SURVEY OF HIGHWAY CONSTRUCTION MATERIALS IN THE TOWN OF COVENTRY, ORLEANS 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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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:

- 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 over
all picture of material resources was available. Highway contractors or

resident engineers are usually required to locate the materials for their

respective projects and have samples tested by the Highway Testing Labo
ratory. The additional cost of exploration for construction materials is

passed onto the State in the form of higher construction costs. The Ma
terials Survey Project was established to minimize or eliminate this fac
tor 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

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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 Coventry is located in Orleans County in the northern part of the State. It is bounded on the northeast by Newport City and the town of Derby, on the southeast by the town of Brownington, on the southeast by the town of Irasburg, and on the northwest and north by the town of Newport. (See County and Town Outline Map of Vermont on the following page).

Coventry is located in the Vermont Piedmont, a characteristically hilly to mountainous terrain composed mainly of northeast-southwest trending argillaceous and calcareous metamorphic rocks that have been locally intruded by granitic dikes and domes.

Elevations vary from 682 feet at the shore of Lake Memphremagog in the north-central part of the town to a height of 1520 feet or more on a hill at the northwest town line. Drainage is into South Bay of Lake Memphremagog via the Black and Barton Rivers and their tributaries.

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

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

Discussion of Rock and Rock Sources

It 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 included in this report). In the Summary it is apparent that complex metamorphic rocks make up a major portion of the formations within the town of Coventry. A minor portion consists of igneous rocks along its northwest boundary.

Occasionally, rocks belonging to the same formation and exhibiting similar outward 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.

In general, bedrock in the town of Coventry suitable for Item 204, Sub-base of Crushed Rock, rarely occurs as a continuous surface exposure 150 feet or more in length. Most bedrock is covered with a mantle of granular material and vegetion that limits sampling to sporadic outcrops within the linearly measured interval.

The <u>Centennial Geologic Map of Vermont</u>, 1961, shows a small area of granite on a hilltop southeast of the Newport Municipal Airport and northwest of the intersection of State Aid #1 and State Aid #2. However, the Materials Survey was unable to verify this occurrence as bedrock. There are rounded granitic boulders at the location, but profuse sod beneath and vegetation around the boulders tend to make the <u>Map's</u> designation as outcropping inconclusive.

Undifferentiated granitic rock of the New Hampshire plutonic series was sampled at three widely separated localities (Map Identification Numbers 1, 3, and 5). Materials tend to be fine - to medium-grained in texture. Wear-test values vary from 4.4% to 9.4% with an average value of 7.1%. An old quarry of small extent is located near one of the localities (Map Identification Number 1).

A greenstone occurrence of the Missisquoi formation (Coburn Hill volcanic member) gave a wear-test value of 6.5%. The feature sampled is a longitudinal ridge about 800 feet long (Map Identification Number 2). Material is somewhat fissile and is thinly covered with glacial till.

One test was made in a ledge of the Waits River formation (Barton River member) at a point 350 feet west of proposed I-91 right-of-way near Town Highway #21. Sample consisted of black, argillaceous phyllite overlying gray, calcareous limestone. It gave a wear-test value of 8.0%. In spite of prominent relief there are few good exposures of material at this locality because of suffuse vegetative cover in the area.

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 areas 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

Granular materials of economic value within Coventry Township are chiefly found adjacent to Stony Brook for most of its length, on both sides of the Black River south and northeast of Coventry Village, and at scattered locations east of the Barton River.

Coarser materials occur in the western part of the township, principally cobbles, coarse, sandy, and dirty gravels, and sands with gradations from coarse to silty. Most of these materials have been mapped by Dr. D. P. Stewart as kamic in origin, largely on the basis of their occurrence as ice contact deposits superimposed longitudinally on the regional preglacial topography. It would appear that extensive kame moraine deposition in recent glacial history blocked the upper Stony Brook valley sufficiently to cause emponding of a lake north and east along Town Highway #6. It is also possible that a similar type of deposition dammed the Black River valley northward from about the present position of Town Highway #39 to State Aid #2 (Airport Road). A particularly good source of coarse gravel in the past has been the H. G. Calkins property. South of Stony Brook in the vicinity of Map Identification Numbers 4, 8, and 11 much material has been removed. Except for a few remnants it would appear that large amounts for future exploitation would be southward in Map Identification Numbers 13, 14, and 15.

Dr. Stewart additionally showed coarse material in the east corner of the township as deltaic in origin. Gravel pits in Brownington and Barton show definite deltaic structural features, but this evidence was not conclusively determined in Coventry. A preponderance of the materials examined and tested are sands that are either pebbly or silty in texture.

Dr. Stewart mapped lake-sand deposition within or marginal to the emponded lakes mentioned above. Although tests tend to confirm the areal extent of these lake sands, a large proportion of the tests did not meet Vermont Highway Department specifications for Sub-base of Sand, Item 202.

SUMMARY OF ROCK FORMATIONS IN THE TOWN OF COVENTRY

Waits River formation (Barton River member) - Interbedded siliceous crystalline limestone and sericite-quartz-chlorite phyllite in northern Vermont; diopsidic limestone and cordierite hornfels at contacts with granitic dikes and sills.

Waits River formation (Ayers Cliff member) - Siliceous crystalline limestone containing thin beds of slate and phyllite north of the Lamoille River.

Northfield formation - Dark gray to black quartz-sericite slate or phyllite with fairly widely-spaced interbeds a few inches thick of siltstone and silty crystalline limestone like that of the Waits River formation; calcareous slate north of the Lamoille River.

Shaw Mountain formation - Chiefly tan to brown weathered quartzose limestone and calcareous quartzite characterized by specks of limonite after ankerite: locally underlain by blue fossiliferous crystalline limestone; greenstone and quartz-sericite schist.

Missisquoi formation (Cram Hill member) - Pale greenish-gray to black phyllite: grades locally into gray to black slate; felsic to mafic volcanic rocks.

Missisquoi formation (Coburn Hill volcanic member) - Actinolite-epidote-chlorite-albite greenstone and hornblende-albite-epidote amphibolite; includes pillow lava.

Granite - Medium-to coarse-grained granitoid rocks, including granodiorite and quartz monzonite.

New Hampshire plutonic series - Undifferentiated granitic rocks.

GLOSSARY OF SELECTED GEOLOGIC TERMS

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

Argillaceous - Containing or consisting of clay.

Calcareous - Pertaining to or containing calcium carbonate.

<u>Deltaic</u> - Relating to predominantly alluvial deposition built out by a stream into the sea or other body of water. It usually is formed like the Greek letter delta.

Dike - A sheet-like body of igneous rock that fills a fissure in older rocks which it entered while in a molten condition. Varies from less than an inch in width and a few yards in length to thousands of feet in width and many miles in length. May radiate in groups from a center or occur singly and isolated from other igneous bodies.

Fissile - The tendency possessed by some rocks to split into thin sheets along either bedding planes or cleavage planes induced by fracture or flowage.

Granitic - Characteristic of, composed of, pertaining to, or like granite.

Greenstone - A field name for rocks that have been so metamorphosed or otherwise so altered that they have assumed a distinctive color owing to the presence of chlorite, epidote, or actinolite.

Ice Contact Deposits - Sediments having various topographic expressions that have accumulated in contact with wasting glacial ice. Included are eskers, kame terraces, kames, and features marked by numerous kettle holes.

Igneous Rocks - Rocks formed by solidification of hot mobile rock material.

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

Kamic - Relating to stratified drift deposited by glacial streams flowing in or on the ice at the sides or terminus of a glacier.

Lacustrine - Pertaining to lakes.

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

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

<u>Phyllite</u> - 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 silvery appearance.

<u>Sediments</u> - All kinds of deposits from the waters of streams, lakes, or seas, and in a more general sense to deposits of wind and ice.

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

<u>Varves</u> - The regular layers or alternations of materials, in sedimentary deposits, that are due to annual seasonal influences, and occur abundantly in glacial-lake sediments.

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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

complete list of specifications see "Standard Specifications for Highway

and Bridge Construction" approved and adopted by the Vermont Department

of Highways 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 (9) inch 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 (40) percent 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 AASHO 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 ($3\frac{1}{2}$) 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
11/211	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 $(3\frac{1}{2})$ 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, crusherrun material, 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.

1 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
Цu	95-100
1 ¹ 2"	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:

- Name the security of the object to proceed the self-through a people may be sent the title through		Square Openings	Percent Passing
Sub-base of	Coarse-Graded	Ц"	100
	Item 205-A	No. Ц	25 - 50
Crushed Gravel	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 AASHO T-4, or more than thirty-five (35), 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	O - 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."

