

SQUARE TOWER GROUP
Hovenweep National Monument
Near Park Headquarters
Aneth Vicinity
San Juan County
Utah

HABS No. UT-132

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HISTORIC AMERICAN BUILDINGS SURVEY
National Park Service
U.S. Department of Interior
1849 C Street, NW
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HISTORIC AMERICAN BUILDINGS SURVEY

SQUARE TOWER GROUP

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Location: Hovenweep National Monument, near park headquarters, Aneth vicinity, San Juan County, Utah.

Significance: The Square Tower Group is one of six ruin complexes that together comprise the Hovenweep National Monument, an entity established in 1923 based on the recognition of the pre-European Pueblo culture and on the significance of its stone masonry. The complex built at the head of Little Ruin Canyon on Cajon Mesa took its name from the Square Tower located on the canyon bottom. Surrounding the canyonhead are Hovenweep Castle and Hovenweep House.

Description: Square Tower Group consists of a loose cluster of buildings located at the edge of Little Ruin Canyon and around a perennial water source, or seep. Nine discernible structures make up the ruin complex. Low stone walls connected the units within the Square Tower Group; 200 rooms, twelve towers, and many kiva depressions fill the group's structures.¹ Contributing to the ruinous appearance of the Square Tower Group are the remnants of the talus slope architecture or units built into the canyon slope in the 1270s. Once vacated, the talus slope architecture succumbed to erosion and vegetation.

The buildings within Square Tower Group were constructed of compound walls made of semi-course, loaf-shaped sandstone, mud mortar, and rubble in-fill. Building heights fluctuated between one- and two-stories. Upper floors and rooftops were made from viga (beam) and latilla construction. The latillas were smaller sticks laid perpendicular to the vigas; once the latillas were in place, the surface was covered with mud over bark. Openings usually were rectangles or T-shapes cut into the sandstone walls.

At Hovenweep Castle, small port holes in the exterior wall and two of the doorways, one inside and one out, are aligned in such a way as to create a solar calendar. Together the port holes and door openings provide dates for the summer and winter solstice and for the timing of the vernal and autumnal equinox sunsets. On those dates, sunlight highlights specific architectural features inside the castle. There are other calendrical features in the complex including petroglyphs.

History: The stone structures of the Square Tower Group rise out of a sage covered plateau near Little Ruin Canyon. The Pueblo III (A.D. 1150-1300) era of life in Cajon Mesa witnessed a shift from the mesa tops to a canyon environment. The canyonhead complexes around Hovenweep typify this change, so much so that this move is called the "Hovenweep phase." Settlement patterns of the Hovenweep phase are a cluster of sites separated by sparsely settled areas. At this time, the northern San Juan River Basin Anasazi -- who built the Square Tower Group -- communities were autonomous, that is, not answerable to a regional authority. Within the Anasazi community, they governed by consensus.

¹Based on 1970s archaeological information. See Ian Thompson, The Towers of Hovenweep (Mesa Verde National Park, CO: Mesa Verde Association, Inc., 1993).

Towers, such as the Square Tower and the tower in Hovenweep Castle, served a variety of economic, social, and ceremonial activities. While archaeology has unearthed a variety of rooms within the towers, only the suggested functions of grinding, manufacture, and ceremony can be made. However, enough evidence exists to discount the tower as a defensive structure and leave its name as a purely architectural classification.

Dendrochronology and archaeology date the construction of the Square Tower Group to the second half of the thirteenth century. The dates assigned to the Square Tower Group are based on two archaeological surveys, in the 1970s and in 1993, that uncovered ceramics, stone tools and architectural construction. Archaeological evidence also suggests that the community practiced agriculture, cultivating staples like corn and squash, in the sage plains around it.

Sources for Hovenweep:

Cattanach, George S. Jr. and Alden Hayes

1958 Excavation of Kiva 1 at Cutthroat Castle Hovenweep National Monument, Ms. on file Mesa Verde National Park, CO.

Cummings, Byron

1915 The kivas of the San Juan drainage. *American Anthropologist* 17(2). Washington.

Fewkes, Jesse Walter

1925 The Hovenweep National Monument. Bureau of American Ethnology, Annual Report 1923. Washington, D.C.

Gleichman, Carol L. and Peter J. Gleichman

1991 Context Document, Great Pueblo Period of the McElmo Drainage Unit A.D. 1075-1300. Native Cultural Services, Boulder, Colorado.

Gregory, H.E.

1938 The San Juan Country: A Geographic and Geologic Reconnaissance of Southeastern Utah. U.S.G.S. Professional Paper 188.

Holms, W.H.

1878 Report on the Ancient Ruins of Southwestern Colorado, Examined during the Summers of 1875 and 1876. United States Geological and Geographical Survey of Territories. Tenth Annual Report.

Huber, Edgar Kurt

1993 Thirteenth Century Pueblo Aggregation and Organization Change in Southwestern Colorado. Unpublished PhD dissertation, Department of Anthropology, Washington State University, Pullman, Washington.

- Jennings, Jesse D.
1978 Prehistory of Utah and the Eastern Great Basin. University of Utah Press, Salt Lake City.
- Kidder, Alfred V.
1910 Explorations in Southeastern Utah in 1908. American Journal of Archeology 14(3). New York.
- Lipe, William D.
1966 Anasazi Culture and its Relationship to the Environment in the Red Rock Plateau Region, Southeastern Utah. PhD dissertation, Yale University. Ann Arbor: University Microfilms.
- Matson, R.G., William D. Lipe and William R. Haase IV
1988 Adaptational Continuities and Occupational Discontinuities: The Cedar Mesa Anasazi. Journal of Field Archaeology 15(3):245-264.
- Morley, S.G.
1908 The Excavation of Cannonball Ruins in Southwest Colorado. American Anthropologist 10:596-610.
- Morley, S.G. and A.V. Kidder
1917 The Archaeology of McElmo Canyon, Colorado. El Palacio 4:41-70.
- Thompson, Ian
1993 The Towers of Hovenweep. Mesa Verde Museum Association, Inc. Mesa Verde National Park, Colorado.
- Winter, Joseph C.
1975 Hovenweep 1974 Archeological Report No. 1. Anthropology Department, San Jose State University, San Jose, CA.

