

United States Department of the Interior  
National Park Service

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National Register of Historic Places  
Inventory—Nomination Form

received

date entered

See instructions in *How to Complete National Register Forms*  
Type all entries—complete applicable sections

1. Name

historic PLEASANT GROVE SOFT-ROCK BUILDINGS THEMATIC RESOURCES

and or common

2. Location

street & number See individual structure/site forms not for publication

city, town vicinity of

state Utah code 049 county Utah code 049

3. Classification

Category	Ownership	Status	Present Use	
<input type="checkbox"/> district	<input checked="" type="checkbox"/> public	<input checked="" type="checkbox"/> occupied	<input type="checkbox"/> agriculture	<input type="checkbox"/> museum
<input checked="" type="checkbox"/> building(s)	<input checked="" type="checkbox"/> private	<input checked="" type="checkbox"/> unoccupied	<input type="checkbox"/> commercial	<input type="checkbox"/> park
<input type="checkbox"/> structure	<input type="checkbox"/> both	<input type="checkbox"/> work in progress	<input checked="" type="checkbox"/> educational	<input checked="" type="checkbox"/> private residence
<input type="checkbox"/> site	<b>Public Acquisition</b>	<b>Accessible</b>	<input type="checkbox"/> entertainment	<input type="checkbox"/> religious
<input type="checkbox"/> object	<input type="checkbox"/> in process	<input checked="" type="checkbox"/> yes: restricted	<input type="checkbox"/> government	<input type="checkbox"/> scientific
	N/A <input type="checkbox"/> being considered	<input type="checkbox"/> yes: unrestricted	<input type="checkbox"/> industrial	<input type="checkbox"/> transportation
		<input type="checkbox"/> no	<input type="checkbox"/> military	<input type="checkbox"/> other:

4. Owner of Property

name various -- see individual structure/site forms

street & number

city, town vicinity of state

5. Location of Legal Description

courthouse, registry of deeds, etc. Utah County Courthouse

street & number Center Street and University Avenue

city, town Provo state Utah

6. Representation in Existing Surveys

title Pleasant Grove Reconnaissance Survey has this property been determined eligible?  yes  no

date 1984 federal  state  county  local

depository for survey records Utah State Historical Society

city, town Salt Lake City state Utah

## 7. Description

<b>Condition</b>		<b>Check one</b>	<b>Check one</b>
<input type="checkbox"/> excellent	<input type="checkbox"/> deteriorated	<input type="checkbox"/> unaltered	<input checked="" type="checkbox"/> original site
<input checked="" type="checkbox"/> good	<input type="checkbox"/> ruins	<input checked="" type="checkbox"/> altered	<input type="checkbox"/> moved    date _____
<input checked="" type="checkbox"/> fair	<input type="checkbox"/> unexposed		

### Describe the present and original (if known) physical appearance

The thirteen buildings contained in the Pleasant Grove Soft-rock Buildings Thematic Resources nomination were all built of locally quarried soft-rock between about 1865 and 1900. Soft-rock is the local name for tufa, a limestone formed by minerals from springs accumulating around vegetation. It is known for its soft, porous composition. When in the ground, tufa stone can be easily sawn into blocks, yet when exposed to the air hardens to become an excellent building material. The ease in quarrying the stone dictated the abundant use of soft-rock and made it possible for semi-skilled men to lay the stone. This type of stone is found only in Pleasant Grove,<sup>1</sup> and its use there makes it a distinctive facet of Utah's early architectural history.

Twelve houses and one town hall comprise the nomination. Three of the buildings (marked below with an asterisk) have previously been listed on the National Register of Historic Places. The houses are typical vernacular types found in Utah. The Adams, Richins, Young, and Larsen houses are examples of the one-story hall-parlor type, the Green, Ashton/Driggs, and Olpin houses are two-story hall-parlor type houses, the White House is an example of the central passage type, and the Harper, Wadley, Goode, and Lim houses display the T-shaped plan arrangement of the cross-wing type. Ten of the buildings have gable roofs, two are hipped, and one has a combination hip and gable. All of the buildings have similar exterior and interior wood trim that is consistent with the decorative woodwork of Utah's architecture during the second half of the nineteenth century.

