RESERVATION OF THE MARBLE FARM:

A PRELIMINARY VIEW

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The Marble property is a rare, if not unique, microcosm of rural New England in the eighteenth century. Better than any other property I know it is the typical 'middling' farm of the era set in a classic valley-transect, with a mosaic of soil types each suited to one of the many land uses important to the success of subsistence farming in the colonial and federal periods. At the center of gravity of the farm (in terms of energy expenditure of farm labor), and on or near an Indian archaeological site so commonly chosen for first settlement by colonial pioneers, is one of the very few remaining singlestory, wide-based Cape-Cod farm houses: once by far the predominant house and home for early New England farm families. (Only about 2 percent of the single-story farmhouses that once made up 90 percent of the farm landscape of the eighteenth century now remain). The farmbuildings nestle in the 'basketof-eggs topography' of drumlins: rolling ellipsoidal hills creased by treelined vale and meadow. Serried ranks of immaculate stone walls bound tiny fields as well as the threads of three narrow winding roads that meet in a farm yard. This both separates the house from the three barns but also knots them together. The Marble property is a veritable palimpsest bearing some traces of an Indian past and seemingly slight erasure of the eighteenth century past by the Yankee commercial (nineteenth) century and by the "New Immigrant" part-time farm of the twentieth century (in many ways a reinvention of the ecology of the eighteenth century). People of the Commonwealth, and Americans in general will discover here a genius loci: a feeling for a world we have, otherwise, lost, and a sense of place that is distinctively and uniquely New England.

Specialists in 'place' -- archaeologists, architectural historians, agricultural ecologists and economists, social and economic historians,

artists, photographers, and cultural and humanistic geographers, will find it a treasure trove for both teaching and research. Given the interest of the Trustees of Reservation in preserving the 'Marble place' for posterity, it will be a tragedy of some proportion if the opportunity to preserve this "jewel" is lost to the developer's bulldozer.

Farmhouse

Research in the mid 1980s reveals that the single story farmhouse was the norm in eighteenth-century central Massachusetts, almost certainly making up 90 percent of farmhouses in the first half of the last colonial century. The large two-story 'yeoman' houses, for so long taken as the norm, are shown increasingly to be the homes of the wealthy minority, many of them residences (and country seats) of pre-revolutionary Tory loyalists and the symbolic butt of American revolutionaries' discontent, night-gathering and riots. Yet it is these "fashionable" houses of the prosperous yeomen and reactionary gentry that survive to give us unrepresentative, if not false, impression of the landscape of colonial and federal New England. Put in other words, between 30 and 40 percent of the 'elite' two-story houses built in the eighteenth century remain in the landscape today, whereas approximately two percent of all the one-story farmhouses built in the eighteenth century have survived to the present.

Recent recognition of the predominance in the eighteenth century of the single-story farmhouse, together with a desire to show how the eighteenth-century farm looked, led Old Sturbridge Village in the 1970s to bring in the single-story Pliny Freeman farm to be the centerpiece of their reconstruction of the New England farm in the early republic, 1780-1810. (This work, researched, planned, and carried through to become a working demonstration

museum by one of my doctoral students, Darwin Kelsey, is a reconstruction done to the best of our knowledge then in the 1970s). Old Sturbridge Village's commitment to reconstruct what we New Englanders have almost lost — the typical farm complex of the colonial era — is the clarion call to preserve a classic example of one of the very few surviving farm complexes of an average (middling) farm family in the eighteenth century, before it disappears.

It is remotely possible that the farmhouse of the Freegrace Marble site was built in 1731 as the date on it maintains. There are a few surviving single-story houses with tentative early-to-mid eighteenth century dates, with chimneys in the end gable, and possibly 2 or 3 with two chimneys placed as the Marble house had them until the early twentieth century: slightly in from the end gable (Steinitz, 1988). But these are rare and not verified as to date. In Sutton the earliest houses with central hallway plans come later (1767 in the Crowell House), and it is not until the first decade of the twentieth century on Boston Road and its environs and on the main roads, that this houseform becomes at all 'common.' When the style does come in, the chimneys are symmetrically placed on the roof ridge halfway between central hall and end gable, and of similar size. In the most fashionable urban centers of New England, and in the country seats of the "Tory" gentry, central hallway plans with two chimneys on the roof ridge were in the vanguard of English architectural taste in the early eighteenth century. Freegrace Marble, a stone mason who is said, in the town history (1878) to have worked on the Old State House at the head of King (now State) Street in Boston (built 1712), may have been familiar and worked with avant-garde central hallway houses of the wealthy "aristocrats" and (Tory) gentry in the Boston region before coming to Sutton. This could explain why the house unlike practically all other substantial