1976 Hovenweep 1975 Archeological Report No. 2. Anthropology Department, San Jose State University, San Jose, CA.

1977 Hovenweep 1976 Archeological Report No. 3. Anthropology Department, San Jose State University, San Jose, CA.
- Woolsey, Anne I.
1978 Hovenweep 1977 Preliminary Report San Jose State University, San Jose, CA.

Suggested Bibliography, Mesa Verde National Park:

Adams, E. Charles, **The Origin and Development of the Pueblo Katsina Cult**, University of Arizona Press. 1991

An excellent theory on what happened following the move from the north around A.D. 1300, and the archaeological evidence in support of the theory.

Ambler, J. Richard, **The Anasazi, Prehistoric People of the Four Corners Region**, Museum of Northern Arizona. 1977

A prominent archaeologist looks at these prehistoric Pueblo peoples in terms of making a living, making a home, clothing and adornment, basketry & textiles, pottery, and religious life.

Amsden, Charles Avery, **Prehistoric Southwesterners from Basket-maker to Pueblo**, Southwest Museum. 1949

An early classic on the Basketmaker culture; it is excellent background reading on this phase.

Baars, Donald L, **The Colorado Plateau, A Geologic History**, University of New Mexico Press. 1983

A good basic geology of the local region. A bit technical.

Barnes, F. A., **Canyon Country Geology for the Layman and Rock-hound**, Wasatch Publishers, Inc. 1978

Non-technical regional geology written by the layman for the layman. Good background, easy reading.

Barnes, F. A. and Michaelene Pendleton, **Canyon Country Pre-historic Indians, Their Cultures, Ruins, Artifacts, and Rock Art**, Wasatch Publishers, Inc. 1979

Covers the Anasazi and the Fremont cultures. Lists local sites and museums to visit. Good section on artifacts.

Barnes, F. A., **Canyon Country Prehistoric Rock Art**, Wasatch Publishers, Inc. 1982

An older book on local area rock art, but still an excellent background for the local region.

Bossier, Robert, **The Hopi Way, An Odyssey**, Sunstone Press. 1985

Ethnological background of modern Hopi, necessary for those who interpret these prehistoric pueblos.

Breternitz, David A., Arthur H. Rohn and Elizabeth A. Morris, **Prehistoric Ceramics of the Mesa Verde Region, Second Ed.**, Interpark. 1974

The analysis of local pottery by phase and as compared with local pottery of other Anasazi localities in the same times. Helps in interpretation when sherds are available.

Breternitz, David A., **Mummy Lake**, Unpublished Manuscript. 1983

The actual excavation report of the feature known as Mummy Lake. This report suggests the site was a water collection and storage feature rather than a ceremonial feature.

Brody, J. J., **The Anasazi, Ancient Indian People of the American Southwest**, Rizzoli International Publications, Inc. 1990

Dr. Brody looks at building remains and other material cultural remains not as features and artifacts, but as architecture and art. A fresh way of viewing which brings a new and refreshing perspective to the reader.

Brody, J. J., **Mimbres Painted Pottery**, School of American Research, University of New Mexico Press. 1977

Included with Mesa Verde because of the many questions we get in the Museum as to the relationship of Mimbres and Mesa Verde Pottery. It's good to be able to answer visitor questions beyond the park boundary!

Cassells, E. Steve, **The Archaeology of Colorado**, Johnson Books. 1983

Excellent over-all story of archaeology in Colorado. Helps place Mesa Verde and Southwest into the context of the study of archaeology in Colorado. General background reading!

Cattanach, George E. Jr., **Long House, Mesa Verde National Park, Colorado**, National Park Service. 1960

The excavation report and data analysis of this site. A must for those who interpret this site to visitors!

Chapin, Frederick, **Land of the Cliff Dwellers**, University of Arizona Press. 1988

A reprint of the very first formal paper written about and presented about Mesa Verde. The man and paper for whom Chapin Mesa was named by Nordenskiöld! Wonderful background for interpreters!

Cheek, Lawrence W., **A.D. 1250, Ancient People of the Southwest**, Arizona Highways. 1994

Excellent history of the Anasazi and how they relate to the other contemporary cultures of the Southwest. Includes a travel guide. Excellent background for regional knowledge. Comprehensive coverage and superb illustrations, a book highly recommended to visitors in spite of the price.

Cole, Sally J., **Legacy on Stone, Rock Art of the Colorado Plateau and Four Corners Region**, Johnson Books. 1990

The best book on local rock art. Cole expands on Schaafsma's work and fills a much needed gap!

Cordell, Linda S., **Prehistory of the Southwest**, Academic Press. 1984

This has become the standard text for classes on Southwest Archaeology. Gives the commonly accepted theories and data and places everything in perspective.

Cordell, Linda S. and Dewitt Jones, **Anasazi World**, Graphic Arts Center. 1985

From the Smithsonian traveling exhibit of the same name. Covers from Anasazi to modern pueblo with excellent text by Cordell and photos by Jones. One of the inexpensive books frequently recommended to visitors!

Cordell, Linda S. and George J. Gummerman, Editors, **Dynamics of Southwest Prehistory**, School of American Research, Smithsonian Institution Press. 1989

Papers from an SAR research seminar. Adds some new dimensions of thought on topics current today.

Crown, Patricia and James Judge, **Chaco and Hohocom, Prehistoric Regional Systems of the Southwest**, School of American Research Press. 1991

Explores the idea of regional systems, and is one of the best books on understanding Chaco as a regional system. Best book on Chaco since Frazier!

Courlander, Harold, **The Fourth World of the Hopis**, University of New Mexico Press. 1971

Hopi legends and traditions. Again, this book provides the interpreter with information on the Hopi Indians which helps provide the Park visitor with information about the pre-historic Pueblo who once lived here.

Dossier, Edward P., **The Pueblo Indians of North America**, Weveland Press. 1983

Ethnology of the modern Pueblo by a noted Pueblo and also an anthropologist. Provides data needed to interpret these sites.

Dutton, Bertha, P., **American Indians of the Southwest**, University of New Mexico Press. 1983

Good anthropological information on the modern New Mexico Pueblo Indians by a noted local anthropologist.