Map		Year	Depth of	f Over-	Exist-	Ī	Siev	e Ana	lysis		Color	Abrasion	Passes	
Ident.	Test	Field	Sample	burden	ing	1		Passi			AASHO	AASHO	VHD	
No.	No.	Tested			Pit		5/8"		#100	#270	T-21	T-4-35	Spec.	Remarks
1	1		1.5-7	0-1.5	No		100	100		53.3	2½			Owner: Winston Lawson. Area is west of Town Highway #6 and north of house. Test #1 was next to Town Highway #6 at point about 450' northeast of house. Area is in broad northsouth valley on the east side of which is a boulder-strewn pasture slope. Material to 7 feet in depth is silt and silt-clay with dark clay in bands (varves).
2	2		2-13	Stripped	No	100				2.0		E D	Sand	Owner: Keith Parker. Area is in northwest corner of large field northeast of State Aid #2 and southeast of Town Highway #10. Test #1 represents floor of stripped area. Material is 0-3'-clean sand; 3'-10'-clay. It was not sampled. Test #2-material is gravelly sand. It was sampled at point on top of bluff 61' south of woods and 172' from northwest corner of cleared area. It meets requirements for Item 202.
3	1A	1966	1-25	0-1						Samp		11.2%	Grave1	Owner: H.G. Calkins. Area consists of small pit on bend of Town Highway #5 at outlet of Sargent Pond. Test #1A was taken in upper center face, which is composed of a layer of cobbles overlying cross-

COVENTRY GRANULAR DATA SHEET NO. 2

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4.	•	·	_	_	_

Map Ident.	Field Test	Year Field	Depth of Sample	Over- burden	Exist- ing			assi	ng		AASHO	Abrasion AASHO	VHD	
lo.	No.	Tested	-	(Ft)	Pit	1½"	5/8"	#4	#100	∦270	T-21	T-4-35	Spec.	Remarks
	1B	1966	25-50	See Test lA	Yes		97.4			0.9*	1		Sand	bedded clean and stony sands and gravels. Test #1A meets requirements for Item 201. Test #1B was taken in lower left center of face. It meets requirements for Item 202.
4	1A	1966	6-40	0-6	Yes	98.6	98.3	89.6	4.5	1.3	1½		Sand	Owner: H. G. Calkins. Area
	1B	1966	40-79	See Test lA	Yes	N ·	0	T	S A	i 1.2*	P 1	L E D		contains large pit north of Stony Brook and mixing plant. It has extension possibilities northward to Warren Petit's maple grove. Test #1A was sampled from west center of face above a facies change to coars gravel. Sample consists of a pebbly sand which meets requirements for Item 202. Test #1B which consists of a very coarse cobbly gravel was at too steep an angle of repose to sample.
	2	1966	3-10	0-3	No					5.0 3.7*			Sand	Test #2 was on slope above and 175' northeast of pit. Mater: al is pebbly sand that meets requirements for Item 202.
	3	1966	0-8.5	Stripped			74.1	1		ample	2	12.0%	Gran. Borrow (Grav.)	Test #3 was in small excavation slope about 50' north of pit. Material consists of gravel with an occasional cobble and some sand. It fails the specification for Item 201 because too much material passes the #270 sieve. It is acceptable for Item 105.

Map	Field	Year	Depth o	f Over-	Exist-		Siev	e Ana	lysis		Color	Abrasion	Passes	
Ident.	Test	Field	Sample	burden		İ		Passi	•		r .	AASHO	VHD	
No.	No.	Tested		(Ft)	Pit	12"			#100	#270	r-21	T-4-35	Spec.	Remarks
	4	1966	3-10	0-3	No	100	97.6	89.7	13.5	2.0	1	***	Sand	Test #4 was on slope about 200 north of pit. Material is pebbly sand that passes specifications for Item 202.
	5		1.5-10	0-1.5	No	100	100	100	12.0		1½		Sand	Test #5 was located on woods road at edge of Warren Petit's maple grove at a point 0.05 mile northwest of Calkins-Pike access road and 500' northeast of Test #2. Material is sand that meets requirements for Item 201.
5	1A		0-42	Stripped			70.3			2.3	1	13.6%	Gravel	Owner: H.G. Calkins. Area is a double-level pit west of crushing operation between Vt. Rte. 14 and Stony Brook. Test #1A was in center of west face of upper level. Material is an interbedded fine gravel and coarse sand with cobbles. It passes requirements for Item 201.
	1В		42-55.5	See Test 1A		84.3							Gran. Borrow (Grav.)	meet requirements for Item 201 because an excess of fines passes the #270 sieve. It is acceptable for Item 105.
	2	1966	0-10	Stripped				•	25.7 Total	8. 6 Sample	112		Grave1	Test #2 was at west end of stripped ridge 211' from above-mentioned face. Material is a cobbly gravel with too much included fine sand and silt to meet specifications for Item 201. It meets require-

Map Ident.	Field Test	Year Field	Depth of Sample	Over- burden	1		%	Ana:	ing		AASHO	Abrasion AASHO	Passes VHD	
Vo.	No.	Tested		(Ft)	Pit	1월"	5/8"	#4	#100	#270	T-21	T-4-35	Spec.	Remarks
		·	·											ments for Item 105. Insufficient stone for wear test.
6	1	1966	3-10	0-3	No		52.4			3.0	3½	18.8%	Gravel	Owner: Ernest Collins. Area is a sparsely wooded meadow southwest of Vt. Rte. 14. Tes #1 was 50' southwest of rock wall. Material consists of dirty gravel that meets specifications for Item 201.
7	1	1966	0-46	Stripped	Yes	95.1	80.8	63.8	2.6	1.3	15		Gran. Borrow (Sand)	Owner: H. G. Calkins. Area which is north of Stony Brook and west of L. M. Pike fence contains upper and lower pits. Test #1 was in east end of south face of upper pit. Material consists of northeast-dipping coarse and pebbly sand beds. It meets the requirements for Item 105, but not enough passes the #4 screen to qualify for Item 202.
	2		0.5-24.5				and the state of t		2.3		3		Gran. Borrow (Grav.)	Test #2 was in north face of lower pit. Material is a coarse sand with silt and pebbles. This sample apparently meets the gradational requirements for Item 201 in addition to meeting specifications for Item 105. Insufficient stone for wear test.
8	1A	1966	0.5-10	0-0.5	Yes	100	100	93.7	3.7	1.0	3½		Sand	Owner: Robert Petit. Area is sparsely wooded pasture land north of L. M. Pike property that contains a long pit. Test #1A was in northeast face on

Map	Field	Year	Depth of	Over-	Exist-		Sieve	e Ana	lvsis		Color	Abrasion	Passes	
Ident.			Sample	burden	1			Passi	-		Į.	AASHO	VHD	
No.		Tested		(Ft)	Pit	13"				#270		T-4-35	Spec.	Remarks
	1B	1966	10-19	See Test lA	Yes	100	100	79.2	1.6	1.0	1		Sand	edge of bluff. Material is a coarse sand that passes requirements for Item 202. Test #1B was in lower part of face. It passes requirements for Item 202.
	2A	energies er gille er è de	0.5-7.5	0-0.5	Yes	100		79.4		0.8 0.6*	3½		Sand	Test #2A was in southwest face. Material is coarse sand. It passes requirements for Item 202.
	2B		7.5-22.5	Test 2A	Yes	100		88.1		0.8 0.7*	1		Sand	Test #2B was in lower part of face. It passes requirements for Item 202.
9	1			Stripped				49.2		2.3	3	15.8%	Gravel	Owner: H. G. Calkins. Area consists of gravel remnant between two large pits south of Vt. Rte. 14. Test #1 was along north edge of east face of west pit. An 8-foot layer of cobbles just below stripped zone was not sampled. Material sampled consists of medium gravel with an occasional cobble. It meets specifications for Item 201.
	2	1966						29.4				11.2%	Grave1	Test #2 was in floor of southernmost part of west pit at point 80' from east face. Material is a cobbly gravel that meets specifications for Item 201.
10	1	1966	3-12	0-3	No			54.2 ge of		3.0	_	12.4%	Gravel	Owner: L. M. Pike. Area is a ridge north of Stony Brook and east of H. G. Calkins fence. Test #1 was on crest

	Field		Depth of		Exist-		Siev	e Ana	lysis			Abrasion	Passes	
1			Sample	burden				Passi				AASHO	VHD	·
lo.	No.	Tested	(Ft)	(Ft)	Pit	15"	5/8"	#4	#100	#270	T-21	T-4-35	Spec.	Remarks
	2	1966	3-10	0-3	No	71.8	64.6	49.8	9.0	4.0	3	11.4%	Gravel	of hill 50' above and 100' east of Vt. Rte. 14. Material is a composite sand and gravel that meets requirements for Item 201. Test #2 was 187' north of Test #1 and 120' above and 120' eas of Vt.14. Material is similar to but coarser than that of
	3A	1966	3-8.5	0-3	No	100	91.5	90.4	15.4	2.5 2. 3*	1		Sand	Test #1. It passes require- ments for Item 201. Test #3A was in woods at top of ridge 300' northwest of Test #2. Material consists of cobbly sand that meets require
	3B	1966	8.5-10	See Test 3A	No	90.7	76.3	47.2	2.0	1.0	3	10.0%	Gravel	ments for Item 202. Test #3B comprised 1.5 feet of excellent gravel that is acceptable for Item 201.
1	1A	1966		Stripped		100			23.9	6.0*	2		Gran. Borrow (Sand)	Owner: L. M. Pike. Area consists of pits north and west of hot-mix plant with extension possibilities to Robert Petit fence. Tests #IA, #IB, and #IC represent intervals down face of large pit west of hot-mix plant. Material is silty to fine sand. Test #IA had an excess passing the #100 and #200 sieves that fail it for Item 202, but it meets requirements for Item 105.
	1B	1966	17-39	See Test lA	Yes	100	100	78.8	7.1	3.0 2.4*	2		Sand	Test #1B passes specifications for Item 202.

