SURVEY OF HIGHWAY CONSTRUCTION MATERIALS

IN THE TOWN OF ARLINGTON, BENNINGTON 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

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Acknowledgments

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

1. Various departments and individuals of the Vermont State Department of Highways, notably the Planning and Mapping Division and the Highway Testing Laboratory,
2. Professor D.P. Stewart of Miami University, Oxford, Ohio,
3. Professor 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.

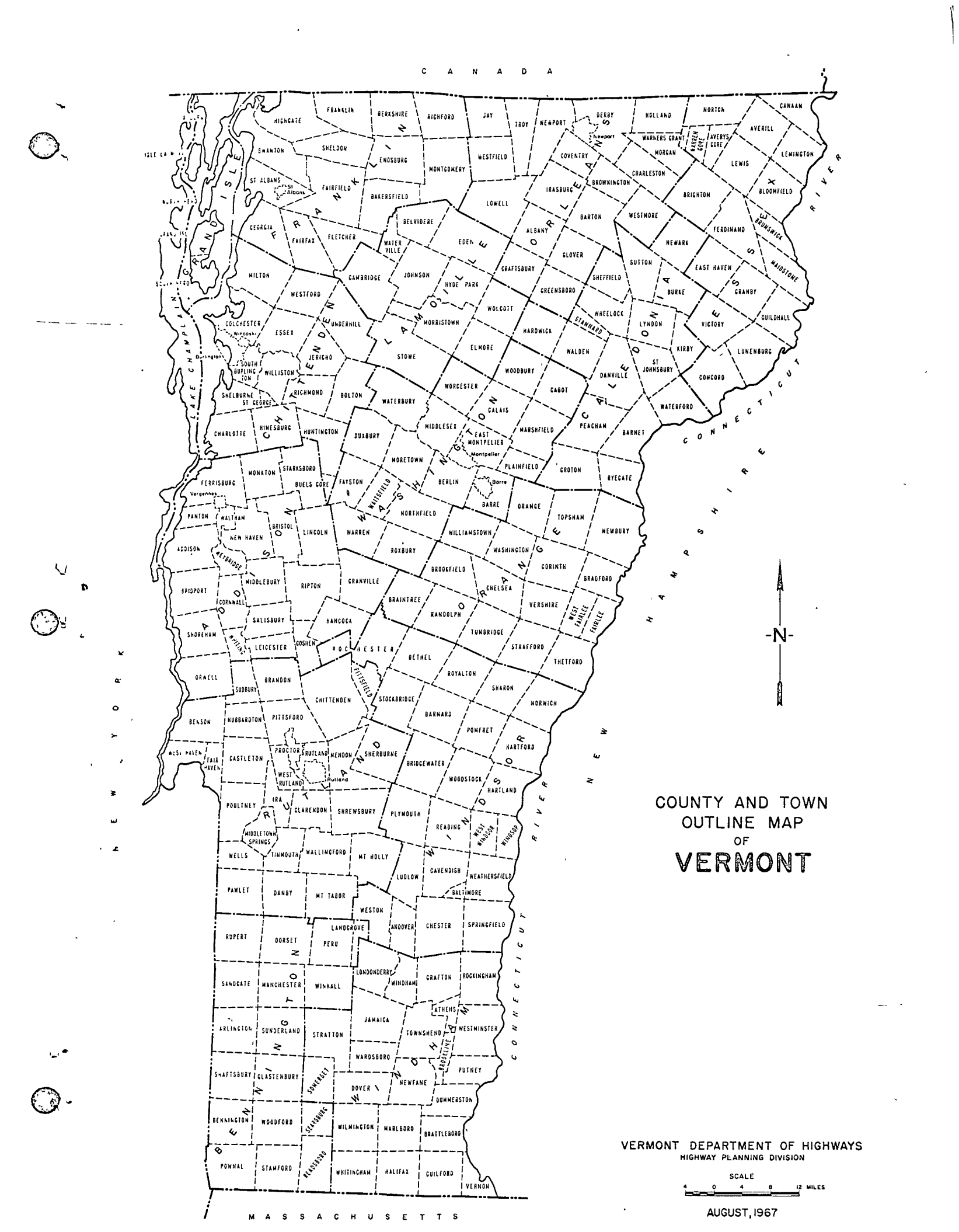
Work sheets contain more detailed information on each test and a detailed sketch of each Identification Number Area. The work sheets and laboratory reports are on file in the office headquarters of this Project.

LOCATION

The town of Arlington is situated in the west-central part of Bennington County, in the southwest section of the State. The town lies in the southwest part of the Equinox Quadrangle, and is north of Shaftsbury, west of Sunderland, south of Sandgate, southwest of Manchester, and east of Sushan, New York. (See County and Town Outline Map of Vermont on the following page).

The town is underlain by the Vermont Valley Sequence of quartzites and carbonates in the east and southeast, and in the valley of the Batten Kill between Arlington and West Arlington. The Taconic Mountains in the west are upheld by the slates and phyllites of the Taconic Sequence. Prominent peaks of the Taconics are Big Spruce Mountain - 2,510', The Ball - 2,715', Red Mountain - 2,869', Grass Mountain - 3,040', and Spruce Peak - 3,060'.

Major drainage occurs via the Batten Kill, which flows southwest from Manchester and Sunderland as far as Arlington Village, where it veers northwest to cut a picturesque valley through the Taconic Mountains. It is joined north of Arlington Village by the Roaring Branch, which is fed from the south by Dry Brook and Warm Brook. The Green River and other tributaries draining the Taconics, enter the Batten Kill near West Arlington. Elevations on the Batten Kill range from about 620' on the Sunderland Town Line, to about 520' at the New York Line.


C A N A D A
M A S S A C H U S E T T S
NEW YORK
CONNECTICUT RIVER
NEW HAMPSHIRE
LAKE CHAMPLAIN
GRAND ISLE
FRANKLIN
ORLEANS
ESSEX
CALEDONIA
WASHINGTON
ORANGE
WINDSOR
RUTLAND
WINDHAM
BENNINGTON
-N-
COUNTY AND TOWN
OUTLINE MAP
OF
VERMONT
VERMONT DEPARTMENT OF HIGHWAYS
HIGHWAY PLANNING DIVISION
SCALE
4 0 4 8 12 MILES
AUGUST, 1967

SURVEY OF ROCK SOURCES

Procedure for Rock Survey

The routine employed by the project in the survey of possible sources of rock for highway construction is divided into two main stages: office investigation and field investigation. The first is conducted primarily during the winter months and comprises the mapping of rock types as indicated in various reference sources. Many different sources of information were utilized, as indicated in the bibliography. These references differ considerably in dependability due to new developments and studies contributing to the obsolescense of a number of reports. In addition, the results of samples taken by other individuals are analyzed, and the location in which these samples were taken is mapped when possible. In other words, as complete a correlation as possible is made of all the information available concerning the geology of the area under consideration.

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

Discussion of Rock and Rock Sources

The rocks of Arlington are divided into two stratigraphic and structural sequences. The Taconic Sequence of slates and phyllites, with minor amounts of quartzite and carbonate rocks, upholds the Taconic Mountains in the western two-thirds of the town. The Batten Kill River has eroded through the Taconic Sequence between Arlington Village and West Arlington, and along this valley quartzites and carbonate rocks of the Valley Sequence are exposed. These rocks also underlie the eastern one-third of Arlington.

The major portion of the Taconic Sequence in Arlington occurs as the St. Catherine Formation, and the remainder, the Brezee Formation, outcrops only in two small areas near West Arlington. There are no exposures of Taconic Sequence rock types which are suitable for Sub-base of Crushed Rock, Item 204.

The Valley Sequence of quartzites and carbonates would be the more suitable source of Item 204 in Arlington, but a mantle of glacial material covers all but a few accessible exposures. At only three of the locations tested was rock for Item 204 acceptable; two are in the Bascom Formation of interbedded dolomites and limestone or marble. The third was adjacent to a contact between the Bascom Formation and the white marble of the Shelburne Formation.

Map Identification No. 1 is an outcrop of the Bascom Formation which lies west-southwest of the southwest flank of Red Mountain, and below a mapped portion of the Brezee Formation of the Taconic Sequence. The Bascom is exposed on a steep scarp 150' north of a farm woods road at a point 0.6 mile north from Vermont Route 313, and 3.45 miles west from U. S. Route 7. The rock is a gray, thin- to medium-bedded dolomitic marble which is

somewhat massive, but has some phyllitic partings. Thick tree cover and steep, rough terrain would be factors to contend with in exploiting this area.