Ferguson, William M. and Arthur H. Rohn Jr., **Anasazi Ruins of the Southwest in Color**, University of New Mexico Press. 1987

Because of the text by Rohn and the coverage of the entire region, this is another book frequently recommended to Park visitors!

Fewkes, Jesse W., "Antiquities of the Mesa Verde National Park, Spruce Tree House," **Bureau of American Ethnology, Bulletin 41**. 1909

The original excavation and stabilization report on Spruce Tree House. Necessary Background for interpretation!

Fewkes, Jesse W., "Antiquities of the Mesa Verde National Park, Cliff Palace," **Bureau of American Ethnology, Bulletin 51**. 1911.

The original excavation and stabilization report on Cliff Palace. As with the other ruins, necessary background for interpretation of the site!

Fewkes, Jesse W., "Excavation and Repair of Sun Temple, Mesa Verde National Park," **Smithsonian Miscellaneous Collections, Explorations and Field Work for 1916**. 1917

The excavation and stabilization report on this site. As always, necessary information for interpretation. One note of interest is how Fewkes arrived at a date of approximately AD 1300 for Sun Temple.

Fewkes, Jesse W., "A Prehistoric Mesa Verde Pueblo and Its People," **Annual Report of the Smithsonian Institution for 1916**. 1917

Report of the excavation and repair of Far View House. Necessary information for site interpretation.

Fewkes, Jesse, W., **Prehistoric Villages, Castles, and Towers of Southwestern Colorado**, Bureau of American Ethnology. 1919

Relates out-of-park local sites to those on the Mesa Verde. Includes Hovenweep, Sand Canyon, Goodman Point, Acmen, McElmo, Escalante, Mancos Canyon, Johnson Canyon, and others.

Fewkes, Jesse W., "Archaeological Field Work on the Mesa Verde National Park," **Smithsonian Miscellaneous Collections, Explorations and Field Work for 1919**. 1920

Original excavation and stabilization report on Square Tower House.

Fewkes, Jesse W., "Archaeological Field Work on the Mesa Verde National Park," **Smithsonian Miscellaneous Collections, Explorations and Field Work for 1920**. 1921

The original excavation reports for Fire Temple, New Fire House, Oak Tree House, and Cedar Tree Tower.

Fewkes, Jesse W., "Archaeological Field Work on the Mesa Verde National Park," **Smithsonian Miscellaneous Collections, Explorations and Field Work for 1921**. 1922

This is the excavation and stabilization report for the work on Far View Tower, Oak Tree House, Willow Tree House, and mention of Mummy House.

Fewkes, Jesse W., "Archaeological Field Work on the Mesa Verde National Park," **Smithsonian Miscellaneous Collections, Explorations and Field work for 1922. 1923**

Dr. Fewkes final season on the Mesa Verde. Original reports on Pipe Shrine House and Megalithic House excavations.

Frazier, Kendrick, **People of Chaco Canyon and Its Culture**, W. W. Norton. 1986

An earlier book on the Chaco Phenomenon written by a science writer rather than by an anthropologist. Good insight into understanding theories about Chaco.

Gabriel, Kathryn, **Roads to Center Place, A Cultural Analysis of Chaco Canyon and the Anasazi**, Johnson Books, 1991

Gabriel has taken data developed during the Chaco Project and written an excellent book for the layperson including much of the technical data from the project in a non-technical presentation.

Griffitts, Mary O., **Guide to the Geology of Mesa Verde National Park**, Mesa Verde Museum Association. 1990

The latest geology of the Park. Griffitts has done an excellent job compiling information which we all need to interpret the basic geology of the park which has such an influence on the ecology system and settlement patterns. See also Simrak.

Grant, Campbell, **Rock Art of the American Indian**, Outbooks. 1981

Again, an older book on rock art, but one that gives some good basic data in interpretation of rock art not necessarily found in some other the other sources.

Hayes, Alden C., **The Archeological Survey of Wetherill Mesa, Mesa Verde National Park, Colorado**, National Park Service. 1964

This report maps the locations of the eight hundred and six sites found during this survey on Wetherill Mesa and classifys sites as to phase of occupation. Good basic data for interpreters on Wetherill Mesa.

Hayes, Alden C. and James A. Lancaster, **Badger House Community, Mesa Verde National Park, Colorado**, National Park Service.1975

The excavation reports of the first three sites on the Badger House Community trail on Wetherill Mesa. Necessary information for interpreters on this mesa.

Hayes, Alden C., **Two Raven House, Mesa Verde National Park, Colorado**, Unpublished Manuscript. Undated.

The excavation report on Two Raven House, the final site on the Badger House Community trail on Wetherill Mesa. Hayes had to come back to the Park after the Chaco Project and do this report as the excavator had left the country without doing the write-up. Again, necessary for interpretation.

Hutchinson, Art and Jack E. Smith, Compilers, **Proceedings of the Anasazi Symposium, 1991**, Mesa Verde Museum Association. 1991

Papers presented at the 1991 Symposium held in the Park. As all such gatherings, some new ideas and ways at looking at old problems were presented. Good information!

Jackson, William H. and William M. Holmes, **Mesa Verde and the Four Corners, Hayden Survey 1874-1876**, Bear Creek Publishing Company. 1981

A reprint of the original government survey of the Mesa Verde. Good historical background for interpreters.

Kidder, Alfred V., **An Introduction to the Study of Southwestern Archaeology**, Yale University Press. 1924

The original text on Southwestern Archaeology, an old book but interesting still, and excellent historical background to interpreting the park today.

Lancaster, James A. and Don Watson, Excavation of Mesa Verde Pithouses, **American Antiquity**, Vol. 9, No. 2. 1942

The excavation report of the pithouse now used for interpretation as the first stop on the Mesa Top Loop on Chapin Mesa. A must for interpretation of the site.

Lancaster, James A. and Don Watson, "Excavation of Two Late Basketmaker Pithouses," **Archaeological Excavations in Mesa Verde National Park, Colorado, in 1950**, National Park Service. 1954

The excavation report of the pithouses at Twin Trees stop on the Chapin Mesa. Again, a must for those who interpret the site to visitors!