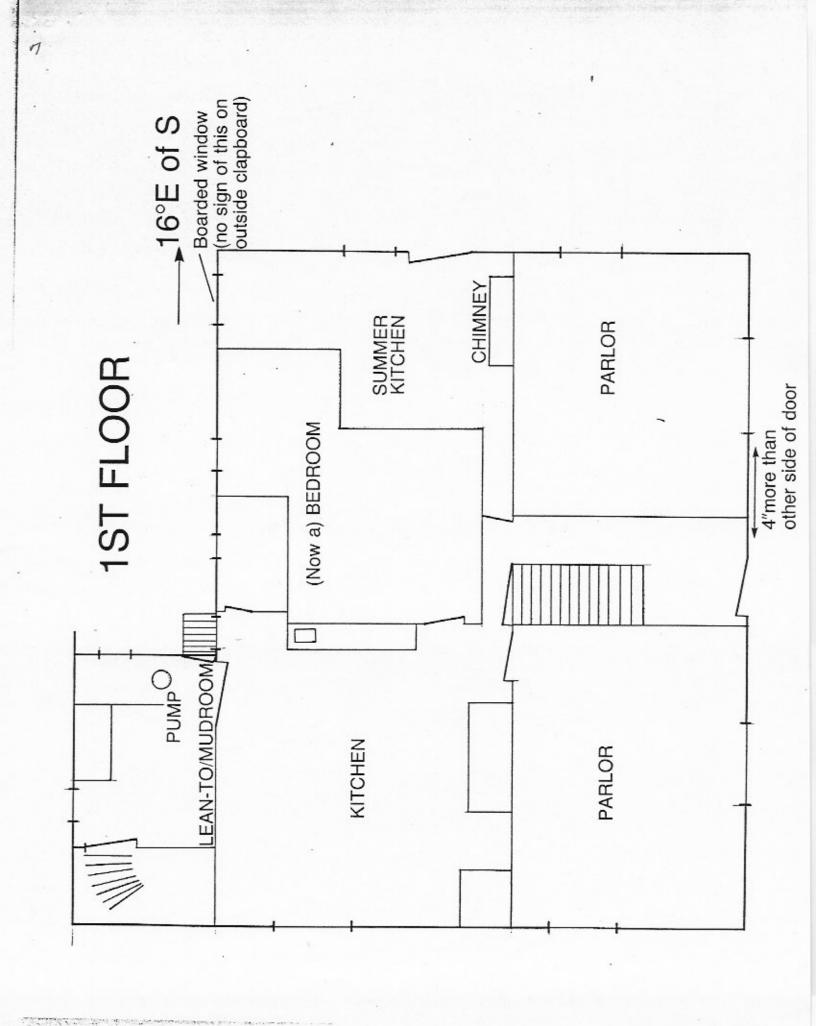
farmhouses of the mid-eighteenth century in Sutton and in the rest of central Massachusetts not only has a central hallway and a four-room plan with two chimneys 'on' the roof ridge but also presents its facade to the full view of the road rather than to the sun (16 degrees E of South).

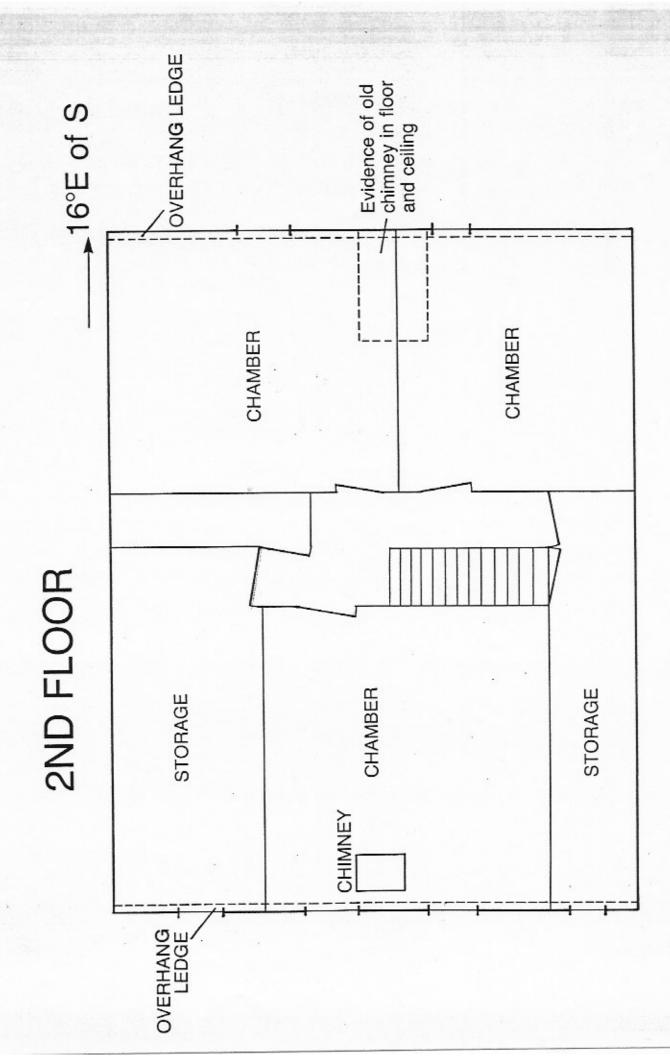
But these characteristics are so common as to become almost universal for all but artisan houses during the increased prosperity after the revolution. In this period a landscape 'revolution' occurred in New England. 'New' houses of the late Georgian, federal, type appeared in the new villages, particularly around the 'commons' that became new 'greens,' on which stood the new Bulfinch-Benjamin style churches. The commercial prosperity of the new villages and the mill villages was paralleled by a 'great rebuilding' of the dispersed farm houses set in their own lands in increasingly prosperous Massachusetts. Massive central chimneys gave way to two smaller chimneys set on the roof ridge midway between the central hallway and the end gable. Single-story farm houses with central chimneys had been replaced by, or absorbed into, two-story houses in the pre-revolutionary period. This process continued after the revolution as central chimney houses, particularly the few surviving single-story ones, were either torn down or removed, and replaced by houses with two-chimney, central hallway, four-room four-hearth plans, invariably presenting the impressive facade to the street, as the Marble house does.