The masonry work on the buildings is similar, though there are some variations. The width of the walls and the size of the stone blocks are fairly consistent, and most of the buildings have generally squared stones and even coursing on at least the principal facade. There is random course stone work on the facades of a few of the houses and on the the side and rear elevations of most of the others. Some of the buildings have raised mortar joints (both original and replicated), while others have flush joints. Raised mortar joints project a more defined, rectangular appearance of both the individual blocks and the masonry work as a whole. Deterioration of the mortar on most of the buildings has required repointing over the years. The quality of the repointing varies from professional, historically accurate work to do-it-yourself patchwork with cement. Repointing quality was not heavily considered in the evaluation, because even the most insensitive repointing did not significantly detract from the overall visual integrity of the buildings. A much more important consideration was simply the existence of exposed soft-rock exterior walls.

Although over 100 soft-rock buildings are estimated to be extant in Pleasant Grove, only these thirteen maintain their historic integrity. The most common alteration to soft-rock buildings was to cover the exterior walls with stucco. Though some of the stuccoing may have been done in the late nineteenth century, most of it was probably done during the 1930-50s. All stuccoed soft-rock buildings were excluded from the nomination because they are no longer visually identifiable as soft-rock buildings. Some unstuccoed buildings that were extensively altered were also excluded. These suffer from an overwhelming combination of alterations, such as large additions, altered fenestration, dormers, and interior remodeling.

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Additions and alterations have been made to all thirteen "eligible" soft-rock buildings as well. These include historic and non-historic additions of soft-rock, wood, concrete block, or brick on the rear or side elevations. Dormers have been added to three of the houses, windows and doors have been enlarged or filled in on at least six of the houses, and interiors have been substantially remodeled on several. Despite the changes, these thirteen buildings maintain a substantial degree of their original form and materials. A few of them are on the borderline of acceptable integrity, but they were deemed eligible because they are among the significantly low percentage (10%) of soft-rock buildings that have not been either stuccoed or demolished.

A few other soft-rock buildings were excluded from the nomination for reasons other than integrity. Granaries and other small outbuildings were left out unless the principal building on the property was also considered eligible. Though these smaller buildings document the use of soft-rock, they are secondary structures that lack individual significance.<sup>2</sup>

Buildings constructed of more than one material were excluded if the principal material was not soft-rock. For example, the old Clark Brothers Store (built c. 1895) at 43 South Main Street is a two-story building with soft-rock sidewalls and a brick facade. The brick front is clearly the principal material, therefore the building was not included in this nomination.

Later buildings constructed of soft-rock were also left out. They were not part of the original period of soft-rock use, and they do not represent a distinct segment of the local building industry as did the earlier buildings. Only four post-1900 soft-rock buildings have been identified. They include the 1917 Vance House, a California bungalow-style house, the c. 1919 Warnick House, a bungalow located in Manila, a few miles north of Pleasant Grove, the 1938-40 city hall, and The Bungalow, a 1972 reception center adjacent to the Vance House. The Bungalow is obviously ineligible because of its age, and the city hall, also less than 50 years old, was left out because it was stuccoed at the time of its construction. The Vance House represents an entirely different aspect of soft-rock use. The rough-textured, rustic appearance of the soft-rock on the Vance House is a conscious element of house's style, whereas on the earlier houses soft-rock was used simply out of necessity. The soft-rock on the Warnick House was salvaged from the fire-damaged ruins of the Alma Radmall House. Both the Vance and Warnick houses are well preserved, and it is possible that they will be added to the nomination at a later date when the "revival" of soft-rock use is more clearly understood.

The following is a list of the buildings included in this thematic nomination.

