THE TEOTIHUACAN VALLEY PROJECT FINAL REPORT

VOLUME 5

THE AZTEC PERIOD OCCUPATION OF THE VALLEY

Part 1 - Natural Environment, 20th Century Occupation, Survey Methodology, and Site Descriptions

Edited by

Susan Toby Evans

and

William T. Sanders

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A. Old stone terrace near the Barranca Pedregal west of Mound 270
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73 305

T.A. 71

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B. View facing north towards Mound 299
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74 310

T.A. 59

A. Facing northeast across the barranca from Mound 240 towards the terraced hillsides of the village of Coyotepec
B. Facing west across an area of medium to heavy Aztec occupation west of the barranca, south of Locus G
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D. Facing north towards Mound 251

75 311

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A. Facing southeast across Mound 253
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D. Facing northwest across the large wash between Mounds 250-253. The wash may represent the remains of several floodwater canals

76 316

T.A. 85

A. View to the southeast across the area where Mounds 453 and 454 are located
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77 318

T.A. 85

A. Facing west across Locus R
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D. Facing south towards Mound 457

78 319

T.A. 85

A. Facing north across the trench excavated in Mound 474, a temple mound
B. Stone wall found in the trench in Photo A

79 324

T.A.86

A. Facing north from Mound 492 towards the Teotihuacan period site T.C. 87-89
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80 327

T.A. 38

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83 335

T.A. 56

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84 339

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A. Panoramic view of the area where Mounds 207-217 are located, taken from across the barranca
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85 340

T.A. 57

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86 344

East end of the Teotihuacan Valley, showing Otumba (left center), Cerro Gordo (center), the deep-soil plain (between Otumba and Cerro Gordo), and the piedmont. Site T.A. 80 is located in the relatively level area between the hilltop, from which the photograph was taken, and the town.
87 345

T.A. 80

A. View to the east from Field 15 toward Field 17, note the jaguey (No. 1 on the plan Figures 93-94)
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88 346

T.A. 80

A. Mound 21 at the east edge of Field 73 between the two barrancas
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89 347

T.A. 80

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90 348

T.A. 80

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91 359

T.A. 90

A. General view of the site to the west
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92 360

T.A. 90

A. View of the temple mound to the west
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94 362

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T.A. 37

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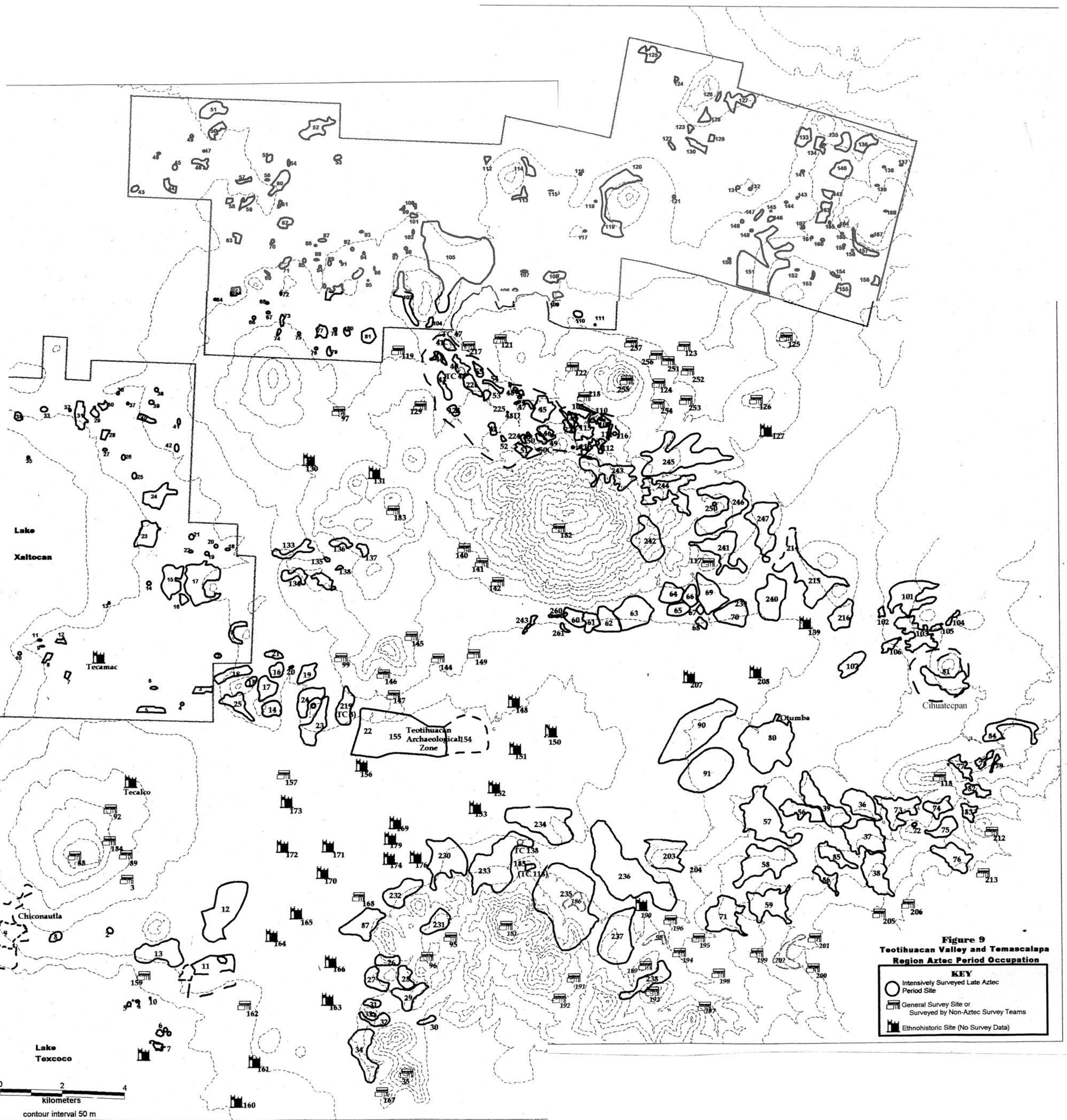