Мар	Field	Year	Depth of	Over-	Exist-		Siev	e Ana	lysis		Color	Abrasion	Passes	
Ident.	1 1	Field	Sample	burden			%	Passi	•			AASHO	VHD	
No.	No.	Tested		(Ft)	Pit	13"	5/8"	#4	#100	#270	T-21	T-4-35	Spec.	Remarks
	1C	1966	39-70	See Test 1B	Yes	100	100	98.3	16.7	2.3*	2		Sand	Test #1C also passes specifi- cations for Item 202.
	1D	1966	2.5-10	0-2.5	Yes	100	100	100	11.0	1.5*	1		Sand	Test #1D was in floor below face. Material consists of medium to fine sand that also
	2	1966		Stripped		100	100		8.3	0.9*			Sand	meets requirements for Item 20 Test #2 was in center of north face of pit north of hot-mix plant. Material consists of a fine to medium pebbly sand cross-bedded against a lens of stony sand. It passes specifications for Item 202.
12	14	1966		Stripped	Yes			85.5		1.1*			Sand	Owner: H. G. Calkins. Area is large pit south of Vt. Rte. 14 (easternmost of Calkins holdings south of highway). Test #1A was sampled near center of south face. Material is cross-bedded sand with a few pebbles that meets requirements for Item 202.
	1B	1966	26-33	See Test 1A	Yes	78.7	63.3	38.0	5.0	3.3		7.4%	Gravel	Test #1B was taken below west edge of Test #1A. Material shows an abrupt change to sandy gravel. It meets the requirements for Item 201.
	2	1966				S A		L E		E P	O R	T L O	5 T	Test #2 was in floor of lift below Test #1. Material con- sists of cobbles with some dir- ty coarse sand becoming finer with depth.
13	1	1966	1-10	0-1				97.7 f Tot	' î		1			Owner: Robert Petit. Area is a field lying between L. M. Pike and Town Highway #6.

COVENTRY GRANULAR DATA SHEET NO. 8

Мар	Field		Depth of		Exist-				lysis			Abrasion		
Ident.		Field	Sample	burden			%]	Passi	ng		1	AASHO	VHD	
No.	No.	Tested	(Ft)	(Ft)	Pit	15"	5/8"	#4	#100	#270	T-21	T-4-35	Spec.	Remarks
	2	1966	1-10	0-1	No	100	100	100	73.0	26.0	1			Test #1 was on knoll 264' east of L. M. Pike fence under a utility line. Material is a silty sand with an excess which passes the #100 and #270 sieves. It is unacceptable for Item 105. Test #2 was at point on ridge N-40-E of Test #1 and 325' from L. M. Pike fence. Material here is similar to Test #1 and is also unacceptable for Item 105.
14	1A	1966	0-32	Stripped	Yes	86.2	80.8	67.0	8.0	1.0	1		Gran. Borrow (Grav.)	Owner: Don Lawson. Area is a pit west of Vt. Rte. 14 and 0.15 mile south of its intersection with Town Highway #6. Upper 32' of southwest face consists mainly of cross - bedded fine gravel and was sampled as Test #1A. Too much material passes the #4 screen failing it for Item 201 specifications. It is acceptable for Item 105. Insufficient stone for wear test
	1B	1966	32-70	See Test 1A	Yes	100	95.4	85.2	14.5	2.5 2.1*	1½		Sand	Test #1B was sampled along north edge of face below Test #1A. It consists of sand with a little gravel in places that is acceptable for Item 202.
	2	1966	0-48	Stripped		69.3	•		•	3.0 Sample	15	12.0%	Grave1	Test #2 was taken in north face of pit. It represents 35' of cobbly gravel underlain by at least 9' of sand. Material is acceptable for

Map	Field		Depth of		Exist-	Ī			lysis			Abrasion		
Ident.	1	Field	Sample	burden				Passi				AASHO	VHD	
No.	No.	Tested	(Ft)	(Ft)	Pit	15"	5/8"	#4	#100	#270	T-21	T-4-35	Spec.	Remarks
	3	1966	0.5-8.5	0-0.5	Yes	84.8	77.7	57 . 8	4.0	2.0	1		Gran. Borrow (Grav.)	here that meets the require- ments for Item 201 gradation; but there was insufficient properly sized stone with thi
15	1	1966	1.5-10	0-1.5	No	74.6	61.3	43.7	8.0	4.0	2½	10.2%	Gravel	sample to perform the wear test. Owner: Reginald Labounty. Area is pasture land and hay- field on top of bluff south of Don Lawson pit (Map Iden- tification Number 14). Test #1 was in pasture 8' east of
·	2	1966	1-10	0-1	No	82.2	69.5	51.8	17.0	8.0	3	15.3%	Gran. Borrow (Grav.)	fence at point 200; south of Lawson property line. Material is gravel with sand and cobbles which met the specifications for Item 201. Test #2 was 30; east of fence at point 600; south of Lawson property line. Material is silty to sandy gravel with cobbles. It fails to meet the requirements for Item 201
	3	1966	1-10	0-1		79.1		٠	·		2	14.0%	Gravel	because excessive material passes the #100 sieve. It is acceptable for Item 105. Test #3 was on top of knoll in field west of Tests #1 and #2. Material varies from pebbly sand to sandy gravel. It meets the requirements for Item 201.

Map	Field	Year	Depth of		Exist-		Siev	e Anal	ysis			Abrasion		
Ident.	Test	Field	Sample	burden				Passir			AASHO	i .	VHD	1
No.	No.	Tested			Pit			#4				T-4-35	Spec.	Remarks
16	1A	1966	2-8	0-2	Yes	88.0	77.2	49.0	4.0	1.5	2	8.8%	Grave1	Owner: Andre Nadeau. Area contains gravel pit north of Town Highway #15 and northwest of old buildings. Pit is in an ice-contact deposit at south end of ridge. Face consists of fine gravel beds overlying coarse sand that becomes stonier with depth. Test #1A was in upper face. It passes the specifications for Item 201.
	1B	1966	8-22	See Test 1A	Yes	95.6	83.5	63.3	3.0	1.5	1		Gran. Borrow	Test #1B was in middle and lower face. It is categorized between sand and gravel in particle size because 36.7% of material was retained by the #4 screen. It meets the requirements for Item 105.
	1C	1966	0-9		Yes	100	85.8	69.3	4.2	2.0	1		Gran. Borrow (Sand)	Test #1C was in floor of pit. Material consists of 3' of gravel overlying 6' of sand. It barely fails specifications for Item 202 because slightly less sand passes the #4 screen than is allowable for this Item. It meets the require- ments for Item 105.
17	1	1966	0.5-10	0-0.5			į	43.4		2.0	2	10.0%	Grave1	Owner: Reginald Labounty. Area is pasture land north of Town Highway #14 and east of Reginald Labounty, Jr.'s farm- house. Test #1 was in west corner of field 30' north of fence in scattered apple trees Material is interbedded sand,

COVENTRY GRANULAR DATA SHEET NO. 11

Мар	Field		Depth of		Exist-	İ			lysis		1	Abrasion		
Ident,		Field	Sample	burden		<u></u>		assi			.	AASHO	VHD	·
No.	No.	Tested	(Ft)	(Ft)	Pit	15"	5/8"	#4	#100	#270	T-21	T-4-35	Spec.	Remarks
	2	1966		Stripped	No	57.6	47.2	34.6	6.0	3.0	1½	7.8%	Gravel	gravel, and cobble layers. It passes requirements for Item 201. Test #2 is in north center of pasture 100' north of fence. Material is coarse cobbly gravel(estimated 20% cobbles) It passes requirements for Item 201.
18	1	1966	0.5-11	0-0.5	No				22.5	3.5 3.3*			Gran. Borrow (Sand)	Owner:Reginald Labounty. Area includes woods and pasture land between Henry Vinton property and Town Highway #4. Test #1 was in center of pasture 200' north of Vinton fence. Material is sand with a small lens of gravel near top. It fails requirements for Item 202 because of an excess of material passing the #100 sieve. It met requirements for Item 105.
	2	1966	2-10	<i>9</i> ~2	No				10.0	3.0	3	11.6%	Grave1	Test #2 was in southeast corner of cornfield about 600' northwest of Test #1. Material is coarse gravel with sand and cobbles. It is acceptable for Item 201.
	3	1966	2-10	0-2					27.4	6.9*	1		Gran. Borrow (Sand)	Test #3 is on edge of same cornfield about 800' southwest of Test #2. Material is medium sand with gravel layers. It fails for Item 202 because of an excess of material passing the #100 and #270 sieves. It is acceptable for Item 105.

Мар	Field		Depth of	Over-	Exist-	İ	Siev	e Ana	lysis		Color	Abrasion	Passes	
Ident.		Field	Sample	burden		l		Passi			,	AASHO	VHD	
No.	No.	Tested			Pit				#100			T-4-35	Spec.	Remarks
19	1	1966	3-10	0-3	No				9.0		2	9.6%	Gran. Borrow (Grav.)	Owner: Reginald Labounty. Area includes pasture land and cornfield on bluffs southwest of Reginald Labounty, Jr.'s farmhouse. Test #1 was on hilltop at edge of cornfield under sugar maple 800' east of Town Highway #14. Top 3 feet is loam grading into dirty coarse sand. Sample was of cobbly gravel. Material fails to meet requirements for Item
	2	1966	1-10	0-1	No	94.2	91.0	82.5	2.5	1.5 1.2*	3		Gran. Borrow .(Sand)	201 because an excess passes the #270 sieve. It meets requirements for Item 105. Test #2 was 300' south of Test #1 on edge of bluff. It represents pebbly sand. Material barely fails acceptance for Item 202 because a slight excess is retained by the 1½-
	3	1966	1-10	0-1	No	100	96.5	94.4	42.5	2.1 2.0*	1		Gran. Borrow (Sand)	inch screen. It meets require- ments for Item 105. Test #3 was 75' southwest of fence corner at edge of woods. Material consists of fine sand. It is unacceptable for Item 202 because an excess passes the #100 sieve. It is accept-
20	1	1966	0.5-16.0	0-0.5					74.0					able for Item 105. Owner: Ethel Columbia Estate. Area consists of small borrow pit on Town Highway #26 at first bend above intersection with Vt. Rte. 14. Material is fine sand and silt.