Map Identification No. 2 is mapped in the Bascom Formation, and is known as Cedar Rock, a nearly vertical promontory about 0.6 mile north of the northwest corner of Town Highway No. 8. Ownership, as well as the rough terrain and thick woods, may influence whether the source could be developed. Cedar Rock is just east of a winding logging road.

Map Identification No. 3 is on Howell's Campground, south and west of School Street Extension (Town Highway No. 37). Part of the sample came from marble of the Shelburne Formation, which outcrops in a fairly flat, heavily wooded zone just west of Howell's pond. The rest of the sample was from the Bascom Formation, which forms a prominent scarp about 200' west of the Shelburne Marble outcrop. This scarp extends about 800' a little west of south and should probably be considered as the primary source of Item 204 in Arlington, because of the large quantity of material and the accessibility of the rock source, and because of its closeness to the proposed Arterial Project. Map Identification No. 1 would be the second best source of Item 204, because it would be easier to develop and has more rock than Map Identification No. 2.

SURVEY OF SAND AND GRAVEL SOURCES

Procedure for Sand and Gravel Survey

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

The second stage of the investigation is begun in the field by making a cursory preliminary survey over the entire area noting area which show physiographic features giving evidence of glacial or fluvial deposits. These locations are later examined by digging test pits with a backhoe to a depth of approximately 11 feet and then sampling the material. The samples are submitted to the Highway Testing Laboratory where they are tested for gradation and stone wear, the latter by the Deval Method (AASHO T-4-35).

Discussion of Sand and Gravel Deposits

The granular deposits in Arlington occur either as sands and gravels of ice-contact origin deposited as kame terraces, kame moraines, kames; or as material deposited as proglacial outwash and fluvial gravels. Many ice-contact areas have been mapped in Arlington by D. P. Stewart. The following Map Identification Numbers had material acceptable for Sub-base of Gravel, Item 201: 1, 3, 6, 9, 11, 12, 23, 25, 30, 32, 33, 34, 35, and 37. The most promising sources in Arlington are the small pits and their extensions at Map Identification Numbers 3, 9, 12, and 25. Owners of Map Identification Numbers 11 and 23 may not sell. In addition, the amounts of gravel are limited in many areas. Map Identification Number 32, a small pit and extension, has acceptable material but is remotely located in South Arlington, more than twenty miles from Arlington Village.

The phyllitic gravels west of U. S. Route 7 are soft and tabular. The gravels east of U. S. Route 7 are characterized by hard, rounded stones and a high percentage of fine material.

Sources of Sub-base of Sand, Item 202, are at Map Identification Numbers 3, 5, 8, 11, 13, 14, 19, 20, 21, 22, 23, 29, and 35. The pits at Map Identification Numbers 3, 11, 13, 21, 22, and 23, and the knolls at Map Identification No. 20 should be considered first due to very limited amounts of material at the remaining locations. Probably only materials at Map Identification Numbers 3 and 20 will be made available by the present owners.

SUMMARY OF ROCK FORMATIONS IN THE TOWN OF ARLINGTON

Taconic Sequence

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

Brezee Formation - 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' thick occur locally and in places contain pebbles of blue quartz. Phyllites are locally highly albitic.

Vermont Valley Sequence

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.

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.

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 - Interbedded quartzite and dolomite; white quartzite beds more than a foot thick, 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.

GLOSSARY OF SELECTED GEOLOGIC TERMS

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

Breccia - A rock consisting of consolidated angular rock fragments larger than sand grains. There may be fault, talus, and volcanic Breccia.

Calcareous - Pertaining to or containing calcium carbonate.

Carbonaceous - Containing carbon.

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.

Glaciolacustrine - A term used to denote formation by, or deposition in quiescent waters of glacial lakes.

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 Moraine - An accumulation of material deposited directly from the frontal portions of melting glacial ice and partly sorted by water action. Deposits may take the form of coalescent knolls, hummocks, ridges, etc.

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

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

Lithographic Stone - Fine grained, compact and homogeneous limestone formerly used for engraving.

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.

Outwash - Stratified sands and gravels that are stream-built beyond the glacier; deposited by meltwater streams issuing from the face of the glacial ice.

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.

Pre-Cambrian - Pertaining to or designating all rocks formed prior to the Cambrian period. Prior to about 500,000,000 years ago.

Proglacial - Pertaining to the area beyond the outer limit of a glacier. That area which is the location of outwash deposits or glacial lake deposits.

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.

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

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.

Soils 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.

Material 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 Rocks, 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.

The Geology of the Equinox Quadrangle and Vincity, Vermont; Philip C. Hewitt; Vermont Geological Survey Bulletin No. 18, 1961.

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 AASHO 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 AASHO 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 No. 100	Percent Passing Square Openings 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	0-18
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 Item 205-A	4"	100
		No. 4	25-50
	Fine-Graded Item 205-B	1½"	95-100
		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 AASHO T-4 or more than thirty-five when tested by AASHO 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 AASHO 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 AASHO Method of Test, Designation T-21."

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 1

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				
1	1	1967	2-6	0-2	Yes	76.8	62.5	42.8	2.0	1.0	2	22.4%	Gravel	Owner: Gordon Woodard. Area is a nearly depleted pit on the south side of a samll wooded knoll. Pit is 40' by 30', and has a slight extension to the north. Property has house on it and is at the north end of Town Highway No. 48. Test #1 was taken from southwest facing slope of pit. Log of hole: 0-2' overburden; 2'-6' cobbly sands and gravel. Material is tabular and phyllitic, locally it is called "slate gravel".
	2	1967	1-7	0-1	Yes	97.2	86.8	57.7	7.0	2.5	1	---	Gran. Borrow (Sand)	Test #2 was taken at base of face 20' northeast of large boulder on pit floor, and 20' east of Test #1. Log of hole: 0-1' overburden; 1'-7' tabular pebbles with sand; bottoms in ledge. Insufficient proper size stone was included for wear test, but notice that wear on stone from Test #1 met requirements. A very limited amount of material is available.
2	1	1967	3-30	0-3	Yes	81.5	57.4	45.6	16.0	6.3	1	7.8%	Gran. Borrow (Grav.)	Owner: Leo Budro (formerly Mears). Area is a large pit on the south end of a wooded knoll which trends nearly northward from Town Highway No. 15. Both of the steep sloped sloughed-

*Percentage of Total Sample

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 2

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				over and deciduous tree-covered pit lobes were sampled. The exploited part of the deposit is about 100' by 500' with a large extension to the north of about 900', and an eastward extension of about 400'. Test #1 was taken from the south face of the east part of pit. The material is unsorted sand and cobbles. About 50% of the stones were 1 inch to 3 inches, 30% were 3 inches to 6 inches and 20% were +6". There is one 2-foot layer of sand about 15' above the floor. Log of sample: 0-3' overburden; 3'-30' sandy pebbly cobbles, bottoms in sloughed piles of large cobbles. No +3" stones included in sample.
	2	1967	3-40	0-3	Yes	61.9	52.4	40.1	13.0	6.5	1	8.2%	Gran. Borrow (Grav.)	Test #2 was 500' west of Test #1 on the face of a spur of the pit. No +3" stones were taken, but many were noted. Log of sample: 0-3' overburden; 3'-40' sandy silt with cobbles; bottoms in sloughed cobbles.
	3	1967	1-5	0-1	Yes	88.9	59.1	34.7	20.0	9.0	1	9.6%	Gran. Borrow (Grav.)	Test #3 was in pit floor 25' southeast of Test #1. Log of hole: 0-1' overburden; 1'-5' cobbly gravel; water at 5'. No stones larger than 2½ inches were taken.

*Percentage of Total Sample

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 3

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	1967	0-8	---	Yes	89.1	74.0	57.2	17.0	1.0	1	8.8%	Gran. Borrow (Grav.)	Test #4 was in floor 25' east of Test #2. Log of hole: 0-8' gravelly sand; bottoms in water and gravelly sand. Material may get better in northward extension of feature. Even though stone passes wear test, there is too high a percentage of particles passing the #100 and #270 sieves for acceptance as Item 201. Further exploitation of this site probably would run into water at, or near the same depths as in Tests #3 and #4, unless a severe prolonged drought occurred.
3	1	1967	2-10	0-2	Yes	70.9	51.6	39.2	15.0	2.0	1	13.0%	Gravel	Owner: Leonard Wilkison. Site is a small wooded knoll with possible extension slightly south of east for about 200'. Knoll is 0.1 mile south of Town Highway No. 15. A similar extension northward would be possible except for the necessary removal of many junked cars before development of that portion. Test #1 was of northeast face. No sorting or bedding was noted.
	2	1967	5-12	0-5	Yes	100	94.7	88.3	7.9	4.8* 4.2*	1	---	Sand	Test #2 was in floor 20' S45°W of Test #1. Log of hole: 0-5' boulders; 5'-12' sand. Bottoms in boulders and sand.