Lancaster, James A. and Jean M. Pinkley, "Excavation at Site 16 of Three Pueblo II Mesa-Top Ruins," **Archaeological Excavations in Mesa Verde National Park, Colorado, in 1950**, National Park Service. 1954

The excavation report of the three ruins now opened at Site 16 on the Mesa Top Loop of Chapin Mesa. Again every interpreter should be familiar with this information.

Lancaster, James A. and Philip F. Van Cleave, **The Excavation of Sun Point Pueblo," Archaeological Excavations in Mesa Verde National Park, Colorado, in 1950**, National Park Service. 1954

The excavation report of Sun Point Pueblo on the Mesa Top Loop of Chapin Mesa. Interpreters should be familiar with this information to explain the site to Park visitors.

Lister, Robert H. and Florence C. Lister, **Those Who Came Before**, Southwest Parks and Monuments Association. 1983

Tells of the archaeology done in the Southwest National Parks and Monuments. Lister & Lister is good and enjoyable reading. Interesting perspective on the archaeology in other national parks and monuments of the Southwest.

Lister, Robert H. and Florence C. Lister, **Mesa Verde National Park, Preserving the Past**, Sequoia Communications. 1987

The story of Mesa Verde National Park by the archaeologists who directed research and headed field schools in the Park for a number of years for the University of Colorado. Again enjoyable reading.

Lister, Robert H. and Florence C. Lister, **Aztec Ruins on the Animas--Excavated, Preserved, and Interpreted**, University of New Mexico Press. 1987

The story of the Aztec Ruins National Monument Archaeology. Many Park visitors want to know how Aztec relates to Mesa Verde.

Malville, J. McKim and Claudia Putnam, **Prehistoric Astronomy in the Southwest**, Johnson Books. 1989

Malville has come up with a very popular book on possible archeoastronomy sites in the local region. The Chimney Rock site is probably the most interesting in the book, and Hovenweep, Yellow Jacket and some of the areas west of Cortez are the sites nearest to Mesa Verde where archeoastronomy can be demonstrated easily.

Martin, Linda, **Mesa Verde, The Story Behind the Scenery**, KC Publications, Inc. 1993

Beautiful illustrations accompany a text by the person who knows Mesa Verde National Park better than any of the rest of us who have lived and worked here. A good book to recommend to park visitors, and a good book to review and to refresh our understanding on occasion!

Muench, David and Donald G. Pike, **Anasazi, Ancient People of the Rock**, Crown Publishing Company. 1974

An older book, but it will never go out of date. The Muench photography will continue to make this book worth more than the price! Excellent text makes this good general reading!

Nichols, Robert F., **Wetherill Mesa Excavations, Step House, Mesa Verde National Park, Colorado**, National Park Service. 1972

The excavation and stabilization report of Step House Cliff Dwelling in Step House Cave. A must for those who will be responsible to interpret this site to Park visitors.

Noble, David Grant, **Ancient Ruins of the Southwest, An Archaeological Guide**, Northland Press. 1981

A guidebook to take along as one visits the various ruins throughout the southwest. An older book, but one still of much value. Gives temporal relationships. Good source!

Noble, David Grant, Editor, **Understanding the Anasazi of Mesa Verde and Hovenweep**, School of American Research. 1985

A compilation of papers by researchers who have worked at both Mesa Verde and Hovenweep over time. An excellent, short, and easy reading publication.

Noble, David Grant, Editor, **Bandelier National Monument: Geology History, Prehistory**, School of American Research. 1980

Papers by researchers who have worked at Bandelier. The Rio Grande Anasazi. Excellent information!

Noble, David Grant, Editor, **Houses Beneath the Rock, The Anasazi of Canyon de Chelly and Navajo National Monument**, Ancient City Press. 1986

Six papers by researchers familiar with these two national monuments and the Kayenta Anasazi. Again, excellent, easy to read, and the very best of information!

Noble, David Grant, Editor, **New Light on Chaco Canyon**, School of American Research, 1984

A brief, easy to read explanation of the Chaco Phenomenon as we understand the theory.

Noble, David Grant, Editor, **Pecos Ruins: Geology, Archaeology, History, Prehistory**, School of American Research. 1981

Papers on the Pecos site--the easternmost Anasazi or Pueblo site. The major Pecos ruin seems to begin about AD 1325, about the time the north region was completely abandoned.

Noble, David Grant, Editor, **Salinas: Archaeology, History, Prehistory**, School of American Research. 1982

The story of the Rio Grande Anasazi in the Salinas region which is southeast of Albuquerque, New Mexico. This region was occupied before the Spanish and not abandoned until in the 1600's.

Noble, David Grant, Editor, **Wupatki and Walnut Canyon, New Perspectives on History, Prehistory, Rock Art**, School of American Research. 1987

Papers on these two Sinagua sites and their relation to contemporary Kayenta Anasazi sites.

Noble, David Grant, Editor, **Zuni & El Morro, Past & Present**, School of American Research. 1983

The southernmost Anasazi or Cibola Anasazi. To the immediate southerly directions were the Mogollon and Mimbres Mogollon. Traces development contemporary with northern Anasazi.

Noble, David Grant, Editor, **The Hohokam, Ancient People of the Desert**, School of American Research. 1991

Papers on the Hohokam, a culture contemporary with the Anasazi in the riverain areas of southern Arizona. All of these School of American Research Publications are of extreme value in helping understand the contemporary peoples of the southwest outside of Mesa Verde. These easy-to-read publications are good background for the Mesa Verde interpreter!

Nordenskiold, G., **The Cliff Dwellers of the Mesa Verde**, Mesa Verde Museum Association. 1893

A reprint of the original 1893 book with the printing plates made by photocopy of the original pages. Seeing the ruins through the eyes and camera of Nordenskiold in 1891 gives the modern-day interpreter an unique understanding of the Park! Should be required reading for interpreters!

Nusbaum, Jesse L., **Report on the Excavation and Repair of Balcony House**, Unpublished Document. Undated.

This document is in the Mesa Verde Research Library with the original notation "Anthro. Archives--Smithsonian Institution--Nusbaum Papers--box 11." It is really all we have on the original work in Balcony House.

Nusbaum, Jesse L., **The 1926 Re-Excavation of Step House Cave, Mesa Verde National Park**, Mesa Verde Museum Association. 1981

Nusbaum's report of the 1926 excavation where he was searching for, and found, Basketmaker III pithouses in Step House Cave. The information in Nordenskiolds book that put Nusbaum onto this search makes a great story to share with Park visitors!