Map	Field		Depth of	i .	Exist-				lsysis	;		Abrasion		
Ident.	Test	Field	Sample	burden				Passi			ľ	AASHO	VHD	
No.	No.	Tested	(Ft)	(Ft)	Pit				#100		T-21	T-4-35	Spec.	Remarks
21	1	1966	0.5-10.5	0-0.5	Yes	100	100	94.6	22.7	8.0 7.5*	1		Gran. Borrow (Sand)	Owner: Reginald Labounty. Area consists of longitudinal ridge immediately west of Stony Brook at point northwest of Reginald Labounty's barn on Vt. Rte. 14. Test #1 was in break in ridge that was once truck trail to old borrow pit just west of ridge. Material is fine sand with a small gravel lens on top and some clay stringers. It fails to meet requirements for Item 202 because excess material passes the #100 and #270 sieve Meets requirements for Item 105.
22	1	1966	1-10	0-1	No	100	96.4	85.2	18.8	6.3 5.4*	2		Gran. Borrow (Sand)	Owner: Sylva Piette. Area consists of terrace east of Town Highway #20 and southeast of Town Highway #22. Test #1 was on edge of terrace under high line 110' southeast of Town Highway #22. Material is gravelly sand. It fails to meet requirements for Item 202 because of an excess of material passing the #100 and #270 sieves. Meets requirements for Item 105.
23	1	1966	1.5-5	0-1.5					52.7	5.0*	2		Gran. Borrow (Sand)	Owner: Alfred Bartlau. Area is sparsely wooded meadow north of Town Highway #32 opposite bend 0.5 mile from U. S. Rte. 5. Test #1 was in swale north of access road at

Map	Field	1	Depth of		Exist-		Siev	e Ana	lysis		Color	Abrasion	Passes	
Ident.		Field	Sample	burden				Passi			AASHO	AASHO	VHD	
No.	No.	Tested	(Ft)	(Ft)	Pit	15"	5/8"	#4	#100	#270	T-21	T-4-35	Spec.	Remarks
							man and an and an an and an analysis of the same of th							point 0.13 mile from Town Highway #32. Material is sil- ty sand overlying glacial till Fails to meet requirements for Item 202 because of an ex- cess of material passing the #100 sieve. Meets require- ments for Item 105.
24	1	1966	2-10	0-2	No	100	100	100	74.0	40.0	1			Owner: Ernest Royer. Area consists of terrace-like feature east of Vt. Rte. 14 and northeast of house. Test #1 was on top of terrace at high point. This material with some interbedded clay varves
	2	1966		0-1.5	No	100	100	100	85.0	36.0	1	~		appears lacustrine in origin. Test #2 was near point where terrace joins hillside 345' northeast of Test #1. Material is similar in character to Test #1.
25		1966	1-11	0-1	Yes	78.4	75.1	68.6	19.0	5.5	1	1 1	Gran. Borrow (Grav.)	Owner: Sylva Piette. Area which is east of Town Highway #20 and north of Town Highway #21 contains two pits. Test #1 was in center of southeast face of west pit. Material consists of 5' of coarse gravel overlying 5' of coarse to silty sand. It is unacceptable for Items 201 and 202 because percentage of material passing the #4 screen falls between the maximum limit for gravel and the minimum limit for sand.

Map	Field	Year	Depth of	Over-	Exist-		Siev	e Ana	lysis		Color	Abrasion	Passes	T
Ident.	Test	Field	Sample	burden	ing			Passi			AASHO	AASHO	VHD	
No.	No.	Tested	(Ft)	(Ft)	Pit	1½"	5/8"	#4	#100	#270	T-21	T-4-35	Spec.	Remarks
	2	1966	0-10		Yes	100	100	99.2	56.5	30.0	1½			Item 105. Test #2 was in floor of west pit. Material consists of silt and sand layers. Water
	3	1966	1-8	0-1	Yes			68.7			1		Gran. Borrow (Grav.)	was encountered at 7.5'. Test #3 was at south end of east pit. It penetrated both stripped lift and floor. Material is interbedded sand an gravel lenses that pinch out to west. Test #3 failed for Item 201 because of an excess of material passing the #4 screen. It meets requirement for Item 105. Test #3 bottome in 2' of silt overlying rotte phyllite ledge. There was insufficient stone for wear test.
26	lA ,	1966	1-26	0-1				of Tot			2		Gran. Borrow (Grav.)	Owner: Campbell and Parker. Area consists of long pit wes of Town Highway #20 at intersection with Town Highway #21 and possible southward extension. Test #1A was in face a far south end of pit. Face was covered with much sloughe over sod and loam. Material consists of sandy gravel. It barely fails to meet requirements for Item 201 because of slight excess passing the #27 sieve. It is acceptable for Item 105. There were insufficient stones for wear test.

Map	Field	Year	Depth of	Over-	Exist-		Sieve	e Ana	lsysi	 S	Color	Abrasion	Passes	
Ident.	·	Field	Sample	burden				Passi	-			AASHO	VHD	
No.	No.	Tested	(Ft)	(Ft)	Pit	12"	5/8"	#4	#100	#270	T-21	T-4-35	Spec.	Remarks
	1B	1966	26-33		Yes	82.6	68.0	51.8	7.0	4.0	1	27.8%	Gran.	Test #1B was in lower lift.
				1									Borrow	Material seems to be homogen-
													(Grav.)	eous cobbly gravel. It fails
														for Item 201 because of excess
														passing the #270 sieve. It
	2	1966	1-10	0-1	No	100	100	96 7	14.5	2.0	1		Sand	is acceptable for Item 105.
	2	1900	1-10	0-1	110	100	100	30.7	14.5	1.9*	•		Salid	Test #2 was at point 88' west of Town Highway #20 and 283'
										1.0				south of pit. Material con-
														sists of fine to medium sand.
														It meets requirements for
														Item 202.
27	1	1966	1.5-10	0-1.5	No	100	100	100	56.0	11.0	1			Owner: Alfred Bartlau. Area
				1										is pasture land along north-
														west property line southeast
														of Town Highway #39. Test #1 was 96' S-70-E of property
														line fence. Material is silty
														sand.
	2	1966	1.5-10.5	0-1.5	No	100	100	100	73.0	23.5	1			Test #2 was next to fence 881
							i				ŀ			N-70-W of Test #1. Material
														is sandy silt.
28	1	1966	1.5-10	0-1.5	No	100	100	97.9	78.3	38.0	1			Owner: Alfred Bartlau. Area
														is pasture land on terrace
														lobes about & mile southwest
														of highest curve in Town High- way #32. Test #1 was on lobe
;														immediately south of field
:					i				1					fence. Material is sandy silt
	2	1966	1.5-12	0-1.5	No	100	100	100	96.0	56.0	1	***		Test #2 was about 630! north-
														east of Test #1 and 176' south
														of Town Highway #32. Material
,														is silt and sand.
i	3	1966	1-4.5	0-1	1			99.7			2			Test #3 was 209' northeast of
				<u> </u>	*Pe	ercent	age o	f Tot	al Sa	mple				Test #2 and 134' south of Town

Map	Field	Year	Depth of	Over-	Exist-		Sieve	Ana	lysis		Color	Abrasion	Passes	
Ident.		Field	Sample	burden				assi	-			AASHO	VHD	
No.	No.	Tested		(Ft)	Pit	15"	5/8"			#270	1	T-4-35	Spec.	Remakrs
														Highway #32 at corner of hedge row. Material is sandy silt. Clay was encountered at 4.5 feet. It extended to 10' depth.
29	1	1966	1-10	0-1	No	N	0	Ť	S			L E D		Owner: Campbell and Parker. Area consists of large field northeast of Roland Ostiguy farm. Test #1 was in south- east corner of field 187' from east fence. It was in clay.
	2	1966	1-10	0-1	No ·	89.8	78.7	57.6	11.0	5.0	1½	29.9%	Gran. Borrow (Grav.)	Test #2 was near northwest corner of field at point 1251 northeast of cemetery. Material is clean sandy gravel with sand near top. It fails for Item 201 because of excess material passing the #270
	3	1966	0.5-8	0-0.5	Yes	92.2	89.4	83.6	10.9	5.0 4.2*	2		Gran. Borrow (Sand)	sieve and wear greater than 25.0%. Test #3 was in north face of old pit in southwest corner of field. Material is gravelly sand. It fails to pass specifications for Item 202 because of an excess of material re-
	4	1966	0-4.5		Yes	100	100	98.8		1.0*	1		Sand	tained on 1½-inch screen. It passes Item 105 specifications. Test #4 was in floor near north face of old pit. Material is medium sand. It meets requirements for Item 202. Water was encountered at 4.5 feet.
30	1	1966	0.5-9.5	0-0.5			100 tage o			•	1			Owner:Reginald Labounty. Area consists of clover field south of Vt. Rte. 14 crossed by