*Percentage of Total Sample

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 4

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	1	1967	3-12	0-3	Yes	100	100	100	37.0	8.0*	1	---	Gran. Borrow (Sand)	Owner: Rev. Lance Webb. This is a small pit at the southeast of a pine-wooded knoll on the west side of a private road which joins Town Highway No. 19 at a point 0.16 mile north of Vermont Route 313. Knoll extends northwest for about 300'. Test #1 was taken from the floor of the 15' x 15' pit. Log of hole: 0-3' overburden; 3'-4.5' pebbles, 4.5'-12' very fine sand.
	2	1967	3-12	0-3	No	100	100	100	27.0	7.0*	1	---	Gran. Borrow (Sand)	Test #2 is in a small clearing on the wooded knoll, 50' north from Test #1. Log of hole: 0-3' overburden; 3'-12' very fine sand. The very fine sand appears to continue throughout the deposit. At time of sampling owner was uncertain about selling.
5	1	1967	1.5-8	0-1.5	No	100	96.6	73.0	10.2	5.0 3.7*	1	---	Sand	Owner: John S. Harrison. Feature is a fenced in pasture with two knolls, one of which has a VHD marker "Ridgeview". Pasture is just north of dirt road to pigpen in woods on West Mountain Farm, that is south of east end of Town Highway No. 22. Test #1 is top of knoll 30' N77°W of VHD marker "Ridgeview". Log of hole: 0-1.5' over-

*Percentage of Total Sample

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 5

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				
														burden; 1.5'-8' pebbly sand.
	2	1967	2-10	0-2	No	100	100	87.6	40.3	21.0 18.4*	1	---	---	Test #2 is on top of knoll 200' north of Test #1. Log of hole: 0-2' overburden; 2'-10' pebbly silt and fine sand.
	3	1967	2-14	0-2	No	100	90.8	75.5	27.2	21.0 15.9*	1	---	---	Test #3 is 75' S60°W of Test #2 in a small basin between two knolls. Log of hole: 0-2' overburden; 2'-14' pebbly, silty, fine sand and bottoms in silt and boulders.
6	1	1967	0-5	---	Yes	82.9	57.3	27.5	3.0	2.0	1	12.6%	Gravel	Owner: John S. Harrison. Site is west up a woods road from gate to Map Identification No. 5. Pit is 25' by 30' and has an additional extension of about 25' by 75' into the woods. Ledge seems to be close to surface and would limit extension. Test #1 was in floor at south end of pit. Log of hole: 0-5' gravel with tabular stones and pebbles. Bedrock at 5'. Tabular material is "slate gravel".
7	1	1967	1-6	0-1	No	15.2	12.4	10.1	37.0	13.0	3½	---	---	Owner: John S. Harrison. Area contains two wooded knolls east of a horse pasture at Map Identification No. 8. Test #1 is at southeast base of the northern knoll, and 150' N70°E of gate to horse pasture. Many +6" cobbles

*Percentage of Total Sample

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 6

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				were noted, but not included in sample. Log of hole: 0-1' overburden; 1'-6' cobbles with sand and silt; bottoms in boulders (+12"). Insufficient proper size stones were included for the wear test. However, very similar material taken at Map Identification No. 8, immediately to the west, passed the abrasion specification. Nearly 40% of sample was retained on 3" screen, and nearly 85% was retained on the 2" screen.
	2	1967	1-5	0-1	No	18.9	15.9	14.0	15.0	5.0	2	---	Gran. Borrow (Grav.)	Test #2 was at north base of south knoll, 20' N80°E from gate to horse pasture. Log of hole: 0-1' overburden; 1'-5' cobbles with sand and boulders; bottoms in boulders. Many +4" cobbles were noted, but not included in the sample. There was 22% of the sample retained on the 4" screen, 63.6% was retained on the 3" screen, and 76% was retained on the 2" screen. There was insufficient proper size stone included for the wear test, but similar material from Map Identification No. 8, passed the abrasion specifications. Sample meets grading requirements for Subbase of Gravel, Item 201.

*Percentage of Total Sample

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 7

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				
														Knolls were too steep to test except at their bases. Stones seem hard enough. Area probably would be available. Surface of knolls had many cobbles showing.
8	1	1967	3-12	0-3	No	75.6	71.0	62.6	20.0	8.5 5.3*	1	---	Gran. Borrow (Grav.)	Owner: John S. Harrison. The West Mountain Farm horse pasture is located 250' west of a ledge overlooking Howell's camping area and pond. Pasture is nearly surrounded by planted pines with some birch. There is one small knoll at north end of pasture and two small knolls at the south end. Pasture is about 900' by 300'. Test #1 was taken 175' S75°E of fence opening on west side of field. Log of hole: 0-3' overburden; 3'-7' fine sand; 7'-8.5' cobbles with sand; 8.5'-12' fine sand with a small seam of silt; water at 12'.
	2	1967	2-10	0-2	No	100	100	87.4	5.2	2.0 1.7*	1	---	Sand	Test #2 was in top of small knoll at south end of pasture. Log of hole: 0-2' overburden; 2'-3' gravel; 3'-8' sand; 8'-10' cobbly sand.
	3	1967	3-11	0-3	No	83.7	58.9	23.8	25.0	11.0	1	12.0%	---	Test #3 is 175' N20°E of Test #1, and about at the middle of the largest section of the field. Log of hole:0-3' overburden;

*Percentage of Total Sample

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 8

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	1967	2.5-9	0-2.5	No	72.2	45.4	27.8	15.0	7.5	1	7.2%	Gran. Borrow (Grav.)	3'-7' sandy gravel; 7'-9' sand; 9'-11' cobbles with sand. Test #4 was on the knoll near fence at north end of field, 305' N30°E of Test #3. Log of hole: 0-2.5' overburden; 2.5'-7.5' cobbles with sand; 7.5'-9' gravel; bottoms at 9' in boulders.
9	1	1967	1-7	0-1	Yes	78.6	51.8	25.9	5.0	1.0	1	15.0%	Gravel	Owner: John S. Harrison. Location is 150' west of southern part of area at Map Identification No. 8, and just east of a small woods road. A small pit about 90' by 30', is sloughed, overgrown, and is used as a trash heap. Feature extends into wooded knoll trending northeast towards Map Identification No. 8. Test #1 is in floor at base of northeast face. Log of hole: 0-1' overburden; 1'-7' cobbly gravel; water at 7'.
	2	1967	19-28	0-2	Yes	100	100	97.9	22.5	5.0 4.9*	1	---	Gran. Borrow (Sand)	Test #2 was the face above Test #1. Log of sample: 0-2' overburden; 2'-19' sand and silt (too high to sample); 19'-28' mixed beds of sand and silt.
10	1	1967	2-9	0-2	No	N O T S A M P L E D								Owner: William Howell. Area is a wooded knoll south of old lime kiln on west side of pond and Howell's campgrounds at the intersection of two roads.

*Percentage of Total Sample

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 9

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				
														Property is west and south of Town Highway No. 37. Test #1 - Log of hole: 0-2' organic overburden; 2'-9' bouldery till. There is bedrock to the east and west.
11	1	1967	4-10	0-4	Yes	100	100	100	4.0	1.5*	1	---	Sand	Owner: William P. Sohn. Area is a small pit on the west side of a field at a point 0.15 mile northwest of the northwest corner of Town Highway No. 8, which is 0.55 mile west from junction of north end of Town Highway No. 8 and U. S. Route 7. The pit is 75' by 50' and has an eastward extension of about 150', exposed as a low rolling grassy ridge in the field. Test #1 was from south face of lower pit level. Log of sample: 0-4' overburden; 4'-10' sand.
	2	1967	2-12	0-2	Yes	100	100	100	9.0	2.3*	1	---	Sand	Test #2 was 50' east of and 8' above Test #1. Log of hole: 0-2' overburden; 2'-12' sand; 12'-20' silt not included in sample.
	3	1967	6-14	0-6	No	70.8	60.4	48.4	8.0	4.0	1	15.2%	Gravel	Test #3 was 40' east of fence, and 150' S10°E of Test #2. Log of hole: 0-6' topsoil; 6'-14' cobbly gravel. Area looks like a good source of both Sub-base of Sand, Item 202, and Sub-base of Gravel,