Figure 9
Teotihuacan Valley and Temascalapa Region Aztec Period Occupation

INTRODUCTION

By

Susan Toby Evans and William T. Sanders

The following is Volume 5 of the final report of the Teotihuacan Valley Project - which deals primarily with the Aztec period, but also includes a discussion of the Early Colonial phase occupation of the valley. The field operations of the Teotihuacan Valley Project ran from June 1st 1960 until Sept 1st 1964. The major activity of the project was a 100% regional surface survey of the approximately 500 km^2 surface area of the valley. The objective was to provide a history of changing settlement patterns and resource utilization of the valley, from the beginnings of its occupation by sedentary farmers until the moment of the Spanish Conquest. In relation to this objective, we also conducted studies of the natural environment, the 20th Century occupation of the valley, and a series of test excavations at a number of sites in order to, on the one hand, redefine certain chronological questions, and on the other, to elucidate the nature of the architectural remains revealed in the surface survey. During the process of the survey we became aware of and surveyed an unusual concentration of Teotihuacan Period rural sites on the north slope of Cerro Gordo, and the slopes of an isolated volcanic cone to the northeast, called Cerro Buena Vista, an area outside of the drainage basin of the Teotihuacan Valley. We also surveyed an area called the North Tributary Valleys to the north of the archaeological site of Teotihuacan. The northern part of this area drains to the north, ultimately to join the Avenidas de Pachuca, outside of the Teotihuacan Valley proper. The southern portion of the North Tributary Valleys area consists of a series of streams that drain southward into the Teotihuacan Valley and hence are part of the Teotihuacan Valley. With the exception of this last area this region falls geographically within what we define as the Temascalapa Region (see below). These areas outside of the valley added an additional 50 km^2 to the survey area.

By the end of the Teotihuacan Valley Project we were unable to complete the survey of a number of areas in the middle and upper portions of the Teotihuacan Valley. Jeffrey Parsons, was a graduate student assistant during the 1961-1964 seasons, and wrote a Ph.D Dissertation on the Aztec ceramics collected during that period. Subsequently in 1966 he conducted his own surface surveys in these remaining unsurveyed portions of the valley. Thomas Charlton, who also worked as a graduate student on the Teotihuacan Valley Project in 1963 and 1964, conducted additional surveys following the project - in the area around Colhuacan on the Cerro Gordo North Slope and in the Upper Valley, in connection with his Ph.D. Dissertation. Since 1966 Thomas Charlton has been engaged in extensive research, including surveys, excavation, and ethnohistoric work in the Upper Valley. Some of this subsequent research has been included in this Teotihuacan Valley Project publication (as Chapter 5). Most recently Charlton has conducted a very intensive resurvey and excavations at the Otumba town site (T.A. 80), assisted by Deborah Nichols and Cynthia Charlton. This research is summarized in Chapter 11 of this volume.

Susan Evans, the co-editor of this volume, was a graduate student at Pennsylvania State University and received her Ph.D degree in 1980. In 1977 she resurveyed a portion of the Cerro Gordo: South Slope area in preparation for a series of excavations of house mounds (see Chapter 7). Unfortunately subsequent extensive destruction of sites in that area forced her to shift her attention to a well preserved, extensive site, east of Otumba that we recorded as T.A. 81 in our surface survey, and locally referred to as Cihuatecpan. The results of this project are also summarized in this report (see Chapter 10). In 1963, during the survey of the T.A. 40 site on the Cerro Gordo North Slope we located a mound with well defined wall traces on its summit. Thomas Charlton excavated the mound to obtain data on Aztec rural residential architecture. The results are published here as Chapter 8. George Vaillant in 1935 conducted excavations at the town site of Chiconauhtla and his excavations revealed several high status residences. This research has never been published and with the cooperation of the American Museum of Natural History, we are presenting his report as Chapter 9.