O'Bryan, Daric, "Excavations in Mesa Verde National Park, 1947-1948," **Medallion Papers, No. 39**. Gilla Pueblo. 1950

The original excavation reports of the two sites, P-I and early P-II, at Twin Trees on the Mesa Top Loop on Chapin Mesa. This report also contains the best summary of the geology of Mesa Verde National Park.

Oppelt, Norman T., **Guide to Prehistoric Ruins of the Southwest**, Pruett Publishing Company. 1981

Similar to David Noble's book. However many of the ruins of the area are opened to the public, but not on the highways and difficult to find. Oppelt's book gives specific directions for finding those out-of-the-way sites.

Oppent, Norman T., **Earth, Water, and Fire: the Prehistoric Pottery of Mesa Verde**, Johnson Books. 1991

In this book, Oppent covers the manufacture and classification of the Anasazi pottery of Mesa Verde. His photographic illustrations of pottery from the different time phases provide an easier to use classification aid than the Lucius and Breternitz Field Guide.

Patterson, Alex, **A Field Guide to Rock Art Symbols of the Greater Southwest**, Johnson Books. 1992

Good background information for working with those many visitors who want to know what different symbols may have represented.

Peterson, Kenneth Lee, **Climate and the Dolores River Anasazi**, University of Utah Press, 1988

The observed population movements from the Dolores Project seem to support similar observed movements on the Mesa Verde as suggested by Rohn and also by Smith. Petersons climate reconstructions suggest a reason for these observed movement patterns as well as a general theory for the abandonment of the north in AD 1300.

Rippeteau, Bruce Estes, **A Colorado Book of the Dead: the Prehistoric Era**, Colorado Historical Society. 1978

Places Mesa Verde and the Anasazi in perspective in Colorado prehistory. Also, this contains some fantastic early historic photographs of Mesa Verde that are worth the time to review the publication!

Rohn, Arthur H. Jr., **Cultural Change and Continuity on Chapin Mesa**, The Regents Press of Kansas. 1977

Rohn publishes the results of Watson's archaeological survey of Chapin Mesa, and presents theory to explain the fact that some parts of the Mesa demonstrate more settlement in some time periods than in others. Good background for the interpretation of the Park. Note, Smith finds similar evidence of movement in his surveys in other areas of the Park.

Rohn, Arthur H. Jr., **Mug House, Mesa Verde National Park, Colorado**, National Park Service. 1971

The excavation report on Mug House on Wetherill Mesa. Although Mug House is not now opened, the report is almost a must reading. In it, the evidence that supports Rohn's, and others, belief that the

Mesa Verde Anasazi became the Modern Kerisan speaking Pueblos. Also includes evidence to support a number of other popular anthropological theories.

Sando, Joe S., **The Pueblo Indians**, Indian Historic Press. 1976

Provides ethnological data on the modern Pueblo, which is necessary in doing ethnographic analogy as the Park interprets these sites.

Schaafsma, Polly, **Indian Rock Art of the Southwest**, School of American Research, University of New Mexico Press. 1980

This work is considered as "The Bible" on Southwestern Rock Art. Necessary when doing Rock Art interpretation!

Simrak, David T., **The Geologic Story of Mesa Verde Country, Mesa Verde National Park and Vicinity**, La Plata Color Printing. 1983

An earlier geology of Mesa Verde National Park than that by Mary Griffiths. Some different data, and perhaps a bit more expansive than Mary's book. See also Griffiths.

Smith, Duane A., **Mesa Verde National Park, Shadows of the Centuries**, University of Kansas. 1988

Mesa Verde National Park in historic times. This book provides great stories to use with Park visitors! This is a book with which every interpreter should be familiar.

Smith, Duane A. and Jack E. Smith., *A Love Affair That Almost Wasn't: the Nusbaum Years*. Mesa Verde Occasional Papers No. 1. Mesa Verde Museum Association. 1981.

Most interesting is the account of pioneering archeology by Nusbaum which led to the collection of artifacts, some of which are on display in the Archeological Museum.

Smith, Jack E., **Mesas, Cliffs, and Canyons, The University of Colorado Survey of Mesa Verde National Park, 1971-1977**, Mesa Verde Museum Association. 1987

The first major Archaeological survey in the Park was done by Don Watson following World War II. This was strictly Chapin Mesa--the ruins area to be opened to the public. Watson found more than one thousand sites. With the Wetherill Mesa project, Alden Hayes surveyed Wetherill Mesa and found an additional eight hundred and six sites. The University of Colorado contracted to survey the remainder of the Park, and Jack Smith led the field work of this survey between 1971 and 1977. This publication is a brief summary of these archaeological surveys.

Smith, Jack E., Editor, **Proceedings of the Anasazi Symposium, 1981**, Mesa Verde Museum Association. 1981

Papers on a variety of topics giving research results and suggesting new research topics. As with all symposia, this information is one way to keep current in research.

Stokes, William Lee, **Scenes of the Plateau Lands and How They Came to Be**, Starstone Publishing Company. 1969

An older, very basic geologic history of the Colorado Plateau. Easy to read and understand for those with very limited geology background!

Stokes, William Michael and William Lee Stokes, **Messages on Stone, Selections of Native Western Rock Art**, Starstone Publishing Company. 1980

This unique little publication classifies Rock Art by what is pictured--a very literal interpretation. Good to use with children and youth as an introduction to the study of Rock Art.

Thompson, Ian, **The Towers of Hovenweep**, Mesa Verde Museum Association. 1993

Although Hovenweep is yet unexcavated, and most of the material culture still is buried, this book provides a provocative look at the Anasazi of Hovenweep. Thompson's text is supported by very dramatic photographs as well as passages quoted from modern Pueblo peoples! Again, great general background reading, and some of the modern Pueblo thought undoubtedly also applies to the sites on the Mesa Verde.

Waters, Frank, **Book of the Hopi**, Penguin Books. 1963

Although not currently in favor with some Hopi, others highly recommend it. Good ethnological data for background in interpretation of these prehistoric sites.