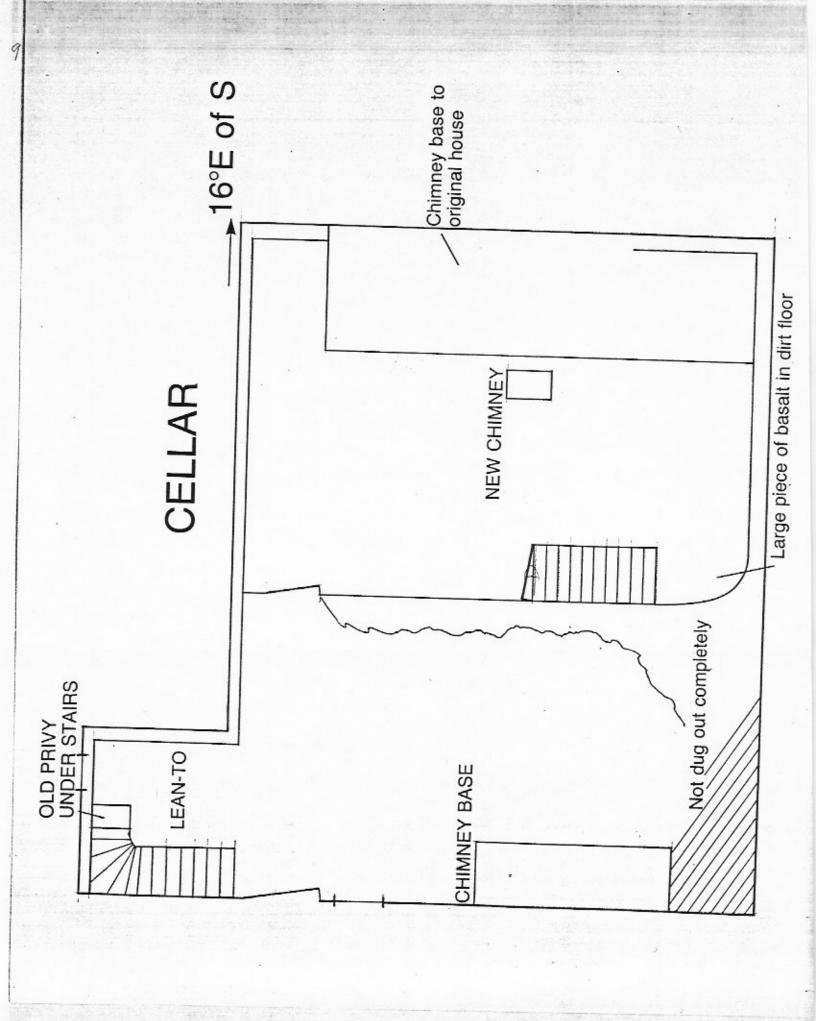
There is much architectural evidence to suggest that, in the immediate post-revolutionary period, this is what happened to the Marble house. The pre-existing farmhouse (probably single-story, for reasons to be suggested later) was replaced, rather unusually, by a single-story house of 'similar' first-floor dimensions. This suggests that, perhaps because of fire, the

'new' farmhouse was built early, using the new 'style', but retaining the single-story. Two, possibly three, reasons for this choice suggest themselves. At the time of building the association of the two-story central hallway house with Tory loyalists and 'British' gentry was still strong, as witnessed by the fact that no houses of this type were built for more than 25 years in the town between 1767 and 1794, (while substantial two-story central chimney houses, albeit with narrower bases and often facing the street (Boston Road) were still being built in architecturally conservative Sutton in the 1790s). Could it be also that at the time of building the farm had yet to experience the commercial prosperity of the federal period that would have enabled the farmer (Malachi Marble) to build in two stories? Another possibility is that the farm, such an ideal one in the subsistence-improvement period with its exceptional array of soils and a mosaic of land uses/resources, was both too small and too diverse in its soils and resources to specialize and take full advantage of the new markets for dairy produce and vegetables in the nearby mill villages and towns of the Blackstone Valley. Thus the single-story farmhouse could be a sign of both the farm family's already marginal position and of priorities different from those of neighboring hilltop farmers with big fields and large acreages better suited to the emerging commercial world.