*Percentage of Total Sample

TABLE I

ARLINGTON 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 % Passing					Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
														Item 201, if owner decides to sell.
12	1	1967	2-10	0-2	Yes	87.4	68.0	47.3	9.0	4.0	1	11.6%	Gravel	Owner: Robert B. Young. Area is a small overgrown pit on the steep southeast slope of some knolls which extend northwest from a chicken house that is 0.1 mile north of a point on Town Highway No. 8 0.33 mile west of its north junction with U. S. Route 7. Access is by private road. Test #1 was located at base of slope 40' N80°W from southwest corner of chicken house. Log of hole: 0-2' overburden; 2'-10' cobbly gravel. Stone size was estimated as 1"-3" (50%); 3"-4" (25%); 4"-8" (25%). Deposit seems to extend northwest into the knolls. The material may extend into the knolls. The material may extend westward, as it seemed quite similar to that at Map Identification No. 11, Test #3.
13	1	1967	2-8	0-2	Yes	98.3	94.5	90.7	20.0	8.0 7.2*	1	---	Gran. Borrow (Sand)	Owner: Angelo Carbonti. Site is small pit behind houses on east side of U. S. Route 7, 0.07 mile south of north end of Town Highway No. 8. Steep-faced pit is on west edge of a wooded knoll which extends 300' east to railroad

*Percentage of Total Sample

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 11

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				
														tracks. Owner is building houses nearby and using material from the pit, so the volume of available material is decreasing. Pit is 200' by 250' with an average height of 20'. Feature sampled is an ice-contact deposit. Test #1 was on 8' face at north end of pit. Log of sample: 0-2' overburden; 2'-8' sand; bottomed in pebbly sand.
	2	1967	2-20	0-2	Yes	69.6	60.7	57.5	29.0	15.0	1	6.8%	---	Test #2 was 130' south of Test #1. Interbedded cobbly sand and gravel and some thin silt beds were noted. Log of sample: 0-2' overburden; 2'-20' cobble sand and gravel.
	3	1967	2-15	0-2	Yes	100	89.7	83.9	9.2	3.0 2.5*	1½	---	Sand	Test #3 was a floor sample below Test #1. Log of hole: 0-2' overburden; 2'-15' interbedded sand with cobbles.
	4	1967	9-14	0-9	Yes	100	100	98.4	6.9	2.3*	1	---	Sand	Test #4 was in floor below Test #2. Log of hole: 0-9' cobbly overburden; 9'-14' sand. Hole continues in sand. Area may prove to be an adequate source for both Sub-base of Sand, Item 202, and Granular Borrow, Item 105, but should be more efficiently developed than in the past.

*Percentage of Total Sample

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 12

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				
14	1	1967	4-14	0-4	No	95.2	92.1	89.0	9.8	3.0 2.7*	1	---	Sand	Owner: Robert B. Young. Site tested is wooded knoll that is reached by 0.7 mile of woods road south from Town Highway No. 8 at point 0.34 mile west of its northern junction with U. S. Route 7. The knoll, which is west of the woods road, has a limited extent to the northwest. Test #1 is 15' west of woods road on east edge of the knoll. Log of hole: 0-4' overburden; 4'-5' coarse sand; 5'-8' fine sand, 8'-14' coarse sand with cobbles, bottoms in cobbly sand. Other heavily wooded knolls in the vicinity that could not be sampled may be additional sources of acceptable construction material.
15	1	1967	7-13	0-7	No	100	100	100	22.0	2.5*	1	---	Gran. Borrow (Sand)	Owner: Robert B. Young. Area is a partly wooded pasture which is 0.11 mile south of Map Identification No. 14 on woods road. Test #1 is at top of small knoll at south end of field. Log of hole: 0-7' mostly brown, silty, topsoil; 7'-13' fine sand; bottoms in fine sand.
	2	1967	11-13	0-11	N O T S A M P L E D									Test #2 is 60' north of, and 6' below Test #1. Log of hole: 0-11' organic

*Percentage of Total Sample

TABLE I

ARLINGTON 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 1½"	5/8"	#4	#100	#270	Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
16	1	1967	2-11	0-2	No	82.5	65.8	51.4	22.0	9.0	1	11.2%	Gran. Borrow (Grav.)	11"-13' silt. Owner: Richard Hagelberg. Site is field with a small knoll east of a wooded area, and just south of Town Highway No. 7 at a point 0.1 mile east of Town Highway No. 8. Knoll tremds N80°E for 125'. Owner may use field for house lots in the future. Test #1 was at top of the knoll, 140' south of Town Highway No. 7. From 2'-11' sandy gravel with cobbles was encoumtered.
	2	1967	2-11	0-2	No	N O T S A M P L E D								Test #2 was 87' south of and 12" below Test #1 in low part of field at base of knoll. Hole encountered 2'- 7' silt and 7'-11' clay.
17	1	1967	2-10	0-2	Yes	100	100	100	36.0	6.0*	1	---	Gran. Borrow (Grav.)	Owner: Richard Hagelberg. Small pit is located on west side of Town Highway No. 8 at point 0.42 mile south of Town Highway No. 7, and has a possible extension along a 300' knoll trending S85°W from pit. Material is phyllitic and powdery. Test #1 was from northwest face that has interbedded fine to coarse sand with small seams of clay and silt. Dark sands occur above light ones. Bottoms in pebbles and cobbles.

*Percentage of Total Sample

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 14

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Over-burden (Ft)	Existing Pit	Sieve Analysis % Passing 1½"	5/8"	#4	#10	#270	Color AASHO T-21	Abrasion AASHO T-[illegible]35	Passes VHD Spec.	Remarks
	2	1967	2-8	0-2	Yes	77.7	67.0	43.8	10.0	4.0	1	25.4%	Gran. Borrow (Grav.)	Test #2 was from southwest face of pit. From 2'-8' occur poorly sorted sand, pebbles, and cobbles. Most of the rock and pebbles are tabular and soft. Test barely fails the abrasion requirements for Sub-base of Gravel, Item 201.
	3	1967	0-14	---	Yes	N O T S A M P L E D								Test #3 was in pit floor 10' N45°E of Test #2. Silt and clay with water at 14' were encountered.
	4	1967	2-11	0-2	No	100	87.0	67.5	32.0	15.0	1	---	---	Test #4 was at top of knoll 290' S85°W from Test #1. Stony silt with some boulders was encountered. Neither pit nor extension are too promising.
18	1	1967	2-15	0-2	Yes	81.2	71.9	55.3	13.0	4.0	1	---	Gran. Borrow (Grav.)	Owner: Arthur W. Wood, Jr. Tests were of a 100' x 30' pit which extends into wooded knolls. Pit is 0.1 mile west of State Aid Highway No. 4 and 0.2 mile south from the proposed Arterial Project line. Vegetation occurs on five of the six faces, and slumped material has accumulated at the base of their steep slopes. Test #1 was the face on the southwest part of the south-central lobe of the pit. Log of sample: 2'-4' pebbles; 4'-13' cobbly gravel; 13'-15' cobbles with sand. The pebbles are tabular, but the

*Percentage of Total Sample

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 15

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				
														cobbles are more rounded. Insufficient proper size stone were included for the wear test.
	2	1967	2-12	0-2	Yes	70.8	56.7	44.7	17.0	6.5	1	19.8%	Gran. Borrow (Grav.)	Test #2 was a floor sample which started at the base of Test #1. Material has cobbles with sand to 9', underlain by 3' of sand. Bottoms in sand at 12'.
	3	1967	1-10	0-1	Yes	NOT SAMPLED								Test #3 was floor sample 20' N25°E of Test #2. Many boulders are present and hole bottoms at 10' in boulders and clay.
19	1	1967	1-4	0-1	Yes	100	100	100	47.0	15.0*	1	---	---	Owner: Arthur Johnson. Area is small pit east of a small wooded knoll. Abandoned cars and trash are near the edge of the pit, which has a diameter of 30'. This pit is in pine woods east of the Catholic Cemetery, 200' south of Town Highway No. 10 and 700' from State Aid Highway No. 4. There is a limited east-west extension. Test #1 has 3' of sand below 1-foot of overburden.
	2	1967	2-15	0-2	Yes	100	100	97.1	4.9	1.0*	1	---	Sand	Test #2 was in pit floor 5' N10°E of Test #1. Sands occur to 10', followed by beds of sand, and then silt with cobbles from 12' to 15'. Most of sample is fine sand.