Мар	Field	1	Depth of		Exist-				lysis			Abrasion		
Ident.		Field	Sample	burden				Passi	_			AASHO	VHD	
No.	No.	Tested	(Ft)	(Ft)	Pit	1월"	5/8"	#4	#100	#270	T-21	T-4-35	Spec.	Remarks
								****						former location of Vt. Rte. 14. Test #1 was next to south property line fence 500! east of west property line fence. Material is silt to clay.
31	1	1966	1-8.5	0-1	No	100				22.0 20.7*	1			Owner: Campbell and Parker. Area consists of large field northeast of Marcel Quirion's farmhouse and west of Day Broo Test #1 was on edge of ter- race 0.25 mile from farmhouse and 450' N-60-W of Day Brook. Material is silty sand.
32	1A	1966	0.57	0-0.5	Yes	100	96.5	90.1	6.3	2.5 2.3*	2		Sand	Owner: Town of Coventry. Area consists of large pit east of Vt. Rte. 14 0.6 mile west of U. S. Rte. 5. Test #1 was in center of north face Test #1A material is pebbly sand. It meets requirements for Item 202.
	1B	1966	17-47		Yes		66.7				1	15.0%	Gravel	Test #1B material is cobbly gravel. It meets requirements for Item 201.
	2	1966	1-7	0-1	Yes		98.7			0.7*	1		Sand	Test #2 was in floor of upper lift at point 75' from north face. Material is coarse peb- bly sand. It meets require- ments for Item 202.
33	1	1966	1-10	0-1			81.5			14.0 10.6*	1			Owner: Campbell and Parker. Area consists of field on hill east of Day Brook due east of Marcel Quirion's farm. Test #1 was at high point on hill 200' east of proposed I -91 north-

Map .	Field		Depth of	1	Exist-			e Ana			ı	Abrasion		
Ident.	1 :	Field	Sample	burden				Passi			ı	AASHO	VHD	
No.	No.	Tested	(Ft)	(Ft)	Pit	12"	5/8"	#4	#100	#270	T-21	T-4-35	Spec.	Remarks
						ļ ————————————————————————————————————								bound lane. Material is stong sand with excessive silt.
34	1A	1966	30-50	0-30	Yes	100	98.0	90.2	3.6	1.5	15		Sand	Owner: Leland Drake. This is large pit east of Vt. Rte. 14 and 0.3 mile west of U. S. Rt. 5. Upper 35' of approximately 107-foot face shows thick interbedded sand and gravel lenses with minor terracing and cross-bedding. Portion of facabove Test #1A was not accessible for sampling. Test #1A was in upper center of east face. It was gravelly sand
	18	1966	50-100		Yes	84.1	80.5	72.9	4.0	2.0	1		Gran. Borrow (Grav.)	that passes for Item 202. Test #1B was of northwest edge of lower east face. Material is a cobbly gravel with insuf- ficient portion coarser than #4 screen to meet Item 201 specifications. It meets requirements for Item 105. There were insufficient stones for wear test.
	1C _	1966	100-107		Yes	100	91.6	88.3	1.8	1.0 0.9*	1		Sand	Test #10-material was coarse sand. It meets requirements for Item 202.
	10		, , , , ,	Stripped		100		99.2	5.0	1.0*	1		Saṇd	Test #1D was in floor of pit. Material is coarse sand. It meets requirements for Item 202.
35	1	1966	0.5-10	0-0.5		100	100 tage o		73.0		1			Owner: Leonard Brothers. Area consists of fallow land west of house on bend in Town Highway #36 at Black River bridge. Test #1-material is sandy silt

Map		Year	Depth of		Exist-			e Ana	-			Abrasion		
Ident.		Field	Sample	burden				Passi				AASHO	VHD	
No.	No.	Tested			Pit		5/8"			 #270	T-21	T-4-35	Spec.	Remarks
36	1	1966	1-10	0-1	No 1	100	100	100	50.0	15.5	2			Owner: Ellis Smith. Area is southwest corner of field nort of Town Highway #34 and 0.1 mile west of Town Highway #36. Test #1 was 140! north of Town Highway #34 in center of slightly elevated terrace. Material
	2	1966	1-11.5	0-1	No	100	100	100	91.0	69.0	1			is very fine sand. Test #2 was on knoll in center of field 0.04 mile south of Test #3 and opposite Judd's house. Material is silt.
	3	1966	1-11.5	0-1	No	100	100	100		23.0	1	M = m	***	Test #3 was on terrace-like feature 211' northwest of Judd's house. Material is sandy silt.
	4	1966	4.5-6.0	0-1	No			69.4			1		Gran. Borrow (Grav.)	Test #4 was located S-60-E of Test #4 and 114' west of Town Highway #36. Material is fine gravel. It is rejected for Item 201 because only 30.6 of material was coarser than #4 screen. It meets require- ments for Item 105.
37	1	1966	1-10	0-1	Yes	100	100	99.6	2.0	1.3*	1		Sand	Owner: Norman Lawson. Area includes embankment east of U. S. Rte. 5 and adjacent field north of State Aid #1. Test #1 was in east face of grown-over pit 0.05 mile south of Town Highway #39. Material consists of medium sand with oxidized zones. It passes requirements for Item 202.
	2	1966	6.5-10	0-6.5	Yes *P	100 ercer	100 tage	98.7 of To		1.5* Sample	1		Sand	Test #2 was in cut-away embank ment in north edge of second

Map	Field		Depth of		Exist-		•	e Ana	-			Abrasion		
Ident.		Field	Sample	burden				Passi				AASHO .	VHD	
No.	No.	Tested	(Ft)	(Ft)	Pit	1월"	5/8"	#4	#100	#270	T-21	T-4-35	Spec.	Remarks
		1000	1 10	0.1	N	02.0	67.7	5/ 1	32.0	13.3	13	17.6%	C	overgrown pit 0.1 mile north of State Aid #1. Material overlying sample comprises 6.5 of gravelly cobbles. Sampled portion is medium sand. It meets requirements for Item 202.
	3	1966	1-10	0-1	No							17.0%		Test #3 was on top of hill at edge of woods 243' southeast of Test #1 and 151' northeast of Test #2. Material is dirty sand and gravel with cobbles. It fails to meet requirements for Item 201 because excess material passes the #100 and #270 sieves. It meets the requirements for Item 105.
38	1	1966	1.5-10	0-1.5	No	100	100	100	8.0				Sand	Owner: Roger Lamarche. Area consists of large field north of Town Highway #36 and south of Black River. Test #1 was on knoll at north end of field 25' from woods and 512' west of fence. Layer of sod and dirty gravel, above clean medium sand, was not sampled. Test #1 meets requirements for Item 202.
	2	1966	0.5-10	0-0.5	No	100	100	100	8.0	3.3*	1		Sand	Test #2 was on ridge 136' west of fence and 330' north of Town Highway #36. Material is sand and passes specifications for Item 202.
	3	1966	0.5-7.5	0-0.5		100 ercent	•				1½	~ ~ ~		Test #3 was on knoll 66' north of Town Highway #36 and 115' east of west fence. Material

Map	Field	1	Depth of		Exist-			e Ana:				Abrasion	9	
Ident.		Field	Sample	burden				Passi			3	AASHO	VHD	
No.	No.	Tested	(Ft)	(Ft)	Pit	1월"	5/8"	#4	#100	#270	T-21	T-4-35	Spec.	Remarks
														is fine sand with an excess of silt passing the #270 screen.
39	1	1966	5-11	0-5	No	100	100	97.4		1.6*	1		Sand	Owner: Norman Lawson. Area is field south of cemetery and north of State Aid #1. Test #1 was in southeast corner of field 6' west of woods and 41' north of fence. Material is clean sand which meets requirements for Item 202.
40	1	1966	0.5-10.5	0-0.5	No	100	.95.0	90.8	18.2	7.0 6.4*	1		Gran. Borrow (Sand)	Owner: Bruce Wilson. Area is upper meadow south of Town Highway #34. Test #1 was on terrace lobe 140' south of fence at point 0.15 mile from gate at Town Highway #34. Material is pebbly sand with silt. It has excess material passing the #100 and #270 sieves and fails specification for Item 202. It passes requirements for Item 105.
	2	1966	0.5-10	0-0.5				69.8			2		Gran. Borrow (Grav.)	Test #2 was at southeast edge of meadow 195' southeast of Test #1. Material is interbedded sand and gravel. Excess of material passing the #100 and #270 sieves fails specifications for Item 201. It passes requirements for Item 105. There were insufficent stones for wear test.
	3	1966	0.5-11	0-0.5	1			79.2 f Tot		2.5 2.0* mple	1		Sand	Test #3 was on second terrace lobe and south of Tests #1 and #2. It was 77' northwest of