1. \*Joseph Olpin House                      Built c. 1875  
    510 South Locust Avenue                National Register 1977  
    Pleasant Grove

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2.	*Ashton/Driggs House 119 East 200 South Pleasant Grove	Built c. 1866 National Register 1972			
3.	*Pleasant Grove Town Hall 107 South 100 East Pleasant Grove	Built 1887 National Register 1985			
4.	Jacob Hanmer White House 599 East 100 South Pleasant Grove	Built c. 1874			
5.	Charles T. H. Goode House 1215 East Main American Fork	Built 1897			
6.	Samuel Green House 264 East 200 South Pleasant Grove	Built c. 1870			
7.	John Alma Adams House 625 East 200 South Pleasant Grove	Built 1877, 1889			
8.	William Friend Young House 550 East 500 North Pleasant Grove	Built 1885-86			
9.	Thomas A. Richins House 405 North 500 East Pleasant Grove	Built c. 1897			
10.	Neils Peter Larsen House 1150 North 100 East Pleasant Grove	Built c. 1870			
11.	William Lim House 695 North 400 East Pleasant Grove	Built 1888			
12.	Edward Wadley House 2445 North Canyon Road Pleasant Grove	Built 1893			
13.	Alfred William Harper House 125 West 400 North Lindon	Built 1877, 1889			

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<sup>1</sup>The "pot rock" found in Midway, Wasatch County, is similar to soft-rock, though its composition is less porous and it is formed by hot mineral springs.

<sup>2</sup>Except in rare instances, outbuildings are dealt with only as contributing buildings on properties. The comprehensive architectural survey that was conducted in Pleasant Grove in 1984 did not clearly identify all of the outbuildings in the community because of the difficulties in seeing them on the interior of blocks and in associating them with the proper houses. Therefore, there is no reliable data on the number, condition, and types of soft-rock outbuildings there are in Pleasant Grove.

## 8. Significance

Period	Areas of Significance—Check and justify below			
<input type="checkbox"/> prehistoric	<input type="checkbox"/> archeology-prehistoric	<input type="checkbox"/> community planning	<input type="checkbox"/> landscape architecture	<input type="checkbox"/> religion
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> archeology-historic	<input type="checkbox"/> conservation	<input type="checkbox"/> law	<input type="checkbox"/> science
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> agriculture	<input type="checkbox"/> economics	<input type="checkbox"/> literature	<input type="checkbox"/> sculpture
<input type="checkbox"/> 1600-1699	<input checked="" type="checkbox"/> architecture	<input type="checkbox"/> education	<input type="checkbox"/> military	<input type="checkbox"/> social/
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> art	<input type="checkbox"/> engineering	<input type="checkbox"/> music	<input type="checkbox"/> humanitarian
<input checked="" type="checkbox"/> 1800-1899	<input type="checkbox"/> commerce	<input type="checkbox"/> exploration/settlement	<input type="checkbox"/> philosophy	<input type="checkbox"/> theater
<input type="checkbox"/> 1900-	<input type="checkbox"/> communications	<input type="checkbox"/> industry	<input type="checkbox"/> politics/government	<input type="checkbox"/> transportation
		<input type="checkbox"/> invention		<input type="checkbox"/> other (specify)