Preliminary investigations of the interior suggest a post-revolutionary date for the house. The bead on the boxing of the beams in northwest parlor is late eighteenth-century as are the nails, the pintles and straps, latches, and doors. Accordion lath with cut nails is found exposed in the southeast room. Nowhere are there found the giveaway signs of early and mid-eighteenth century houses:rosehead nails, thick riven oak laths (with roseheads), champfering in the lower rooms and gunstocks (with one probable exception behind







boxing). Both chimneys and fireplaces of the late eighteenth century were removed in the early twentieth century. Notches on the central ridge pole show exactly where the chimneys were placed — surprisingly close to the end gable (two feet away at both ends). With the chimneys on different sides of the ridge pole and, surprisingly, of different sizes, the chimneys were not symmetrical. These facts support an early date of building in the period 1785-1800, with the slight irregularities in the chimney positions, substantial differences in sizes, and the positions close to the end gable suggesting a very early, rather than a late date in this fifteen-year period, by the end of which time it was the established fashion to have two matched chimneys placed precisely halfway between central hallway and end gable to create 'symmetry'.

A number of findings suggest that there may have been on the site a preexisting house of typical mid-eighteenth century style. The long southwall is
almost as long as the front. In fact it is oriented precisely 16 degrees east
of south, the orientation of the fronts of most houses of the mid-18th century, in order to maximize (passive) solar radiation in the two large front
rooms. The "raised terrace" on the south side of the house, thought to have
been a herb garden and with a wall exactly parallel to the existing side wall
of the house may well be the former south-facing front of an early house
(simple archaeological work can establish this). The present full cellar consists of two parts. An extremely well-finished cellar of basalt with carefully cut faces finished by a well-trained stone mason, and another cellar of
crude field stone with the 'common' wall faced on the "half-cellar side" and
crude field stone on the outer side. The two 'sections of the cellar were
built in different eras, and the larger 'basalt' cellar has a long protrusion

that suggests the base of a central-chimney stack.

Outbuildings

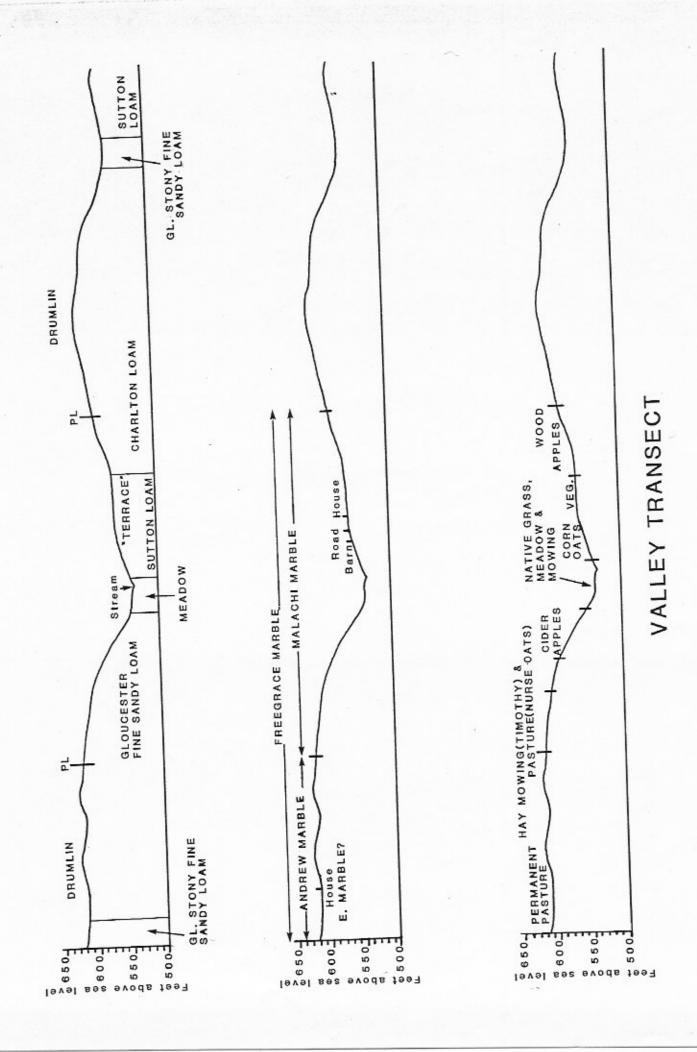
The town history (1878) states that "the house in which Freegrace Marble lived and died was situated on the opposite side of the road (Burbank Road), west of the house as it now stands" (p.390). The history also notes the site of an outbuilding: "Freegrace Marble purchased of the town...the old building...built as a defense against the Indians. This building was moved to a spot about forty of fifty feet south-west from the (present) house...where it was used for religious meetings and other public purposes....Mr. Joseph Hathaway used it for a time as a machine shop, driving the machinery by horse power, using the old fashioned tread-wheel...(He) made shuttles in the beginning of his business....(The building) was taken down a few years since by Mr. Leland" (late 1860s?). These buildings it should be possible to locate by archaeology.