Мар	Field	Voor	Depth of	Over-	Exist-		Cian	o A	lysis		Calan	Abrasion	lD-	T
Ident.		Field	Sample	burden	4			e Ana Passi	•		AASHO	ì	VHD	
No.	No.	Tested			Pit	13:11			#100	1#270		T-4-35	Spec.	Remarks
												1-4-33	opec.	fence separating upper and lower meadows. Material consists of 2.5 feet of dirty pebbly sand overlying 8 feet of clean coarse sand. Material meets requirements for Item 202. Site of Test #3 is 0.2 mile from gate at Town Highway #34.
41	1	1966	1.5-8.0	0-1.5	No		100	100		38.0	1			Owner: Archie St. Onge. Area consists of hillside pasture with scattered evergreen trees north of State Aid #1 near Norman Lawson's farmhouse. Test #1 was near top of hillside 225' from State Aid #1. Material is stony silt.
	2	1966	1-10	0-1	No	100	100	100	78.0	38.8	1			Test #2 was on a terrace level with the ridgepole of Lawson's house about 45 feet below Test #1. Material is silty fine sand.
	3	1966	1.5-40	0-1.5	No	N	0	T	S A	M M	P L	E D		Test #3 was below Test #2 at north end of little meadow at point 110' from fence bounding State Aid #1 near access gate to area. Material consisted of clay, silt, and stones. It was not sampled.
42	1	1966	5.5-11.5	0-5.5					26.0		1		Gran. Borrow (Sand)	Owner: Aime Laframboise. Area consists of ridge south of Town Highway #36 and east of the Black River. Test #1 was on top of ridge 50' north of Roy Gustin property line fence. Material is overlain

COVENTRY GRANULAR DATA SHEET NO. 24

Map	Field	Year	Depth of	Over-	Exist-		Sieve	e Ana	lysis		Color	Abrasion	Passes	1
Ident.		Field	Sample	burden				Passi	-		AASHO		VHD	
No.	No.	Tested			Pit	1½"			#100	#270	T-21	T-4-35	Spec.	Remarks
	2	1966	5-11	0-5	No	100	100	100	46.0	11.0	2			by 5 feet of fine sand and silt. Material tested is a medium clean sand. It is acceptable for Item 105. Test #2 was on west side of ridge 340' north of Test #1 and 135' south of reservoir. Material is overlain by 4½
	3	1966	4=10.5	0-4	No	100	100	100	39.0	14.0	1			feet of sandy silt. Material tested is a fine clean sand. Test #3 was on spur of ridge 210: northwest of reservoir and 65: south of fence. There is an outcrop of slate 33: west of Test #3. Material is overlain by 3½ feet of silt. Material tested is fine sand.
43	1	1966	0.5-12	0-0.5	No	100	100	100	98.0	52.5	1			Owner: Bruce Wilson. Area is a pasture west of hayfield and northwest of house. Test #1 was on easternmost knoll 84' west of fence. Material is clean silt with a trace of sand.
44	2	1966	0.5-11	0-0.5	No No		100	100	75.0	4.0* 23.0	1 2		Sand.	Owner: Roy Gustin. Area is continuation of ridge south of Aime Laframboise property. Test #1 was in saddle on ridge 110' south of the Laframboise property line. Material tested is fine sand becoming coarser with depth. It meets specifications for Item 202.
	. 2	1700	U.J.II	0.00			,	•	tal Sa		1			Test #2 was on small plateau 300' south of Test #1 and 125' west of ledge. Material is

TABLE I

Map	Field		Depth of	1	Exist-			e Ana	-			Abrasion		
dent.	1	Field	Sample	burden				Passi				AASHO	VHD	
No.	No.	Tested	(Ft)	(Ft)	Pit	15"	5/8"	#4	#100	#270	T-21	T-4-35	Spec.	Remarks
								<u> </u>						fine sand.
45	1	1966		0-1	No	100	100	78.9	18.0		2		Gran. Borrow	Owner: Norman Lawson. Area consists of hilltop in pasture S-35-E of house. Test #1 was on hilltop in stony material which appears to be silt with clay lenses. It meets require ments for Item 105.
46			0.5-3	0-0.5	No	N	0	T		A M	P 1	L E D		Owner: Arthur Whipple. Area consists of hilltop with scattered maples and pasture S-35-E of Whipple house and S-50-W of Norman Lawson's barn. This area is apparently covered with glacial till. A heavy covering of turf overlies clay and stones.
47	1	1966	0-11.5	Stripped	No	100	100		*** *** *** *** *** *** *** *** *** **	29.0	1			Owner: Wilfred Desbiens. Area consists of several cleared fields east of U. S. Rte. 5 northeast of junction with Vt. Rte. 14 south. Test #1 was on terrace lobe next to woods near northeast corner of field and 167' N-65-E of field fence
	2	1966	0-11	Stripped	No	100	100	100	85.0	46.0	1 .			Test #2 was in north face of large circular terrace east of barn in old bulldozer trail.
	3	1966	1-11.5	0-1	No	100g	100		51.0		1			Test #3 was on highest point of terrace 500' S-45-W of Test #1. All material from these tests is silty fine sand.
48	1	1966	0.5-12	0-0.5	No	100	100	100	40.0	5.5*	1		Gran. Borrow (Sand)	Owner: Roy Gustin. Area tested was bluff south of house, west of Town Highway
	į	!			*	Perce	ntage	of T	otal	Sample				#7, and north of Irasburg

Map	Field	Vaar	Depth of	Over-	Exist-	·	Star	a Ana	lysis		Color	Abrasion	Passes	
Hap Ident.		Field	Sample	burden				Pass	-		1 3	AASHO	VHD	
No.	No.	Tested	, - }	(Ft)	1	11/211				#270	, ,	T-4-35	Spec.	
												1-4-35		town line. Test #1 was in swale 27' south of fence and 210' west of Town Highway #7. Material is a clean fine to medium sand which coarsens with depth. It meets requirements for Item 105.
49	2	1966	0.5-10 4.5-10	0-0.5	No	71. 4	59.0	mangementer in eine der mittel met eine der mi	28.0	36.0	1	29.1%		Owner: Roy Gustin. Area consists of ridge bounded by U. S. Rte. 14 south and Town Highway #7. Test #1 was on top of ridge 75' northeast of Irasburg town line and 40' east of high line. Material consists of: 0.5'-10' fine silty sand with a small sand lens. It bottoms in silt.
	2	1900	4.5-10	0-0-5	NO	/1.4	59.0	42.7	28.0	12.0	1½	2 9. 1%		Test #2 was 345' north of Test #1 in saddle. Material is: 0.51-4.5', dirty fine sand; 4.5'-10', cobbly gravel. Neither Test #1 nor Test #2 meets requirements for Item 105.
**************************************	3	1966	0.5-10	0-0.5	No	100	100	100	93.0	68.5	2			Test #3 was at break in slope 15' south of hayfield fence and 210' west of Test #2. Ma- terial is sandy silt.
	4	1966	0.5-8	0-0.5	No !	100	100	96.3	70.3	32.0 30.8*	2			Test #4 was near north end of field 42' west of fence at point 0.05 mile north of intersection of U. S. Rte. 5 and Vt. Rte. 14. Material is silty sand. It bottoms in boulders.
	:				*Pe	rcent	age o	of To	tal Sa	mple	:		· ·	Journal of the state of the sta

Мар	Field	Year	Depth of	Over-	Exist-		Siev	e Ana	lsis		Color	Abrasion	Passes	
		Field	Sample	burden				Passi				AASHO	VHD	
No.	No.	Tested		(Ft)	Pit	15"				#270		T-4-35	Spec.	Remarks
50	1	1966	0.5-10.5		No	N	0	T	S	A M		L E D		Owner: Adelard Racicot. Area is a pasture at the west end of a terrace northwest of house. Test #1 was 0.22 mile N-45-W of house. Material is 0.5'-2.0', loamy sand; 2.0'-10.5', clay.
51	1		1-10	0-1	Yes		en de se e e depresar en como especial de como especial d		13.7	5.5*			Gran. Borrow (Sand)	Owner: Adelard Racicot. Pit tested is in a bank above intermittent stream and N-40-E of house. Test #1 was of the west face and floor. Material consists of 1'-8'; gravel, 8'-9', sand; 9'-17', clay. Water table was penetrated at 14'.
52	1	1966	1-10	0-1	No	100	100	100	95.0	74.0	1			Owner: Wilfred Desbiens. Area is hayfield north of old U. S. Rte. 5 and west of Roy Lamarche property. Test #1 was on hilltop 285' east of field fence. Materialis fine silty sand.
53	1	1966	1-10	0-1	No	95.1	94.2	88.0	19.3	9.0 7.9*	12		Gran. Borrow (Sand)	Owner: Adelard Racicot. Area is hilltop pasture S-55-E of house. Test #1 was 38' west of fence at edge of woods and 76' northwest of high line. Material consists of silty sand with a few stones. It has an excess of material passing the #100 and #270 sieves so it fails for Item 202. It meets requirements for Item 105.
;				:	*P_	rcent	. 20p c	f To	tal Sa	mn 1				1031

lap			Exist-			e Anal	•			Abrasion	(
dent.	Test	1	Sample	burden				Passin			AASHO AASHO	L .	VHD		
0.	No.	Tested		(Ft)	(Ft)			#4				T-4-35	Spec.	Remarks	
4	1		1-9	0-1	No	100	88.4	74.6	9.7	5.3 4.0*	1½			Owner: Lester Cleveland. Area consists of the northwest half of a cornfield crossed by the Brownington - Coventry town line. (See Map Identification #8, Brownington, for southeast portion.) Test #1 was at north edge of field 240' from northwest corner and 280' nort west of Test #4, Map Ident. #8 in Brownington. Material con sists of interbedded sand and gravel lenses that dip south. It meets requirements for Item	
	2	1966	1-9	0-1	No	89.9	76.4	58.7	8.0	4.0	3	29.6%	Gran. Borrow (Grav.)	Test #2 was at northwest corner of field 210' west of Test #1. Material is sandy gravel with cobbles underlain by a foot of coarse, clean sand. It fails to meet gradation requirements for Item 201 because of excess material passing the #270 sieve. It also fails the wear test for this item. It was acceptable for Item 105	
	3	1966	1.5-9.5	0-1.5	No	90.1	76.7	63.5	9.5	4.5	1		Gran. Borrow (Grav.)	Test #3 was at west edge of field 125' south of Test #2.	