Specific dates c. 1865-c. 1900

Builder/Architect see individual structure/site forms

### Statement of Significance (in one paragraph)

The soft-rock buildings of Pleasant Grove are significant because they help illustrate the distinctive regional diversity found in nineteenth-century Mormon building stones in Utah. They also represent a distinct phase of the building construction industry in the Pleasant Grove area. Members of the Church of Jesus Christ of Latter-day Saints, the Mormons, occupied Utah and surrounding areas of the Great Basin for the purpose of establishing a Kingdom of God on earth. Mormon community building rested upon the dual principles of order and permanence, and the grid-iron town plan and use of stone as an early building material have become important symbols of LDS settlement values.<sup>1</sup> A great variety of local building stones were utilized around the state, a fact that lends rich diversity to the vernacular architecture of the state. A grey, metamorphic stone is found from Salt Lake City northward to the Idaho border; to the east, in the Heber Valley, and in the extreme south, various hues of sandstone are encountered; in the Sanpete Valley an oolitic limestone predominates; in the vicinity around Beaver, builders used both black and pink volcanic stone; and in Pleasant Grove it was the unusual brownish soft-rock tufa that met the settlers building needs.<sup>2</sup> Between about 1865 and 1900, an estimated 130 buildings were constructed in Pleasant Grove of locally quarried tufa, or soft rock. Most of the earlier buildings, constructed during the 1850s and '60s, were made of adobe, which was easily made and worked. As fired brick became more available and fashionable during the late nineteenth and early twentieth centuries, it replaced soft-rock as the dominant local building material. Today, only 13 soft-rock buildings remain in the Pleasant Grove area that exhibit a degree of historic integrity. These properties are important examples of a local architectural character and contribute significantly to an understanding of the regional diversity of the state's architectural history as a whole.

Pleasant Grove's settlement in mid-September 1850 necessitated hurried preparations for winter. Some families built one-room log cabins with dirt roofs. Others spent the winter in wagon boxes that were set on logs. During that first winter all the dwellings were located together for protection from the local Ute Indians who were living in the area at the time of Mormon settlement. The following spring the settlers spread out and began constructing larger houses. In addition to log, adobe was used extensively for constructing houses. The first adobe-makers in Pleasant Grove were George A. Clark, Samuel White, and Thorit Peck--men from Company A of the Mormon Battalion who had gained experience in adobecraft during the construction of Fort Moore (now Los Angeles, California) during the Mexican War. Adobe became the principal building material in town for the next 10 to 15 years.<sup>3</sup>

In the summer of 1853, the Walker War broke out between the Mormon settlers and the displaced Utes. The Mormons built a fieldstone fort with a four foot high wall, and many log and adobe houses were dismantled and moved within its protective boundaries. Once again, adobe became the chief material for the 60

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new houses that were built within the fort. The Walker War lasted only a year, so by 1854 houses were again being constructed on town lots outside the fort. The houses within the wall were left intact for refuge in case of Indian attack, and many remained occupied.<sup>4</sup>

Just when the tufa or soft-rock was discovered is not known, but the first stone houses were probably built as early as the mid-1860s. These houses represented the increasing growth and permanence of the community during the immediate post-pioneering period. In most cases the actual builders of the soft-rock houses are not known. Many settlers had experience in laying adobe and could have transferred this new-found skill to the easily worked stone. A case in point is the story of Henry B. Radmall. Radmall was a butcher by trade, but in 1853 was given the work of helping lay up the Salt Lake City fort wall and the "eagle yard or Brigham Young's yard." Henry moved from Salt Lake City to Springville just in time to help lay their adobe fort wall in 1854 and to build a meetinghouse. He also laid up an adobe and pole fence around his hay and grain fields. Henry moved to Pleasant Grove April 9, 1862, and settled on a quarter section land grant which included the Big Springs soft-rock quarry.<sup>5</sup> He built a small soft-rock house on this property (probably in the mid-1860s) and in 1882 moved west of Big Springs and built another soft-rock house.<sup>6</sup> The first house was demolished in 1983 while the later one still stands at 399 East 1100 North, but has been significantly altered.