The main barn below the house is a two-level, end-opening three-bay bank barn of mortice-and-tenon construction bigger than the side-opening English barns common in the subsistence period but appreciably smaller than the five-bay bank barns that became common in the mid-nineteenth century during the height of prosperity of commercial dairying (Glassie, 1968, pp. 160, 186-187). It was probably built by Oliver Leland between 1811 and 1840. Access to the barn is by the bank opposite the farmhouse, from the farmyard (Sibley Road). Access to the lower level is by doors that open on to Burbank Road. Clearly the cattle were brought down Burbank Road from the small-stone fields. In summer when they were in the big fields to the east, they came to be milked across the stone bridge and along the path that is now Sibley Road. The unique thing about this barn is that the main farm floor rests in the middle

on a massive outcrop of black basalt, partially pared away in later years for wallstone. Two outbuildings of mid-to-late nineteenth century vintage complete the cluster. One, an open shelter for farm equipment is on the side of the bank-approach to the main barn, midway between the main barn and the small storage barn with side-opening doors that faces the farmhouse across the farmyard. This barn is perched high on ten-feet walls open to the north. Here were once stacked between layers of straw ice-blocks cut by saw from the Sibley Reservoir. This south-facing small barn and its underpinnings acted to keep the sun off the ice in the 'pit' at all times. The stone walls to the east of the farmyard bound a sizeable paddock from which stones do not appear to have been cleared. (Thus it may have been a paddock from the first). The complex of outbuildings suggests the eighteenth century pattern of small, discreet, buildings for different functions, loosely clustered across the street from the farmhouse, rather than the nineteenth century pattern of a big multipurpose barn often connected, or close to the farmhouse. Even if the barns on the site are of nineteenth century construction, the eighteenth-century barns that preceded them were almost certainly on the same sites and of somewhat similar size and function as their successors.

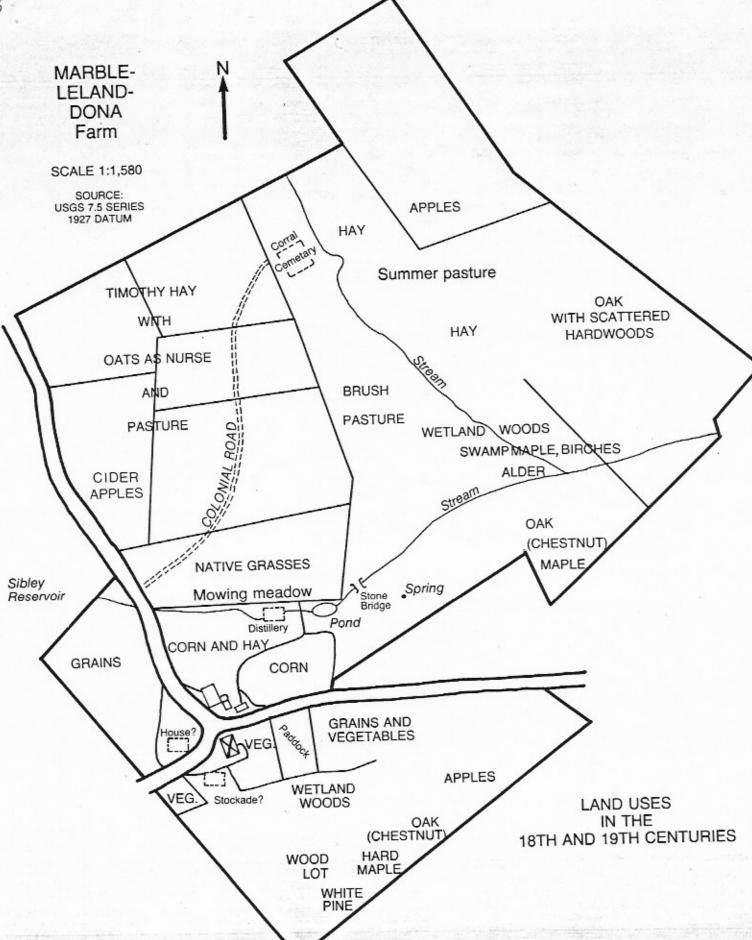
Valley Transect

The selection of this valley transect by Freegrace Marble was shown by the U.S.D.A. soil surveyors two centuries later (in 1927) to be an inspired folk choice, for in the small space of 100 acres Freegrace Marble had six distinctly different soil types, each especially suited to one or more of the farm uses (vegetables, orchards, meadow, grains, hay-mowing, pasture, and wood-lot land) necessary to the success of the subsistence farm economy.