Watson, Don, **Indians of Mesa Verde**, Mesa Verde Museum Association. No Date

A look at the Mesa Verde Anasazi from a former Park Archaeologist who excavated many of the local sites and who interpreted much of the material culture that was recovered from those sites.

Wenger, Gilbert R., **The Story of Mesa Verde National Park**, Mesa Verde Museum Association. 1980

Wenger's book looks at all aspects of the Mesa Verde, the Anasazi, the ecology, the plants and animals. Another of the books highly recommended to Park visitors when they ask about books for additional information!

Widdison, Jerold G., Editor, **The Anasazi. Why did they leave? Where did they Go?** Southwest Natural and Cultural Heritage Association. 1991

This is a transcript of talks presented by leading Southwest archaeologists and Zuni and Hopi Pueblo representatives at a panel discussion held at the Anasazi Heritage Center on June 19, 1990. Good

background information on the current theories of abandonment of the north!

Williamson, Ray A., **Living the Sky, The Cosmos of the American Indian**, University of Oklahoma Press. 1984

A major work on archaeoastronomy in the United States. Good basic information and background for dealing with Kim Malville's book. Archaeoastronomy is a frequent topic with visitors and their questions should be answered from a background of scientific knowledge as much as is possible.

Winkler, William C., **Mesa Verde**, Interpark. 1977

A great little booklet, very complete, easy to read, outstanding with children. Unfortunately also out-of-print!

Yandell, Michael D. Editor, **National Parkways Comprehensive Guide to Mesa Verde, Canyon de Chelly, & Hovenweep**, World Research Publishing Company. 1987

Dave Breternitz and Jack Smith do an excellent presentation of Mesa Verde in this publication! Good Photographs also.

Project Information: Documentation of the Square Tower Group, Hovenweep National Monument was undertaken in 1993-94 by the Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) of the National Park Service. The project was sponsored by the Rocky Mountain Regional Office (RMRO) of the National Park Service and by Mesa Verde National Park (MEVE). The principals involved were Robert Baker, Director, RMRO; Richard Cronenberger, Regional Historical Architect, RMRO; Lawrence Wiese, Superintendent, MEVE; Linda A. Towle, Chief, Research and Resource Management, MEVE; Kathleen Fiero, Archaeologist, MEVE; Robert J. Kapsch, Chief, HABS/HAER; Paul D. Dolinsky, Chief, HABS; and Joseph D. Balachowski, Staff Architect, HABS. The bibliographic information was compiled by Dick Richmond, MEVE, May 1996, and reviewed for this project by Kathleen Fiero, Archaeologist, MEVE.