*Percentage of Total Sample

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 16

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				
20	1	1967	1-12	0-1	No	100	100	97.7	11.7	3.0 2.9*	1	---	Sand	Owner: Arthur Johnson. West of Johnson's house are three knolls at the edge of the pine woods. These knolls trend east-west and slope down to the east. This area is just south of Map Identification No. 19. Test #1 was 0.1 mile west of State Aid Highway No. 4, and on the top of the northernmost knoll, 60' east of pines. There was sod and loam to 1'; light brown sand from 1'-5'; silt from 5'-7.5'; dark gray sand from 7.5'-11'; white sand from 11'-12'; stony, bouldery sand below 12'.
	2	1967	1-12	0-1	No	100	100	83.8	5.9	3.0 2.5*	1	---	Sand	Test #2 was dug 230' S20°W of Test #1 and at the low point between two knolls. Log of hole: sod and loam to 1'; sandy loam from 1'-2'; 2'-3.5' silt; 3.5'-12' pebbly sand; bottoms at 12' in pebbly sand with some cobbles.
	3	1967	2-11	0-2	No	71.2	50.1	43.6	14.0	5.0	1	7.2%	Gran. Borrow (Grav.)	Test #3 was taken from the top of the southernmost knoll 290' S30°W of Test #2. Log of hole: 0-2' overburden; 2'-3' sand; 3'-6' sandy, cobbly gravel. Test barely fails to have enough stone to pass for Sub-base of Gravel, Item 201.

*Percentage of Total Sample

TABLE I

ARLINGTON 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				
	4	1967	1-9	0-1	No	100	100	100	12.0	4.0	1	---	Sand	Test #4 was at edge of field 307' N86°E of Test #3. Log of hole: 1'-3' pebbly sand; 3'-9' interbedded silt and sand. Probably extension of the area is to the west and southwest.
21	1	1967	1-6	0-1	Yes	100	100	100	5.0	1.5	1	---	Sand	Owner: Milton Thomas (old Rice pit). The area is a heavily overgrown pit south and west of Map Identification No. 20 and 0.11 mile west of State Aid Highway No. 4. Area extends to the northwest, the north, and east to Map Identification No. 22. Test #1 is in floor 35' south of north face. Test hole is in pebbly sand from 1'-6', then bottomed at 6' on stones and ledge. Pit has a northeast-southwest trend.
	2	1967	1-9	0-1	Yes	100	100	95.8	11.5	3.0 2.9*	1	---	Sand	Test #2 was at the base of north face 35' north of Test #1, and 200' N60°E from end of pit road near old posts in ground. There was slate-pebble sand from 1'-5'; white sand from 5'-9'; bottoms at 9' on ledge. There is very limited thickness of deposit due to ledge.

*Percentage of Total Sample

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 18

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				
22	1	1967	1-6	0-1	Yes	100	100	99.2	3.0	1.0*	1	---	Sand	Owner: Milton Thomas (old Rice pit), Site of pit is 0.10 mile west of State Aid Highway No. 4, and 0.10 mile east of Map Identification No. 21. Pit is overgrown and sloughed and is at the south end of a wooded knoll which extends N20°E. There are several large logs and stumps in the pit. Test #1 was in north face west of a large log. Face consists of 1'-6' sand. The 6-foot level is floor of pit. Floor is 60' by 45'.
	2	1967	1-10	0-1	Yes	100	100	100	4.0	0.5*	1	---	Sand	Test #2 was below Test #1. Material is sand from floor level down to 9'. Feature is an ice-contact knoll.
23	1	1967	2-15	0-2	Yes	100	100	98.0	7.8	2.5*	1	---	Sand	Owner: Harlan B. Miller. Area is a two level pit which is at the southeast end of a knoll which extends northwest by north. It is 0.16 mile west of State Aid Highway No. 4, and 0.32 mile south of State Aid Highway No. 5. Test #1 was of the upper level of the southwest face of pit. Material is sand from 2'-15'. Bottom is in cobbly, sandy gravel at 15'.
	2	1967	2-15	0-2	Yes	71.7	57.1	38.8	11.0	2.8	1	24.8%	Gravel	Test #2 was 15' east of Test #1. The bottom of Test #1 was

*Percentage of Total Sample

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 19

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Over-burden (Ft)	Exist-ing Pit	Sieve Analysis % Passing 1½"	5/8"	#4	#100	#270	Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
														the same level as the top of Test #2. Most cobbles were 1"-3" size, but some +6" stones were noted. There was interbedded sandy, cobbly gravel from 2'-15'.
	3	1967	1-10	0-1	Yes	68.1	41.0	27.3	19.0	15.0	1½	7.6%	---	Test #3 was in floor 15' N80°E from Test #2. From 1'-10' was sandy cobbly gravel. About 30% of the stones were 6"-10", and many were 3"-6". Screening would help to supply adequate material for Granular Borrow, Item 105.
	4	1967	0-14	---	Yes	95.5	90.5	79.9	29.6	9.0 7.2*	---	---	Gran. Borrow (Sand)	Test #4 was in floor 60' N50°E from Test #3. From 0-14' is fine sand with some pebbles. Material is finer than that of Test #3.
	5	1967	0-12	---	Yes	100	100	95.2	29.5	3.5 3.3*	1	---	Gran. Borrow (Sand)	Test #5 was in floor of upper level, and 20' N45°W of Test #1. There was interbedded sand and gravel from 0-12'. This is the same bed of gravel which was sampled lower and to the east in the same pit. Owner would not allow testing in the pasture.
24	1	1967	1-10	0-1	Yes	N O T S A M P L E D								Owner: Walter Lundeen. Site is a heavily overgrown pit on the south side of Town Highway No. 12 at the north end of a steep, wooded knoll, which trends nearly north-south. Face is about 50' high. Test #1 was in floor 20'

*Percentage of Total Sample

TABLE I

ARLINGTON 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 % Passing 1½"	5/8"	#4	#100	#270	Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
														south of Town Highway No. 12, 0.21 mile west of U. S. Route 7. The hole from 0-10' was till; the boulders and organic matter was not sampled. Face was not sampled because of excess sloughing.
25	1	1967	2-15	0-2	Yes	77.6	52.6	33.5	27.0	15.0	1	16.6%	---	Owner: Donald J. Norris. Feature is a small wooded knoll with a pit on the west side. Knoll is about 250' x 200' x 15' high, and 0.95 mile south of U. S. Route 7 on the east side of State Aid Highway No. 2. The knoll is almost flat on top and is bounded on the east by a marshy area. Many large cobbles are piled on the floor of pit. Test #1 was on the east face. From 2'-15' on the face there are sandy, cobbly, boulders with silt. There were many +3" stones, but they were not included in the sample.
	2	1967	2-12	0-2	Yes	68.3	44.9	20.9	11.0	5.0	1	6.6%	Gravel	Test #2 was from face 8' north of Test #1. From 2'-12' on the face there is good clean gravel estimated to have 1"-3" stones (50%) and 3"-6" stones (30%).
	3	1967	1-7	0-1	Yes	88.2	42.2	16.8	9.0	4.0	1	8.6%	Gravel	Test #3 was in floor, 50' west of Test #2. From 1'-7' is good, clean gravel. This looks like a good clean

*Percentage of Total Sample

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 21

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Over-burden (Ft)	Exist-ing Pit	Sieve Analysis % Passing 1½"	5/8"	#4	#100	#270	Color AASHO T-21	Abrasion AASHO T-4.35	Passes VHD Spec.	Remarks
														source, with an estimated volume of about 20,000 cu. yds. of gravel in the feature.
26	1	1967	4-13	0-4	No	100	100	100	49.0	13.0*	1	---	---	Owner: Thurston Hulet. Area is a field with several small cleared knolls just west of a planted pine woods, and southeast of Town Highway No. 50. Test #1 was 370' S55°E of the northeast corner of Thurston Hulet's house. From 4'-13' there was fine sand in the hole.
	2	1967	2-12.5	0-2	No	100	100	100	74.0	30.0*	1	---	---	Test #2 was from top of knoll 260' S64°W of Test #1. Material is silty sand from 2'-12.5'.
	3	1967	2-12	0-2	No	100	100	100	35.0	14.0*	1	---	---	Test #3 was at top of small knoll, 160' S35°W of Test #2. There was sand in the hole from 2'-4' and silty sand from 4'-12'.
	4	1967	3-12	0-3	No	100	100	100	58.0	45.0	1	---	---	Test #4 was from the top of a small knoll 308' S10°W of Test #3. There was sandy silt from 3'-12' in the hole.
	5	1967	2-13	0-2	No	100	100	100	50.0	18.0*	1	---	---	Test #5 was from north edge of the field, 175' N47°W of Test #1. Material is silty sand from 2'-13' in depth.
27	1	1967	2-13	0-2	No	100	100	99.6	81.7	30.0 29.9*	1	---	---	Owner: Bliss Hulet. Tests were taken in a field with gentle swales southwest of Town Highway No. 50 and east