By selecting a farm in a vale with wetland-meadow bounded by drumlins Marble was giving himself the sort of ecologic niche that cultural geographers/anthropologists have long recognized as optimal for survival and development because of the array of resources in close proximity. It was in such valley transects that humankind developed in East Africa (Leakey), where agriculture and plant and animal domestication first developed in S.E. Asia (Sauer), S.W. Asia (Braidwood), and in the Americas (McNeish, Vavilov), where cities first developed in the Tigris-Euphrates transect (Mumford) and in central America (R.M. Adams). Valley transects were also critical in northwest Europe where mixed (general) farming, practiced by Marble, first developed in what is now northern France (Dion, Le Lannou), and where the Anglo Saxons learned to maximize their resources by having land on both hill and vale and by locating farms and villages on the 'break-of-land' between the two (Darby, Wooldridge). Marble had not only an array of soils, but in a region where many of the soil types are poor he had soil types that ranged from 'fairly good' to 'very good'.

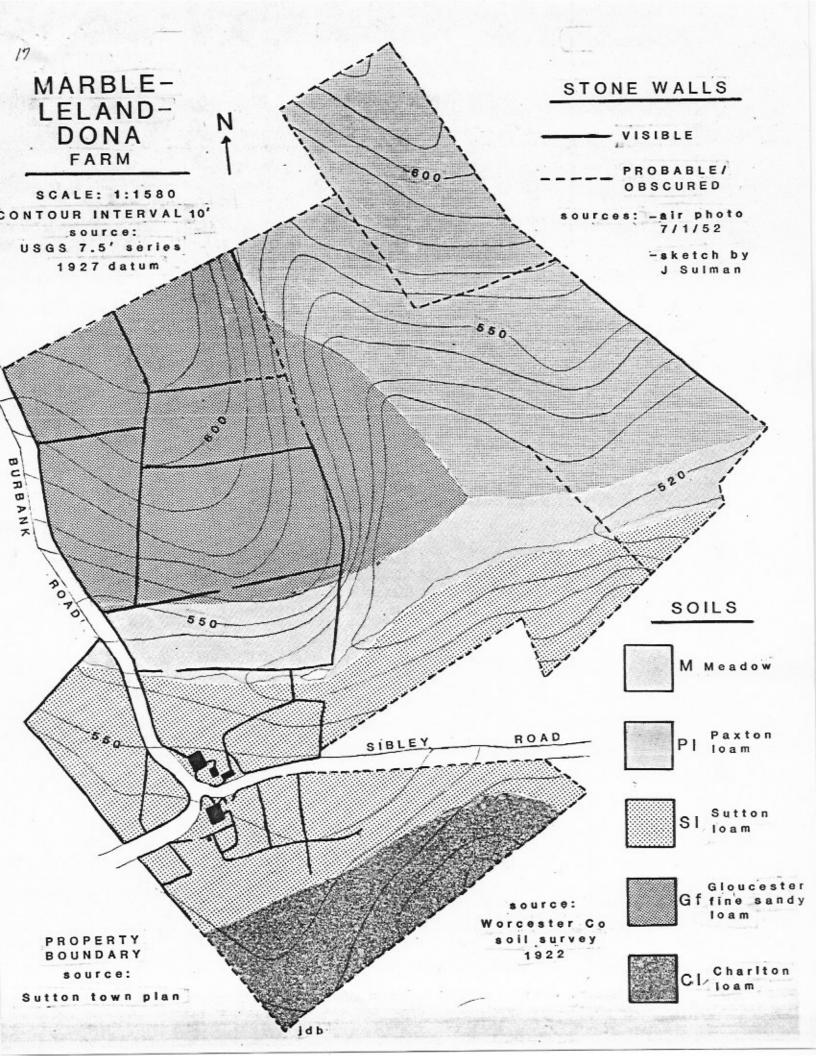
In locating his farmhouse and buildings at the 'break-of-land' between the meadow and the north slope of a drumlin on the south side of the farm, Marble was drawing on a thousand years of Anglo Saxon tradition in south-eastern England where his family originated. He was almost certainly aided in this choice by the Indians who favored and used this site as revealed by surface 'finds' (stone mortars and pestles) on the terrace near a fine spring that is often a concomitant of the 'break-of-land'. Indians in the region had hunted and gathered for 4,000 years and practised slash-and-burn (shifting) agriculture in this region for approximately 500 years before the Marbles arrived. They had established what the U.S.D.A. soil surveyors would later



confirm: that the seven acres of terrace soil on the south side of the stream (Sutton Loam) "is one of the most productive soils in the county;" "that it is good corn land," and that "most vegetables grow exceedingly well." These U.S.D.A. judgements (1927, pp. 1571-2) substantiate that this soil which occupies less than two per cent of the surface of Worcester County was among the best in the county for the Indians' corn-bean-squash economy.

As the Hassanamiscos were still very much present in the adjacent lands to the east when Marble arrived, it is likely that these terrace lands were cleared and open (little of the rest of the property would have been), and for that reason constituted the sort of choice site only available for an original settler (Marble was one of the 30).