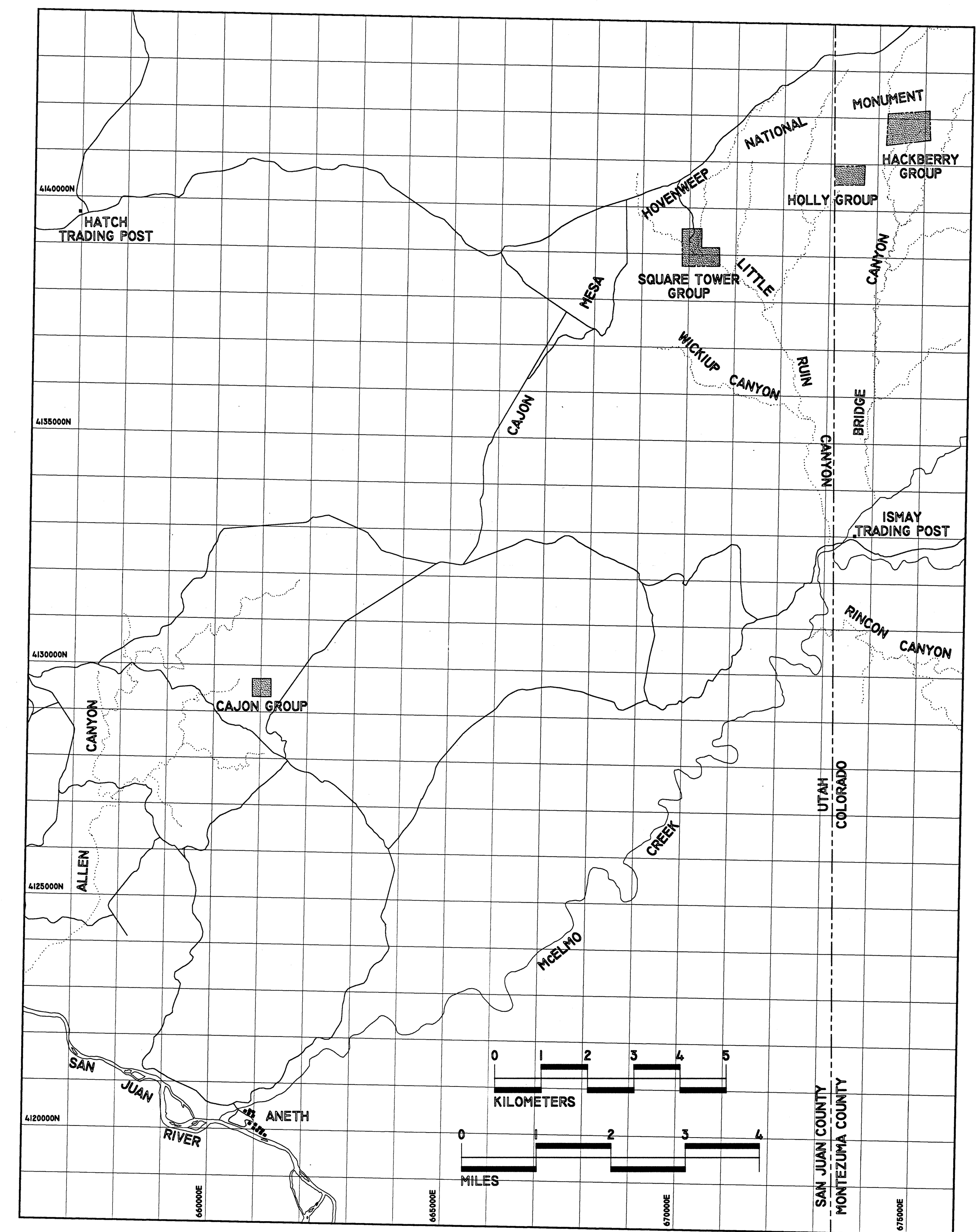
SQUARE TOWER GROUP

HOVENWEEP NATIONAL MONUMENT

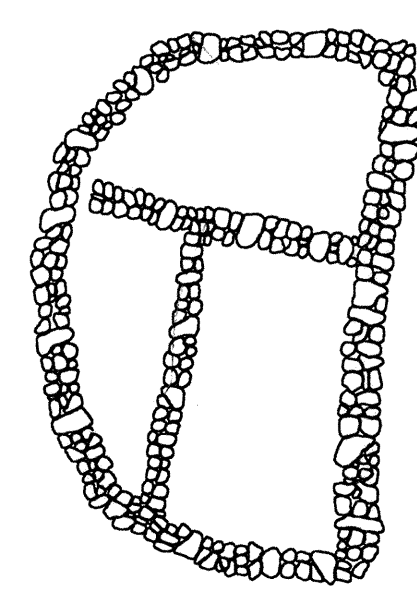
THE SQUARE TOWER GROUP, ONE OF THE SIX RUINS GROUPS COMPRISING HOVENWEEP NATIONAL MONUMENT, IS LOCATED AT THE HEAD OF LITTLE RUIN CANYON ON CAJON MESA AT THE VERY SOUTH-EASTERN CORNER OF UTAH. THE COMPLEX CONTAINS TOWERS, GREAT HOUSES, UNIT-TYPE HOUSES AND STRUCTURES BUILT IN ALCOVES AND ATOP BOULDERS, ALL GROUPED AROUND A PERENNIAL SPRING. TYPICAL CONSTRUCTION FEATURES COMPOUND WALLS, CONSISTING OF OUTER WALLS OF SEMI-COURSED, LOAF-SHAPED SANDSTONES SET IN A MUD MORTAR, WITH RUBBLE INFILL IN BETWEEN. OPENINGS ARE TYPICALLY RECTANGULAR OR T-SHAPED. THE STRUCTURES ARE ONE AND TWO STORIES TALL. ROOFS AND UPPER FLOORS WERE CONSTRUCTED OF VIGAS (BEAMS) AND LATILLAS (SMALLER STICKS LAID PERPENDICULAR TO THE VIGAS) COVERED WITH MUD OVER BARK. SOME OF THE OPENINGS APPEAR TO BE ORIENTED TO THE ANNUAL SOLSTICES AND EQUINOXES, SUGGESTING A CALENDRIAL FUNCTION.

LITTLE ARCHAEOLOGICAL RESEARCH HAS BEEN DONE AT HOVENWEEP. DENDROCHRONOLOGY SUGGESTS THAT ALL OF THE BUILDINGS WERE CONSTRUCTED IN THE 13TH CENTURY. THE CONSTRUCTION TECHNIQUES OF THE SURVIVING BUILDINGS, POTTERY REMAINS FOUND AT THE SITE, AND ARCHAEOLOGICAL EVIDENCE INDICATING AN AGRICULTURE BASED ON CORN, BEANS AND SQUASH, SUGGEST A CLOSE RELATIONSHIP WITH THE PUEBLO INDIANS LIVING TO THE EAST. ARCHAEOLOGISTS REFER TO THESE PEOPLE AS THE NORTHERN SAN JUAN BASIN ANASAZI. THE POPULATION OF THE SQUARE TOWER COMMUNITY IN THE 13TH CENTURY IS UNKNOWN. THE SQUARE TOWER GROUP HAS BEEN THE FOCUS OF INTERPRETATION AT HOVENWEEP NATIONAL MONUMENT SINCE ITS FOUNDING IN 1923.

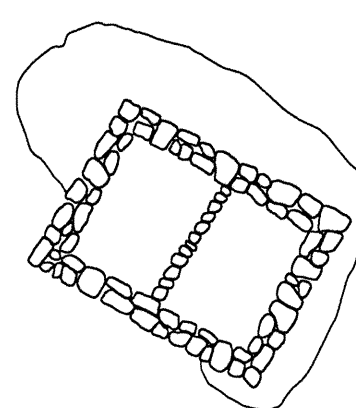
DOCUMENTATION OF THE SQUARE TOWER GROUP WAS UNDERTAKEN IN 1993-94 BY THE HISTORIC AMERICAN BUILDINGS SURVEY / HISTORIC AMERICAN ENGINEERING RECORD (HABS/HAER) OF THE NATIONAL PARK SERVICE. THE PROJECT WAS SPONSORED BY THE ROCKY MOUNTAIN REGIONAL OFFICE (RMRO) OF THE NATIONAL PARK SERVICE, BY MESA VERDE NATIONAL PARK (MEVE), AND BY HOVENWEEP NATIONAL MONUMENT (HOVE). THE PRINCIPALS INVOLVED WERE ROBERT BAKER, DIRECTOR, RMRO; RICHARD CRONENBERGER, REGIONAL HISTORICAL ARCHITECT, RMRO; LAWRENCE WIESE, SUPERINTENDENT, MEVE; ELLEN K. FOPPES, SUPERINTENDENT, HOVE; LINDA A. TOWLE, CHIEF, RESEARCH AND RESOURCE MANAGEMENT, MEVE; KATHLEEN FIERO, ARCHAEOLOGIST, MEVE; DAVID JOHNSON, ARCHAEOLOGIST, MEVE; AND ROBERT J. KAPSCH, CHIEF, HABS/HAER. FIELD NOTES AND PHOTOGRAMMETRIC IMAGES WERE PRODUCED IN THE FIELD BY JOSEPH D. BALACHOWSKI, SUPERVISORY ARCHITECT, HABS; CAROLYN KIERNAT, ARCHITECT, PHOENIX, ARIZONA; RENATA STACHANCZYK, ARCHITECT, ICOMOS, WARSAW, POLAND; AND MARGARET M. BALACHOWSKI, VOLUNTEER. THE FINAL DRAWINGS WERE PRODUCED IN THE HABS WASHINGTON DC OFFICE USING COMPUTER-AIDED DRAFTING AND COMPUTER-RECTIFIED PHOTOGRAMMETRY BY HABS ARCHITECTS STACIE BROADWATER, LESLIE SCHWAB, AND J. RAUL VAZQUEZ; AND BY JONATHON HODGE, ARCHITECTURAL INTERN, CATHOLIC UNIVERSITY OF AMERICA.