Pleasant Grove also had its share of professional stonemasons. Several stonemasons were present in the original pioneering party and others soon moved in. Stonemasons listed in the 1870 census were Joseph Olpin and George Slough, while the 1880 census lists Andrew Jensen and Maritz Paulsen. Another stonemason in Pleasant Grove after 1876 was Olof Monson, who worked with his brother Swen in laying brick on the Provo tabernacle.<sup>7</sup> It is recorded that Olof layed stone on the John Alma Adams House.<sup>8</sup> William Friend Young also made his living as a stonemason after 1884 and built his own soft-rock house.<sup>9</sup>

The Richins family from Gloucestershire, England, also figures in the quarrying of the Pleasant Grove soft-rock. Richins family tradition tells of John Richins being sent to Pleasant Grove in 1870 by Brigham Young because of his previous knowledge of stone quarry work in his native country. Areas in England have a similar soft-stone, such as the Portland-stone of Dorsetshire that "...is very soft when it comes out of the quarry; it works easily and becomes hard by length of time."<sup>10</sup> Richins and his sons initiated the building of about five soft-rock homes for their own use, but inexplicably did not do the masonry work themselves.<sup>11</sup>

Two major quarries have been documented, and three minor quarry sites are known. Perhaps the most prolific of the quarries was the William Wadley Quarry two miles north of town. William Wadley, a coal miner from England, came to Pleasant Grove in 1872 and took a land grant on a northeast section of

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land against the foothills. He established himself as a well-known fruit grower, apiarist, and nurseryman, but continued his interests in mining. He established the soft-rock quarry and a fire clay pit as commercial interests.<sup>12</sup>

Another major quarry was the Big Springs Quarry located approximately one mile southeast of the Wadley Quarry. This was a commercial quarry owned by Henry Radmall. Thomas Walker, a former forest ranger and long-time resident of Pleasant Grove, recalled in an interview that three small quarries existed near Grove Creek Canyon and Battle Creek Canyon directly east of Pleasant Grove. All quarry sites are located on a plateau of the first line of foothills at the base of the Wasatch Mountain Range.<sup>13</sup> The range runs generally north and south and lies to the immediate east of Pleasant Grove. Springs from the mountain drainage have left mineral deposits around vegetation that grew in the area and formed this porous, amorphous rock referred to as soft-rock.

Fired brick played only a minor role in Pleasant Grove's building industry during most of the nineteenth century. One of the first kilns of fired brick was burned in 1872. John Brown, who was mayor at that time, noted that "Two Danishmen have burned a kiln of brick, a very good article, they are setting the second kiln of brick, all of which are engaged.... This will help our place if it becomes a permanent business."<sup>14</sup> The business apparently did not prosper, because very few brick buildings were constructed during the 1870s and '80s. The 1890 Sanborn Maps of Pleasant Grove show only two brick house on the 18 blocks in the central part of town (the only area covered by the map), and an early resident of the town claimed that there were only three brick houses in the town prior to the establishment of the local brickyards in the 1890s and early 1900s.<sup>15</sup> Thereafter significant numbers of brick buildings were constructed as brick became a more fashionable and easily obtained building material than soft-rock.

Changing architectural tastes and problems inherent with soft-rock resulted in alterations to many soft-rock buildings during the late nineteenth and early twentieth centuries. The first period of stuccoing was probably between the 1880s and about 1900. A number of soft-rock buildings were stuccoed and laid off in imitation of finely crafted stone work.<sup>16</sup> It is unclear whether this was generally a later alteration or an original treatment. During the twentieth century, primarily the 1930s-'50s period, asbestos and asphalt siding and stucco were used to "modernize" the appearance of many soft-rock houses. The cement stucco used at that time was harder than the earlier stucco, and it was not scored to resemble stone. The reason for covering the soft-rock was functional as well as aesthetic. The porous texture of the soft-rock had presented problems of insect and bird infestation, and, after several decades of weathering, the buildings were in need of remortaring and other repairs. A simple solution was to cover them with a new exterior surface. Four of the thirteen buildings included in this nomination were previously stuccoed or sided. Of the 100-plus soft-rock buildings known to

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exist, only about 19 have the soft-rock exterior exposed. Some of these have been greatly altered by additions and other architectural changes.