Situated at the far-eastern extremity of the rich Sutton loam that covers much of northwestern quadrant of Sutton (and which would make it one of the most prosperous and populous agricultural towns in Worcester County in the colonial period and in the early republic) the Marble farm was also at the eastern extremity of Sutton settlement when Marble settled the land (Parson, 1934). He was, as it were, on the border zone of two 'topographies' — the relatively flat—to—rolling, early settled, Sutton Loam lands of Sutton Center (and Eight Lots) and the drumlin—and—wetland environment of northeast Sutton. The first of these topographies was occupied by Yankee pioneers in the 1720s while over the second ranged the Hassanamisco Indians. Where the two ecologies met and interdigitated, was a site optimal for the Indian economy. This site on the edge of Indian country makes sense of the oral tradition that one of Marble's first acts in taking the land was to build a log—stockade for defensive purposes, better to fend off potential Indian attacks. (It should be possible with archaeological work to locate the site of this stockade). As



there are so few instances of log-building in New England, this would be a high priority project.

That Marble would settle such an exposed site may seem foolhardy, but in doing so he was in the vanguard of American pioneer tradition. Unlike many farmers in the 1720s in Sutton his terrace land was probably open (thanks to the Indians). Consequently the first two/three years of 'difficulty' while the first land was cleared were less difficult for him. His relatively open Sutton Loams were quickly sown to corn, oats, and vegetables for which they were by far the best suited of all the six soil types the Marbles had acquired. For the next 200 years this would be the prime vegetable and grain land of the property.

After this early period of 'difficulty' the Marbles almost certainly turned to clearing some of the Charlton Loam lands south of the terrace, clothed at the time with chestnut, oak, hard maple and white pine (U.S.D.A., 1927, pp. 1562-3), as they are clothed today with hardwoods. Logs of chestnut, with its dense texture and resilience against water, were rolled down the hill for use on the stockade. Chestnut beams, sills and summers from the slopes behind the house provided the structural members for the house. Oak provided material for studs, planks, joists, and laths, and the trim and doors were undoubtedly of white pine which made up ten per cent of the woods on Charlton Loam. The hard maple also significant in the woods on Charlton Loam was used in furniture and for firewood. Part of this wooded area would have been left in woodlot to provide structural timber and firewood. Apple orchard would have occupied the cleared area on the hill slope (initially with pasture under the orchard trees for sheep and calves, later planted to a cover crop in midsummer as the pasture deteriorated), for "most of the farms" on this soil

"have small orchards in which apples predominate" (and in Sutton there are still commercial orchards on Charlton Loam (U.S.D.A. 1927, p. 1563). By contrast, on the flat land of the Sutton Loam, there was less air drainage and poorer ground drainage, with the result that "apples are not so highly colored as those grown on the more hilly land," (U.S.D.A. 1927, p. 1572). Furthermore, with two good sites for apples on the Charlton Loam and on the Paxton Loam to the east, Marble was unlikely to have wasted any of the single plot of Sutton Loam, so exceptional for corn, oats, and vegetables.

Some confirmation that this Charlton Loam was chosen for apples, and eventually for a sizeable orchard, is the note in the town history that close by "there was a distillery situated...on the brook that passes from the Sibley Reservoir to Marble's pond, about 30 rods below the road...used...for the manufacture of cider brandy," (History, 1878, p. 391). As the cleared areas of Charlton Loam in Worcester County are otherwise devoted "almost exclusively to mowing," it is possible that a small portion of this land was in hay mowing, but it seems unlikely, for the Marble property had rolling lands on the north slopes good for haying.

It is clear from the patterns of walls that the Marbles early recognized the difference between the meadow below the house and that below the stone bridge. Through the former the stream carries a steeper gradient with better natural drainage. From the first this was good permanent pasture with native grasses prized by the early settlers. The native grasses, although rather coarse were cut for hay from the beginning. European grasses seeded in later were timothy and red top. This area was used more and more for hay as soon as other pasture lands to the north were opened up, for on these wetter lands "yields of hay are good even in dry seasons, ranging from 1 to 2 1/2 tons per

acre" (U.S.D.A. 1927, pp. 1588-9). No nurse crops were needed and 'mowings' in this area were allowed to remain for indefinite periods without being reseeded. Such valuable meadow was early bounded by stone walls (as it is today) and used mainly for livestock pasture in fall, winter, and early spring.

The 'meadow' soils below the bridge are a more extensive wetland, as the stream gradient levels out and drainage becomes sluggish. Here is a forest of white and gray birches, swamp maple, 'willow with high bush blueberries and alder in the underbrush;" an area presumably left by the Marbles as a water source for cattle pasturing on the extensive Paxton Loam of the east.