LOCATION MAP
NOT TO SCALE

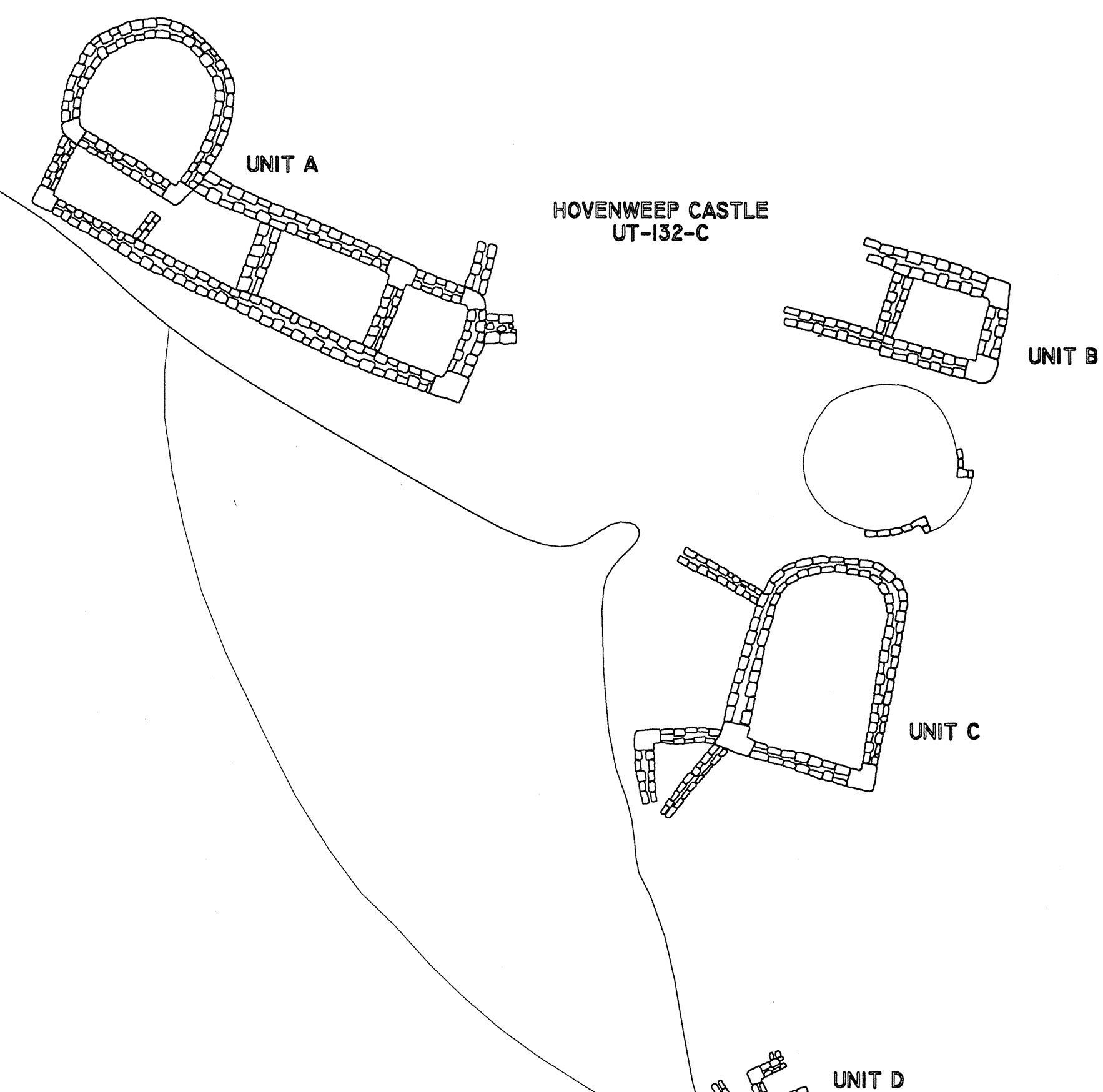
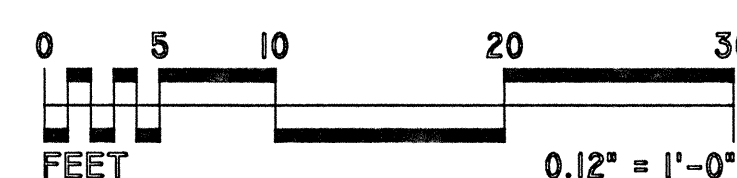
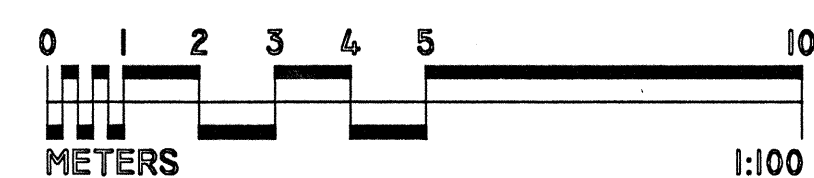


HOVENWEEP HOUSE
UT-132-B



SQUARE TOWER
UT-132-A

SITE PLAN
1:100



NOTES:

SITE PLAN AND INDIVIDUAL BUILDING PLANS ARE ADAPTED FROM 1986-87 RUINS MAINTENANCE RECORDS

LOCATION MAP IS ADAPTED FROM U.S. GEOLOGICAL SURVEY MAPS FOR UTAH-COLORADO, CAJON MESA AND ANETH QUADRANGLES

DRAWN BY: STACIE BROADWATER \ JONATHON HODGE \ LESLIE SCHWAB \ J. RAUL VAZQUEZ
 HOVENWEEP DOCUMENTATION PROJECT, 1995
 NATIONAL PARK SERVICE
 UNITED STATES DEPARTMENT OF THE INTERIOR
 HOVENWEEP NATIONAL MONUMENT
 ANETH VICINITY
 SAN JUAN COUNTY
 UTAH
 SHEET 1 OF 1 SHEET
 HISTORIC AMERICAN BUILDINGS SURVEY
 UT-132