRAP DIKES (basic or dark igneous rocks)
- Red box PERIDOTITE, PYROXENITE, SERPENTINITE (ultra basic igneous rocks)
- Pink box GNEISS
- Light blue box QUARTZITE
- Dark blue box DOLOMITE
- Light purple box MARBLE, LIMESTONE
- White box with black border SCHISTS, SLATES, PHYLLITES, SHALES, CONGLOMERATES
- 3 IDENTIFICATION NUMBER (refer to data sheets)

DANBY



CONTOUR INTERVAL 20 FEET

1969

ROCK MATERIALS MAP

BY
VERMONT DEPARTMENT OF HIGHWAYS
IN COOPERATION WITH
U.S. BUREAU OF PUBLIC ROADS

NOTE: BASED ON U.S.G.S. TOPOGRAPHIC MAPS

REVISIONS

DATE				
BY				