After early establishing the farm on the three bands of different soils in the south, around the farm, Marble and his sons began to clear the Gloucester Fine Sandy Loam on the drumlin north of and opposite the farmhouse. The U.S.D.A. (1927) tells us that "practically all land (in this soil) was cleared and cultivated at one time, but (in this century it) has grown up into forest," (p. 1556). As a soil that is only "fairly important" in Worcester County, it is the poorest of the five soils now in the Marble property. As such, it might have been expected to have reverted to forest in the twentieth century as much of these soils have done. Fortunately this did not happen here, largely, one suspects because the area was adjudged more valuable than the richer Paxton Loams to the east because of (1) proximity to the farm and barns during the part-time dairy period when it was necessary to bring in the dairy cattle for milking to and fro each day, and (2) the existence of tall effective stone walls dividing the 'Gloucester' land into five small fields of between two and four acres. The small number of dairy cattle of the part-time farm could thus be moved easily from field to field, two or three fields could be used for pasture each spring and summer while two or three would be protected for mowing like the meadow field. In most years one of the five fields would be reseeded and nursed by oats - a practice necessary on these soils. This land "fairly well suited to dairying, livestock, and orcharding" shows traces of the last in the gnarled apple trees within the field and on the wall margins. It seems probable that before and after the "distillery" of cider brandy experiment there were cider apples being grown in the field nearest the road and distillery.

The fifth soil on the remaining Marble property is the Paxton Loam--part of a large drumlin beyond the brook and in the far east. Paxton Loam "represents some of the best open farming land in the county" (U.S.D.A., 1927, p. 1567). In Worcester County it was and is the soil type most extensively cleared: "fully 85 or 90 per cent of it" in 1927 compared with 60-65 per cent for Sutton Loams, and 50-55 per cent on Charlton Loams (see also Parson, 1934, pp. 84-5).

On the Marble property today it is covered as it was in the beginning "with oak and a scattering of hardwoods," (U.S.D.A. 1927, p. 1566). A portion of this land was probably the Marble woodlot, simply because of its remoteness from the center of gravity of the farm. As indicated by the remnants of stone walls, fields were large and gradually abandoned (as indicated by tree-size and type) except perhaps as wood pasture during the era of the part-time farm in the twentieth century.

In the two previous 'ecologies' and particularly in the commercial ecology, 1790-1890, these lands were predominantly in mowing, with some in pasture. "This soil has a wonderful moisture-storage capacity; on this land the grass stays green during seasons when it fails on other soil types," (U.S.D.A.

1927, p. 1566) consequently livestock were moved to this land during the more droughty summer months, to let the 'Meadow' and 'Gloucester Fine Sandy Loam' soils recover. "Drainage is well established," but "water seepage often appears on hillsides of these perfectly shaped drumlins," (U.S.D.A. 127, p. 1566). Thus there is water available in these large fields where there is none in the small fields on the Gloucester Fine Sandy Loam nearer to the farm. Thus the cattle in summer did not concentrate exclusively of the stream bottom end of the north-south aligned fields in the east.

The main use of the fields, certainly in the commercial dairy phase in the nineteenth century and probably also in the subsistence period, was for mowing. "Hay produces from 1 to 3 tons per acre, depending on soil and fertilization" (second only to Sutton Loam in the Marble property but better than 'Charlton Loam,' 'Meadow' soils, and 'Gloucester Fine Sandy Loam,' in that order). Kept in mowing, "usually timothy and clover," and nursed by oats, the fields were mowed until timothy began to fail. Then the land was used as pasture. "The sides and the nose of the drumlins make excellent orchard sites" (U.S.D.A., 1927, p. 1567) and, as the Marbles and Lelands had such a site, orchards were certainly located here.

The sixth soil on the original Marble property was the Gloucester Stony
Fine Sandy Loam, broken land north of the farm bordering Burbank Road. "In
its original condition this land contained entirely too much stone for profitable cultivation...Because the stones interfere with the cutting of hay, most
of the cleared land is in pasture," (U.S.D.A. 1927, p. 1557). This land was
the last to be cleared on the Marble property. A house was built on this land
in 1750 or thereabouts, the year that Enoch Marble, Freegrace's second son
married. The house was probably occupied by his family. House and property

probably split off from the present Marble property in the 1760s (Freegrace died at 93 in 1775). Fortunately Enoch's land had some Gloucester Fine Sandy Loam to the south and Paxton Loam in the east to redeem it, but it was no rich valley transect farm like his father's, inherited by the youngest brother, Malachi. That most of Enoch's sons married and died elsewhere suggests that this hardscrabble farm held no attractions for them. It came eventually to Malachi's son Andrew and passed out of the family at Andrew's death in 1808, two years before the Malachi (Freegrace) Marble section passed to Oliver Leland, 1810-11.

The contrast between the two farms is a marked one: one is a valley transect farm rich in an array of resources; the other is a stony-drumlin-top farm on land of second quality with Indians as nearest neighbors. "There used to be many years ago an old wigwam just west of this farm, where the Indians lived for many generations, cultivated the fields and chased the deer until the last one passed away to the happy hunting grounds of the Great Spirit," (Town History, 1878, p. 390). With Indians to the west and east the Enoch Marble section of the Marble property replaced the Freegrace Marble farm as the frontier outpost on the border zone between the English and the Indians.