Мар	i	Year	Depth of		Exist-				lysis			Abrasion	Passes	
Ident.		Field	Sample	burden				assi				AASHO	VHD	
No.	No.	Tested	(Ft)	(Ft)	Pit	1날"	5/8"	#4	#100	#270	T-21	T-4-35	Spec.	Remarks
٠	4	1966	1-10	0-1	No	95.1	86.5	63.7	12.0	6.0	3½	19.2%	Gran. Borrow (Grav.)	It is acceptable for Item 105. Test #4 was at west edge of field 175' south of Test #3. Material is: 1'- 3', very dir- ty gravel; 3'-10', cobbly gra-
								·						vel. Material fails to meet gradation requirements for Item 201 because too little material is retained by the #4 screen and too much passes the #270 sieve. It meets re-
	5	1966	3.5-10	0-2	No	100	100	95.5	12.4	2.3 2.2*	1		Sand	quirements for Item 105. Test #5 was in bend at west edge of field 175' south of Test #4. 1.5 feet of silty gravel overlying sampled por-
	6	1966	3.5-10.5	0-1.5	No	85.5	75.1	58.5	9.0	4.0	3½	17.1%	Gran.	tion was not tested. Tested material consists of fine sand with silt layers and a few pebbles. It meets the requirements for Item 202. Test #6 was in second bend at
												·	Borrow (Grav.)	west edge of field 110' S-30- E of Test #5. Two feet of fine sand overlying sampled portion was not tested. Tes- ted material consists of sandy gravel with cobbles. It bare- ly fails to meet gradation re- quirements for Item 201 be-
	7	1966	1-10	0-1	į	-		92.4 f Tot	5.5 al Sa	2.5 2.3* mple	3		Sand	cause a slight excess passes the #270 sieve. It meets re- quirements for Item 105. Test #7 was in third bend at west edge of field 175' south of Test #6. Material tested

COVENTRY GRANULAR DATA SHEET NO.30

Map Ident.	Field Test	Year Field	Depth of Sample	burden	ing		% 1	Passi			AASHO	Abrasion AASHO	VHD		
No.	No.	Tested	(Ft)	(Ft)	Pit	11/2"	5/8"	#4	#100	#270	T-21	T-4-35	Spec.	Remarks	
	8A	1966	2-5.5	0-2	No	100	100	88.1	10.5	5.0 4.4*	1		Sand	is a clean fine sand with peb bly lenses. It meets require ments for Item 202. Tests #8A and #8B were at poin in cleared row 390' north of Test #7 and 365' south of Tes #1. Test #8A-material is a	
	8B	1966	5.5-10		No	78.5	69.3	55.5	9.0	4.0	1	33.6%	Gran. Borrow (Grav.)	sand with pebbly sand lenses. It meets the requirements for Item 202. Test #8B material is a cobbly gravel with sand. It fails to meet requirements for Item 201 because an excess passes	
	9	1966	1.5-9	0-1.5	No	100	94.5	93.3	9.3	3.0 2.8*	1½		Sand	the #270 sieve, and there is excessive per cent of wear. I meets the requirements for Item 205. Test #9 was dug in extreme southwest corner of field 225 S-35-W of Test #7 and about 14 feet below it in elevation Material is fine sand with pe bles. It meets the require-	
														ments for Item 202.	
55	1	1966	1-10	0-1	Yes	98.9	95.5	[69.2]	6.9	4.3 3.0*	1		Gran. Borrow (Grav.)	Location: I-91-3(4) P.E. Sec 1. Area consists of an old pit on the proposed northboun lane between station 2620+00 and 2630+00. Test #1 was in east face of pit. Material consists of sand, clay, and gravel. It contains insufficient stone to meet gradation requirements for Item 20	

TABLE I

COVENTRY GRANULAR DATA SHEET NO. 31

TABLE	Ι
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Map Ident.		Field	Depth of Sample	burden	ing		%]	Passi			AASHO	Abrasion AASHO	VHD	
No.	No. 2	Tested 1966	(Ft) 0-10	(Ft) 	Yes				#100		1	T-4-35	Gran. Borrow (Grav.)	1
														requirements for Item 201 be- cause of an excess passing the #270 sieve. It meets re- quirements for Item 105.
56	1	1966	1-10	0-1	No	100	100	99.5	31.8	12.5 12.4*				Owner: Maurice Kettle. Area is a long terrace lobe east of house on State Aid #1. Test #1 was near west end of terrace 0.16 mile from house. Material consists of fine to medium sand with some clay.
57	1	1966	1-10	0-1	No	100	100	96.8	7.7	2.5	•		Sand	Owner: Willie Woodard. Area is pasture on Brownington town line north of Town Highway #50. Test #1 was at point 0.15 mile N-10-W of house. Material is sand that meets requirements for Item 202.
58	1	1966	2-6	0-2	No	100	And the second s		18.7	4.5 4.0*	1 -		Gran. Borrow (Sand)	Owner: Willie Woodard. Area is a terrace S-35-W of barn. Test #1 was at a point 60' west of barway in field fence. Material is silty sand with pebbles that fails to meet the requirements for Item 202 because of an excess passing the #100 sieve. It meets requirements for Item 105.
	2	1966	2-16	0-2	No *				7.7	1.3* Sample			Sand	Test #2 was on side of terrace below Test #1. Material is

TABLE I

COVENTRY GRANULAR DATA SHEET NO. 32

Map	Field	Year	Depth of	Over-	Exist-		Sieve	e Ana	lysis	Color	Abrasion	Passes		
Ident.	Test	Field	Sample	burden	ing		% Passing A		AASHO	AASHO AASHO AASHO				
No.	No.	Tested	(Ft)	(Ft)	Pit	1월"	5/8"	#4	#100 #270	T-21	T-4-35	Spec.	Remarks	
	-												medium sand with pebbles. 1	Īt
													meets the requirements for	
													Item 202.	

COVENTRY PROPERTY OWNERS - GRANULAR	Map	Ide	nt. 1	No.
Bartlau, Alfred		23,	27,	28
Calkins, H. G. 3, Campbell, John Cleveland, Lester Collins, Ernest Columbia, Ethel (Deceased)		5, 7 29,		12 33 54 6 20
Desbiens, Wilfred Drake, Leland			47,	52 34
Gustin, Roy		44,	48,	49
Kettle, Maurice				56
Labounty, Reginald Laframboise, Aime Lamarche, Roger	18,	19,	21,	30 42 38 14
Lawson, Don Lawson, Norman Lawson, Winston Leonard Brothers		37,	39,	
Nadeau, Andre		,		16
Parker, Keith Parker, Raymond (caretaker for Ethel Columbia Estate) Petit, Robert Piette, Sylva Pike, L. M. and Sons			8, 22, 10,	25
Racicot, Adelard Royer, Ernest		50,	51,	53 24
St. Onge, Archie Smith, Ellis				41 36
Whipple, Arthur Wilson, Bruce Woodard, Willie			40, 57,	46 43 58

COVENTRY ROCK DATA SHEET NO. 1

TABLE II

	Field		Rock	Exist-	Method	Abrasion	
Ident -	Test	Field	Type	ing	of	AASHO	
No.	No.	Tested		Quarry	Sampling	T-3	Remarks
1	1	1966	Granite	Yes	Chip	6.8%	Owner: Mrs. Mae Reed. Fine to medium-grained gray gran- ite. Owing to the uniformity of the material only one random sample was taken. It was from a glacially scoured exposure about 200' north of house in pasture lane. Ap- proximately 600' southwest of house is an old quarry of small extent, heavily overgrown with bushes and small trees. Material is acceptable for Item 204, Sub-base of Crushed Rock.
2	1		Greenstone	No	Chip	6.5%	Owner: Moody Petit. Fine-grained greenstone, somewhat fissile in character. A random sample was taken on a prominent 800' north-south trending ridge west of Walker Pond. The outcrop sampled, which is thinly covered with glacial till, is at a point 340' south of a barway from Town Highway #9. Material is acceptable for Item 204, Sub-base of Crushed Rock.
3	1	1966	Granite	No	Chip	9.4%	Owner: Ernest Collins. Medium-grained gray granite. It is the coarsest granitic rock that was sampled in the town ship. Bedrock outcropping on a wooded hillside was sampled at 25 foot intervals for 150' in a north-south direction. Outcrop is first encountered 500' south of house and extends south up hillside for at least 300'. Material is not acceptable for Item 204, Sub-base of Crushed Rock.
4	1	1966	Phyllite	No	Chip	8.0%	Owner: Sylva Piette. Hard black phyllite, bounded on the west by calcareous brown limestone. This was a random sample taken in north-south striking ledge at point 50' north of Town Highway #21 0.1 mile east of Town Highway #20. Ledge is heavily covered with soil and vegetation. Material is acceptable for Item 204, Sub-base of Crushed Rock.
5	1	1966	Granitic	No	Chip	5.9%	Owner: Bruce Wilson. Fine-grained green granitic rock, less fissile than greenstone at Map Identification No. 2. This test represents 65' of ledge cropping out east of a trail that is northwestward extension of Town Highway #34. Material is acceptable for Item 204, Sub-base of Crushed Rock.