In the years since about 1900 soft-rock has been used only sparingly, and then for reasons other than necessity, as was the case during the nineteenth century. Perhaps the first of the twentieth-century soft-rock buildings was the California bungalow-style home of Dr. Harvey M. Vance, built in 1917 (79 W. 200 South). Its rough textured, random course, soft-rock walls contribute to the rustic, stylistic intent of the house and differ greatly from the more refined appearance of the earlier soft-rock buildings. That rustic appearance was repeated in The Bungalow, a reception center, that was built adjacent to the Vance house in 1972. Another twentieth-century soft-rock building is the Warnick House in Manila, located three miles to the north of Pleasant Grove. It is a bungalow that was constructed c. 1919 of soft-rock salvaged from the Alma Radmall House that had been destroyed by fire in 1917. The Pleasant Grove City Hall, located at 35 South Main, is another building that is reportedly built of soft-rock. It was constructed in 1938-40 by the Public Works Administration. The PWA may have chosen the bid that would employ the most men and use the least expensive materials; thus soft-rock was laid up and then plastered with a cement finish. A moratorium on quarrying the soft-rock from Big Springs was imposed by the city after 1972. This area is now a source of Pleasant Grove culinary water.

<sup>1</sup> Richard H. Jackson, "The Mormon Village: Genesis and Antecedents of the City of Zion Plan," Brigham Young University Studies 17 (Winter 1977), pp. 223-240.

<sup>2</sup> Barry M. Roth, A Geographic Study of Stone Houses in Selected Utah Communities (Master's thesis: Brigham Young University, 1953).

<sup>3</sup> Howard R. Driggs, Timpanogos Town, pp. 50-51.

<sup>4</sup> 1860 Federal Census of Pleasant Grove, Utah.

<sup>5</sup> U.S. Land Grant to Henry Radmall in possession of Beth Olsen, Pleasant Grove.

<sup>6</sup> Henry Bullivant Radmall, "Autobiography," unpublished, Pleasant Grove City Library.

<sup>7</sup> N. LaVerl Christensen, Provo's Two Tabernacles and the People Who Built Them, p. 117.

<sup>8</sup> Writings of John Lewis Adams, unpublished, p. 3. Available at Pleasant Grove City Library.

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<sup>9</sup>Marjorie Young Wax, Provo, Utah. Interview by Beth Olsen, 1986. Mrs. Wax is a grand-daughter of William Friend Young.

<sup>10</sup>Peter Stockhom, Early American Crafts and Trades, p. 61.

<sup>11</sup>Eva Proctor, Pleasant Grove, Interview, 1986.

<sup>12</sup>Effie Adams, Wadley Family History, Pleasant Grove, 1986.

<sup>13</sup>Beth Olsen, field observations, Big Springs quarry, 21 May 1986. Mary Fugal Howes, personal interviews with Thomas Walker and Lloyd West, 3 June 1986.

<sup>14</sup>John Timmerman Brown, Autobiography of Pioneer John Brown 1820-1896, pp. 337-338.

<sup>15</sup>Pioneer Histories, "Talk Given by C.A. Fugal...(1958)" (Pleasant Grove, Utah: Daughters of Utah Pioneers Battle Creek Camp, 1964), Vol. I, p. 29. Available in the Pleasant Grove City Library. Christian A. Fugal (1876-1962) was a lifelong resident of Pleasant Grove.

<sup>16</sup>The ashlar-like appearance of plastered and scored walls was sometimes enhanced by applying flecks of black paint to the surface, giving the appearance of granite. This technique is visible in several historic photographs of Pleasant Grove houses (see the Alma Christiansen Collection, BYU Library). It was also recorded in field observations of the Benjamin Hawley House (55 East Center) by Roger Roper, February 1982. The exterior walls of the Hawley House were painted during its 1984 rehabilitation. The technique was also used on some adobe buildings in Pleasant Grove, most notably the Old Bell School (see older photographs in National Register file).



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Master's thesis, Brigham Young University, 1953.