*Percentage of Total Sample

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 22

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Over-burden (Ft)	Existing Pit	Sieve Analysis % Passing 1½"	5/8"	#4	#100	#270	Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
														of U. S. Route 7. Test #1 was taken 120' S20°W of the second power pole west of Thurston Hulet's house. From 2'-13' in the hole was silty sand which bottoms in silt.
	2	1967	5-14	0-5	No	100	100	100	90.0	40.0*	1	---	---	Test #2 was on top of a swale 195' N40°W of Test #1. In the hole there was sandy silt from 5'-14' and it bottomed in clay.
28	1	1967	5-12	0-5	N O T S A M P L E D									Owner: Bliss Hulet. Location is a knolly pasture bordering the west side of U. S. Route 7 and the Shaftsbury Town Line. Four holes were dug, no samples were taken. Material is very similar to that at Map Identification No. 27. Test #1 was 175' N25°W of gate at town line. There was silt in hole from 5'-12'. It bottomed in clay.
	2	1967	5-14	0-5	No	N O T S A M P L E D								Test #2 was taken on top of knoll 150' northwest of Test #1. There was loam in the hole from 0-5'; and silt from 5'-14". The hole bottomed in clay.
	3	1967	3-13	0-3	No	N O T S A M P L E D								Test #3 was taken at the top of the knoll 160' north of Test #2. The hole exposed 3'-13" silt and bottomed in clay.

*Percentage of Total Sample

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 23

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Over-burden (Ft)	Existing Pit	Sieve Analysis % Passing 1½"	5/8"	#4	#100	#270	Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
	4	1967	2-14	0-2	No	N O T S A M P L E D								Test #4 was at top of knoll 200' N70°W of Test #3. There was silt from 2'-14' and clay below 14' in hole.
29	1	1967	1-14	0-1	Yes	100	100	83.8	14.2	3.0 2.5*	1	---	Sand	Owner: Bliss Hulet. Feature is pine and birch wood knoll that extends west from sand pit which is 0.13 mile west of U. S. Route 7, just south of Bliss Hulet's house. Test #1 was in south face 25' southeast of old Dodge automobile. Log of hole: 1'-8' sand; 8'-9.5' gravel; 9.5'-12' sand; 12'-14' silty sand.
30	1	1967	3-13	0-3	Yes	85.8	74.3	55.6	5.0	1.0	1	18.4%	Gravel	Owner: Thurston Hulet. Site is a birch and pine wooded knoll trending west from a small "slate gravel" pit which is 0.21 mile west of Hulet's rental house on U. S. Route 7. Test #1 was from west face of the pit. There was pebbly sand and cobbles from 3'-13'. Hole bottomed in cobbles and sand at 13'. Material is phyllitic.
	2	1967	2-12	0-2	No	78.4	57.3	34.2	10.0	5.0	1	24.9%	Gravel	Test #2 was from field at top of knoll 100' N85°W of Test #1. Hole contains tabular gravel and cobbles from 2'-12'; bottoms at 12' in cobbly, tabular gravel. Nearly 10% of

*Percentage of Total Sample

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 24

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				
														the stones were +3".
	3	1967	2-12	0-2	No	100	100	65.3	26.1	18.0 11.8*	1	---	---	Test #3 was in field at the top of a small rise 200' N75°W of Test #2 and 15' south of fence. Hole had silty sand with cobbles from 2'-12'; hole bottomed at 12' with cobbly silty sand.
	4	1967	2.5-11.5	0-2.5	No	97.4	77.9	49.1	14.0	7.0	1½	22.8%	Gran. Borrow (Grav.)	Test #4 was taken at the west end of the field 175' south of fence, 35' east of birches, and 215' S75°W of Test #3. From 2.5' to 11.5' hole had sandy gravel. Hole bottomed in bolders and silt at 11.5'.
31	1	1967	3-14	0-3	No	100	95.6	84.3	28.7	13.0 10.5*	1	---	---	Owner: Bliss Hulet. Site is a field which is 0.42 mile west of U. S. Route 7 on a woods road between the first and second knolls north of the Shaftsbury Town Line. This field that is east of a pine woods and slopes gently to the east, has a cellar hole filled with trash. Test #1 was located 20' east of a wooden gate at west side of the field. Hole had sand, silt, and some cobbles from 3'-14' and bottoms in fine sand and silt at 14'.
	2	1967	3-12	0-3	No	100	100	54.9	12.6	12.0 6.6*	1	---	---	Test #2 was 190' N35°E of Test #1. The hole had pebbly, silt/sand from 3'-12' and bottomed in boulders and silt at 12'.

*Percentage of Total Sample

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 25

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				
32	1	1967	2-10	0-2	Yes	95.9	81.9	53.4	5.0	2.0	1	23.2%	Gravel	Owner: Joseph W. Guber. Area is a small pit located on the south end of a northward extending grassy knoll that is 300' long, 40' wide, and 15' high. Pit is west of Town Highway No. 29 at a point 0.27 mile north of Town Highway No. 31. Area was not sampled with a backhoe due to extreme distance from the proposed Arterial Project (over 20 miles). Test #1 was in the east face 95' west of Town Highway No. 29. There were pebbles with some sand from 2'-10'. Sample bottomed in sloughed material at 10'. Material is tabular and rather soft.
	2	1967	1-6	0-1	Yes	86.1	65.9	39.8	7.0	4.0	1	24.4%	Gravel	Test #2 was in west face. There was pebbly cobbly gravel from 1'-6'. Test bottomed at 6' in sloughed material.
33	1	1967	2-10	0-2	No	90.2	67.7	43.9	2.0	1.0	1	25.0%	Gravel	Owner: James W. McCabe. Site is a field which has a short, wide terrace 0.1 mile north of Vermont Route 313, 1.98 miles west of State Aid Highway No. 3. The feature crosses eastward into Kelley's property. Test #1 was on edge of terrace 100' east from trees. Log of hole: 2'-5' cobbles' 5'-8' gravel; 8'-10' bottoms in pebbly sand.

*Percentage of Total Sample

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 26

Map Ident. No.	Field Test No.	Year Field Tested	Depth of Sample (Ft)	Over-burden (Ft)	Existing Pit	Sieve Analysis % Passing 1½"	5/8"	#4	#20	#270	Color AASHO T-21	Abrasion AASHO T-4-35	Passes VHD Spec.	Remarks
	2	1967	2-10.5	0-2	No	100	100	68.3	23.2	22.0	1	---	---	Test #2 was 150' upslope N5°W of Test #1. From 2'-10.5' there was pebbly sand and silt in the hole that bottomed in clay.
	3	1967	4-9	0-4	No	100	100	44.7	3.1	3.0 1.3*	1	---	Gran. Borrow (Sand)	Test #3 was 20' N75°E of power line pole near fence. Material is pebbly sand from 4'-9'. Bottomed at 9' in sand and water.
24	1	1967	1.5-5	0-1.5	Yes	96.6	87.5	53.8	11.0	3.0	1	27.2%	Gran. Borrow (Grav.)	Owner: Kenneth J. Wilcox. Area is a small pit on the west side of a hilly pasture 0.6 mile N25°E from the Wilcox house on Vermont Route 313 and 1.6 miles east of the New York State Line. Test #1 was in east face just west of an old pasture road. Material was pebbly sand from 1.5'-5'.
	2	1967	1.5-5.5	0-1.5	Yes	92.7	77.4	56.3	6.0	2.0	1	22.0%	Gravel	Test #2 was on west face 10' below Test #1. Hole was pebbly sand from 1.5'-5.5' and bottomed in clay. Material from area is phyllitic, tabular, and soft.
	3	1967	1.5-10	0-1.5	Yes	87.7	76.9	51.8	8.0	2.0	1	28.4%	Gran. Borrow (Grav.)	Test #3 was in the floor below Test #1. Hole was in pebbly sand from 1.5'-10' and bottomed in the same material.
	4	1967	---	0-2	Yes	N O T S A M P L E D								Test #4 was below Test #2 in the floor. There is clay at 2'. Area does not look very promising.