TABLE II

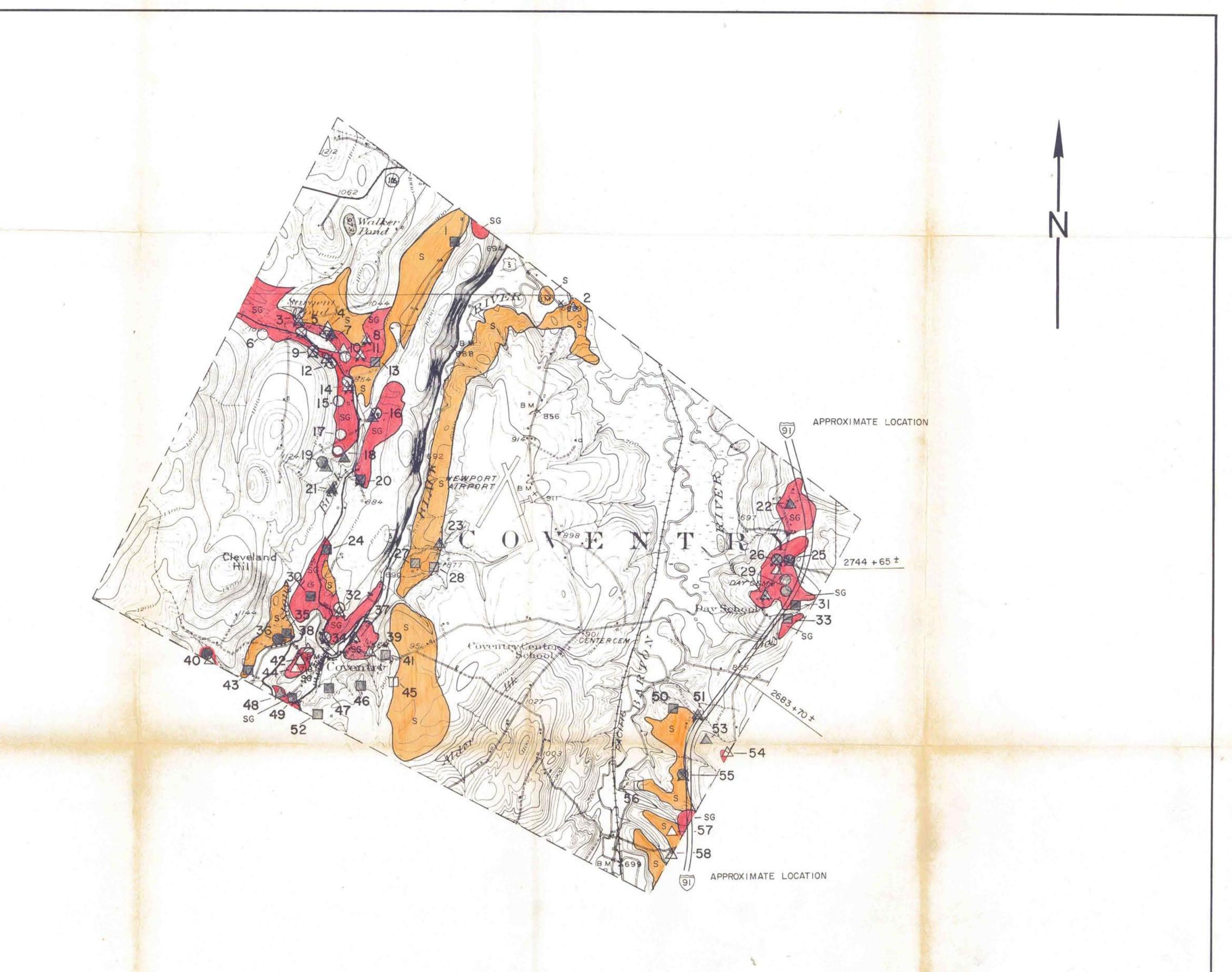
COVENTRY ROCK DATA SHEET NO. 2

	Field	Year	Rock	Exist-	Method	Abrasion	
Ident.	Test	Field	Type	ing	of	AASHO	
No.	No.	Tested		Quarry	Sampling	T-3	Remarks
No.	No. 2	Tested 1966	Quartzite	No	Chip	T-3 4.4%	Remarks Test #2 comprised of fine-grained grayish-white quartzitic rock. It was sampled at 40-foot intervals for 185! westward from end of Test #1. Material is acceptable for Item 204, Sub-base of Crushed Rock.

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TABLE II Supplement

COVENTRY PROPERTY OWNERS - ROCK	Мар	Ident.	No.
Collins, Ernest		-	3
Petit, Moody Piette, Sylva			2
Reed, Mrs. Mae			1
Wilson, Bruce			5



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
- SAND & GRAVEL DEPOSIT
- SAND DEPOSIT
- IDENTIFICATION NUMBER (refer to data sheets)

COVENTRY

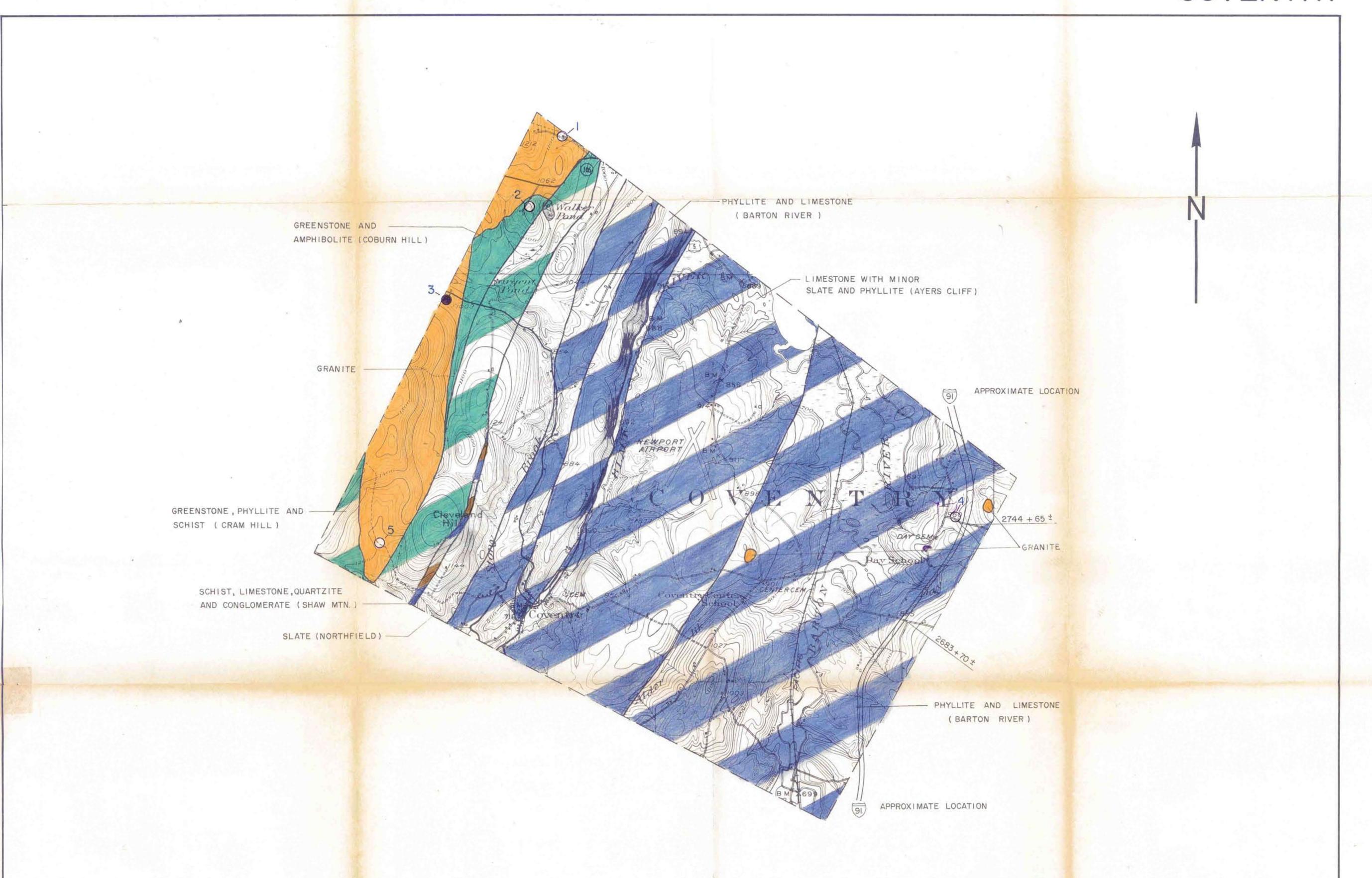
SCALE 131,250 HH HH H CONTOUR INTERVAL 20 FEET

GRANULAR MATERIALS MAP

VERMONT DEPARTMENT OF HIGHWAYS IN COOPERATION WITH

U.S. BUREAU OF PUBLIC ROADS

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



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 IDENTIFICATION NUMBER (refer to data sheets)

COVENTRY

SCALE 1:31,250 HHHHH CONTOUR INTERVAL 20 FEET

MATERIALS MAP

VERMONT DEPARTMENT OF HIGHWAYS IN COOPERATION WITH

U.S. BUREAU OF PUBLIC ROADS

ROCK

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

REVISIONS