*Percentage of Total Sample

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 27

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				
35	1	1967	1-10	0-1	Yes	88.3	73.9	47.4	6.0	4.0	1	23.0%	Gravel	Owner: Clifford McKee. Area is a pit with a northwest and a possible east extension. The pit seems to be nearly depleted, but some material may be available nearby. The pit is 400' north of Vermont Route 313 and 0.2 mile west of State Aid Highway No. 3. Test #1 was on north face of upper level that has sandy, cobbly gravel from 1'-10'. Sample bottomed in sloughed material. Material in area is phyllitic, soft, and tabular.
	2	1967	1-5	0-1	Yes	100	100	73.1	7.3	5.0 3.7*	1	---	Sand	Test #2 was from the west face of the upper level; and has finer material than Test #1. It comprised pebbly sand from 1'-5' and bottomed in sloughed cobbles and sand.
	3	1967	0-4	---	Yes	N	O	T	S	A	M	P	L E D	Test #3 in upper floor, 45' east of Test #1, had clay at 4'.
	4	1967	1-8	0-1	No	100	100	52.5	12.0	8.0	1	---	Gran. Borrow (Sand)	Test #4 was 40' west of Test #2. There were cobbly sand and pebbles from 1'-8'. The hole bottomed in clay at 8'.
	5	1967	4-11	0-4	No	N	O	T	S	A	M	P	L E D	Test #5 was 100' north of Test #4. There was clay from 4'-11'. Hole bottomed in clay.
	6	1967	1-12	0-1	Yes	93.8	78.2	47.9	8.0	3.0	1	21.9%	Gravel	Test #6 was 95' N45°E of Test #1. Log of hole: 1'-4' cobbles and pebbles; 4'-6' clay; 6'-12' cobbly, gravelly sand.

*Percentage of Total Sample

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 28

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				
36	1	1967	0-3	---	Yes	89.8	76.2	46.8	2.0	1.0	1	26.3%	Gran. Borrow (Grav.)	Owmer: Paul Bedell. Site is a flat stream bank on the west isde of the Green River 350' S25°W of Bedell's silo which is located 0.05 mile east of State Aid Highway on Vermont Route 313. The only extension may be a field to the north. Test #1 was in floor of a small scooped-out area that comtained cobbly, sandy gravel bottoming at 3' in water.
37	1	1967	0-18	---	Yes	91.8	74.7	46.2	13.0	7.5	1	22.2%	Gran. Borrow (Grav.)	Owmer: Harry J. Pickering (formerly Yalo). Location is a large three level pit that is on the north side of Vermont Route 313, 2.45 miles west from U. S. Route 7. A small extension to the east is limited by house lots. The material is soft, tabular, and phyllitic; and there is a thin cover overlying ledge in the floor. Test #1 was in the east face off the lowest level that contains sand, pebbles, and cobbles from 0-18', before bottoming in sloughed material. Test #2 was in the east face off the second level. It has pebbly gravel with cobbles from 0-50' and bottoms in sloughed sand and cobbles.
	2	1967	0-50	---	Yes	82.9	62.6	23.6	4.0	1.5	1½	25.0%	Gravel	

*Percentage of Total Sample

TABLE I

ARLINGTON GRANULAR DATA SHEET NO. 29

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-4-353	Passes VHD Spec.	Remarks
						1½"	5/8"	#4	#100	#270				
	3	1967	0-15	---	Yes	100	100	80.6	4.8	4.0 3.2*	1	---	Gran. Borrow (Sand)	Test #3 was in the face of small pit at upper level. From 0-15' material is sand that bottoms in sloughed material.
	4	1967	0-5	---	Yes	100	82.3	55.3	15.0	7.0	1	28.4%	Gran. Borrow (Grav.)	Test #4 was in floor of north end of lowest level. Material is cobbly gravel and boulders bottoming on ledge at 5'.
	5	1967	0-3	---	Yes	N O T S A M P L E D								Test #5 was in floor of second level below Test #2. Ledge was encountered at 3'. The small amount of soft tabular material in this area could be used for town projects.
38	1	1967	1.5-9	0-1.5	No	90.5	78.4	50.9	13.0	7.0	1	29.4%	Gran. Borrow (Grav.)	Owner: E. C. Mattern(formerly Reed). Area is a low, east-west trending knoll 150' long and 8' high. Test #1 was 100' N25°W of house. Log of hole: 0-1.5' overburden; 1.5'-4' cobbly gravel; 4'-6' silt to clay; 6'-9' cobbly gravel; boulders at 9'. There were many 6"-12" cobbles noted, but none taken.

*Percentage of Total Sample

TABLE I
Supplement

ARLINGTON PROPERTY OWNERS - GRANULAR	Map Ident. No.
Bedell, Paul	36
Budro, Leo	2
Carbonti, Angelo	13
Guber, Joseph W.	32
Hagelberg, Richard	16, 17
Harrison, John S.	5, 6, 7, 8, 9
Howell, William	10
Hulet, Bliss	27, 28, 29, 31
Hulet, Thurston	26, 30
Johnson, Arthur	19, 20
Lundeen, Walter	24
Mattern, E. C.	38
McCabe, James W.	33
McKee, Clifford	35
Miller, Harlan B.	23
Morris, Donald J.	25
Pickering, Harry J.	37
Sohn, William P.	11
Thomas, Milton	21, 22
Webb, Lance (Rev.)	4
Wilcox, Kenneth J.	34
Wilkison, Leonard	3
Wood, Arthur W., Jr.	18
Woodard, Gordon	1
Young, Robert B.	12, 14, 15

TABLE II

ARLINGTON 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	1A	1967	Dolomite	No	Chip	2.3%	Owner: Robert V. Jones. This area is a 75' vertical ledge continuous with an additional 75' of exposures on a gentle slope above it, mapped as the Bascom Formation that lies on the southwest flank of Red Mountain on the slope below and southwest of the Brezee Formation near a woods road. The ledge is 0.6 mile north of Vermont Route 313 and 3.4 miles west of U. S. 7. Steep terrain and much tree cover make sampling difficult. There is a steep talus slope on the southwest edge of the outcrop. Where strata was distinct it was nearly horizontal, otherwise it was too contorted to determine a trend. About 30% of the outcrop was too thinly bedded to get material for testing. Test #1A comprised the gentle slope above the ledge where there are interbedded dolomites, marbles, sandy dolomites and some greenish phyllites from 0-75'.
	1B	1967	Dolomite	No	Chip	4.2%	Test #1B, the nearly vertical ledge below Test #1A, is mainly a dolomitic marble from 75'-150'. Several dolomite layers within this interval are too thin to obtain large enough pieces for the abrasion test. This area is probably the second best in Arlington as a source of Sub-base of Crushed Rock, Item 204.
2	1	1967	Dolomite	No	Chip	2.4%	Owner: Eleanor B. Smith. This area is a nearly vertical 150' outcrop of mainly dolomite, known as Cedar Rock, that is located 0.9 mile up a logging road from Town Highway No. 8. The beds, mapped as the Bascom Formation, strike about N20°E and dip from nearly horizontal to about 15°S. Material is phyllitic near the top and grades into massive, dolomitic, buff marble with green to gray phyllitic partings. There are some dark gray beds of fine-grained texture laced with white calcite veins. Even though it gives a good abrasion test result, the rock has about 35% thin-bedded material which did not yield enough pieces to provide a representative sample. In some sections the weathered rock

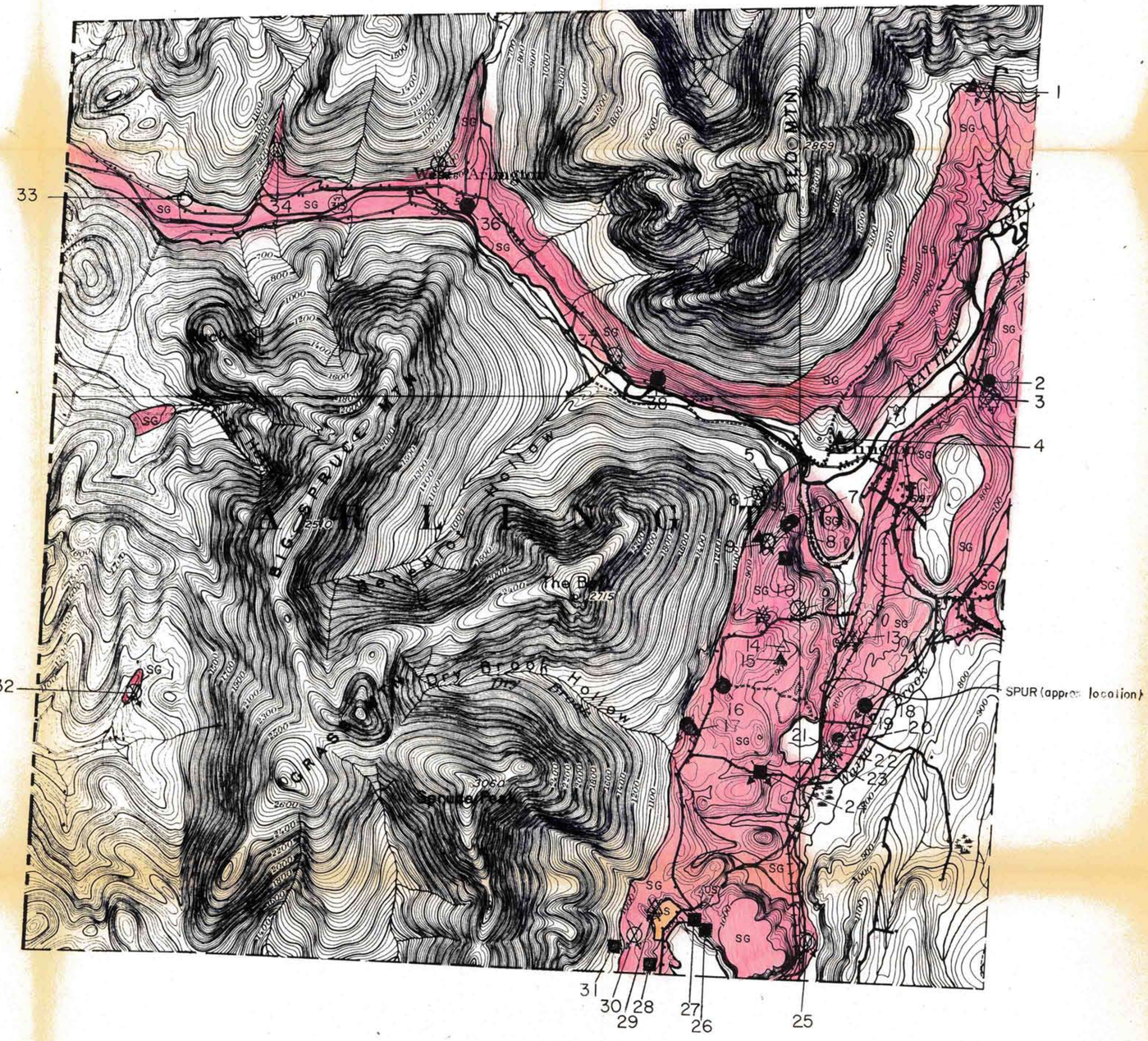
TABLE II

ARLINGTON ROCK DATA SHEET NO. 2

Map Ident. No.	Field Test No.	Year Field Tested	Rock Type	Existing Quarry	Method of Sampling	Abrasion AASHO T-3	Remarks
							was very sandy and sugary. This source probably should be rated third best of these tested in Arlington.
3	1	1967	Dolomitic Marble	No	Chip	6.0%	Owner: William Howell. This area is a ledge escarpment east of the West Mountain Farm property, located N75°W of the north end of Howell's man-made pond and at the west end of his private campground road which extends from Town Highway No. 37 and is known as the School Street Extension. The ledge-forming rock is the Bascom Formation that extends south for at least 800' along a north-south strike. Underneath the Bascom is the Shelburne Formation contact which is covered by a steep, heavily-wooded talus slope. Marble of the Shelburne extends north and south for about 400' but shows as only a narrow outcrop and in scattered old diggins near the pond. One sample was taken that covered an estimated 175' across the strike and included rock exposed below, on, and west of the escarpment. Inclusion of relatively soft marble from the Shelburne in the sample gave a high percentage reading in the abrasion test. The actual escarpment varies from 60' to 100' high. Because of its extent and accessibility for a crushing operation, this area would be the easiest of those tested in Arlington to develop.

TABLE II
Supplement

ARLINGTON PROPERTY OWNERS - ROCK	Map Ident. No.
Howell, William	3
Jones, Robert V.	1
Smith, Eleanor B.	2



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)

ARLINGTON

SCALE 1:31,250

1 0.5 0 1 MILE

CONTOUR INTERVAL 20 FEET

1968

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

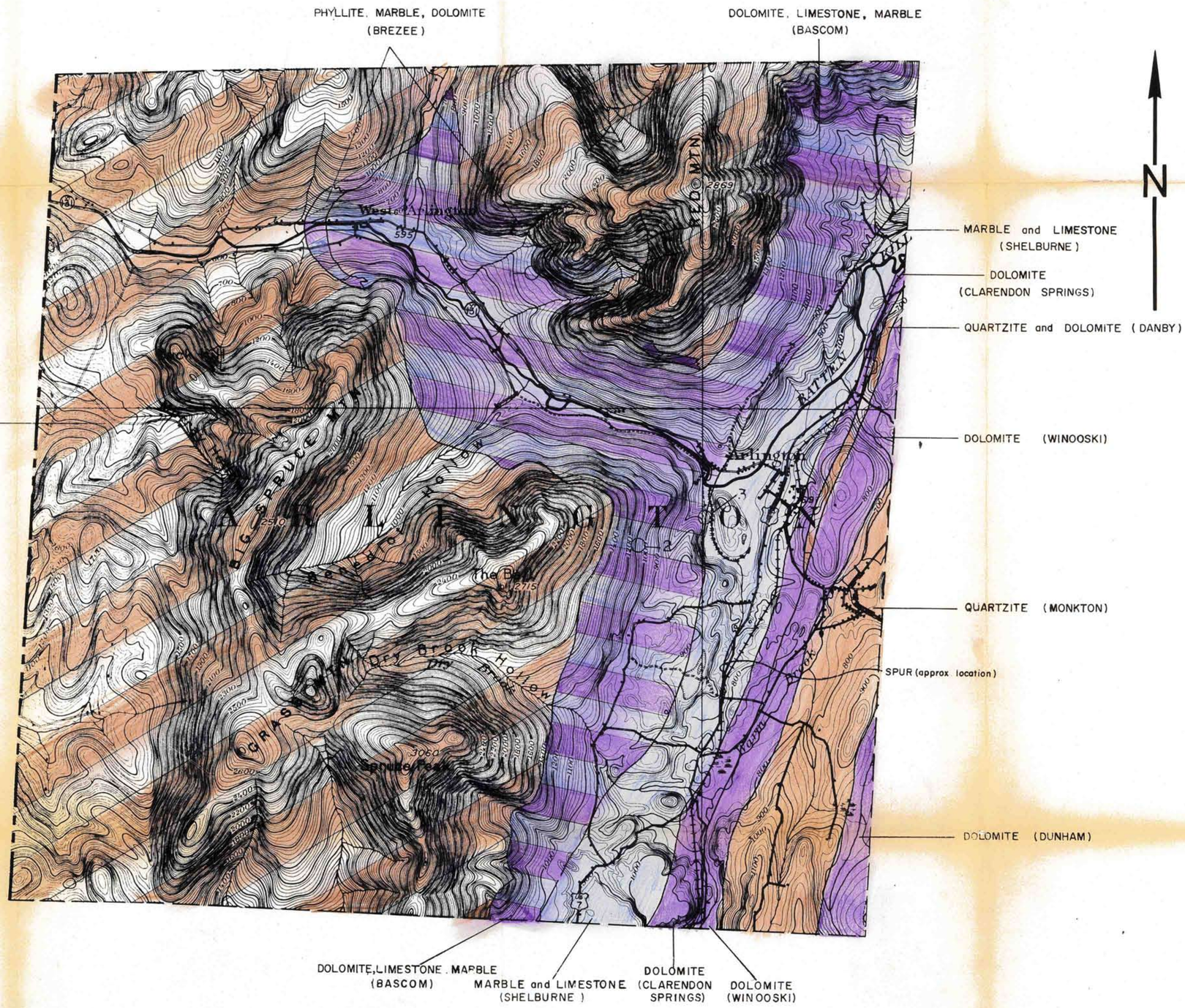
PLATE 1

GRANULAR

BENNINGTON COUNTY VT. HWY. DISTRICT NO. 1

REVISIONS

DATE							
BY							



LEGEND

- ROCK, ACCEPTABLE FOR ITEM 204 (sub-base of crushed rock)
- ROCK, NOT ACCEPTABLE FOR ITEM 204
- EXISTING QUARRY
- GRANITE TO DIORITE (light to intermediate igneous rocks)
- AMPHIBOLITE, GABBRO, DIABASE, METADIABASE, GREENSTONE, TRAP DIKES (basic or dark igneous rocks)
- PERIDOTITE, PYROXENITE, SERPENTINITE (ultra-basic igneous rocks)
- GNEISS
- QUARTZITE
- DOLOMITE
- MARBLE, LIMESTONE
- SCHISTS, SLATES, PHYLLITES, SHALES, CONGLOMERATES
- 3 IDENTIFICATION NUMBER (refer to data sheets)

ARLINGTON

SCALE 1:31,250

1 0.5 0 1 MILE

CONTOUR INTERVAL 20 FEET

1968

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

PLATE II

ROCK

BENNINGTON COUNTY VT. HWY. DISTRICT NO. 1

REVISIONS

DATE							
BY							