Because of the extensive Post Conquest documentation of Aztec culture we have a very rich body of data from historical sources and have applied this data to complement and interpret our archaeological data (see Chapter 12). One of the most important of these documents is the Relación Geográfica of 1580 of the Corregimiento of Tequisistlan, which even includes a regional map. The Relación includes information on the delta, the lower and middle sections of the Teotihuacan Valley, and a large area to the north of the Teotihuacan Valley, where numerous rural dependent settlements of the towns of the Teotihuacan Valley were located. As part of his long term plans to survey not only the Teotihuacan Valley, but the entire Basin of Mexico (an area of 7,000 km^2), Sanders later (1977) directed a project, to survey an area of 150 km^2 located in that area and designated it the Temascalapa Region. Because of its political dependence on the Teotihuacan Valley towns, we are including the results of the survey conducted on the Aztec sites in this volume (see Chapter 6). The pre-Aztec occupation of the Temascalapa Region will be published as a separate volume. These various activities then are the sources of the archaeological data presented and analyzed in this volume.

The Aztec occupation of the Teotihuacan Valley is ubiquitous. One can find sherds of this period in virtually every house lot, agricultural field, and pasture in the valley. Denser concentrations of cultural material, in the form of artifacts and architecture are found in hundreds of localities in every portion of the valley. The population of the Teotihuacan Valley in Aztec times, was equal to that at the peak of the Teotihuacan Period, when the largest city of Mesoamerica, Teotihuacan, was located there. Unlike the Teotihuacan Period, however, a minority of the Aztec period population was concentrated in urban communities, the balance resided in a great number of dispersed rural settlements. The impression one has of the Aztec period is of a very fine-tuned adaptation to the micro-geography of the valley - an impression that we will examine in considerable detail. Because of this high density, the ubiquity of Aztec sites and its geographic significance we are republishing in this volume a summary of Sanders's, Diehl's and Charlton's studies of 20th Century settlement and resource utilization, that was published in Volume 1 of this series as Chapter 1 (the reader is referred to this volume for a more detailed presentation). This research was conducted to provide models to understand the prehispanic culture of the valley.

In summary, Volume 5 is organized as follows. The data and its analysis will be published in four separately bound parts. In Part 1, we will present a summary of the basic geography and 20th Century occupation; a discussion of the methodology used in the surface surveys; and a chapter describing the sites surveyed during the Teotihuacan Valley Project. Part 2 includes Chapters 4-11. Chapters 4-11 present a body of data derived from both surveys and excavations, conducted during, subsequent or prior to the Teotihuacan Valley Project. Part 3 includes Chapter 12-14. Chapter 12 is a summary of the Early Colonial period data relevant to the reconstruction of the Late Aztec period. It focuses on the economic and political conditions in the valley during the first century of Spanish rule. This chapter will also include a series of appendices, primarily 16th century documents, but also a chapter from Manuel Gamio's study of the Teotihuacan Valley, conducted during the second decade of this century. Gamio's project was a monumental effort to integrate data on all aspects of the valley, including its basic geography, and the prehispanic, Colonial, and Republican periods of its occupation. Chapter 13 is an analysis of all of the data, in an attempt to reconstruct life in the Valley of Teotihuacan and Temascalapa region at the moment of the Spanish Conquest. Chapter 14 is a synthesis of the overall sequence of events leading up to the Aztec period, from a theoretical perspective derived from Culture Ecology.

Part 4 is a modified version of Parsons's Ph.D. Dissertation, a detailed analysis of the huge ceramic collections from the various sites excavated during the Teotihuacan Valley Project.

Finally, we have decided to published a fifth bound volume - Part 5 which, in essence, will be an album of photographs, with some commentary. Because of urban expansion, and more importantly, the

extensive mechanization of agriculture in the Basin of Mexico generally, site destruction has occurred at an alarming rate, and since the 70's is accelerating. At the present rate of destruction it will be all but impossible to excavate prehispanic sites in the future. Furthermore, the expansion of agriculture in the rural areas has led to major and dramatic restructuring of the landscape with reclamation of areas that were formerly heavily eroded, and in many cases vast areas of tepetate have been converted to agricultural land or to forest. We photographed extensively during the Teotihuacan Valley project, both in connection with our studies of 20th Century land use and settlement patterns, and the surface survey, and have decided to present a considerable number of these photographs for the use of our colleagues.

We are heavily indebted to the many graduate students who participated in the various projects discussed in this introduction. Furthermore, we wish to thank Sharon White and Peter VanRossum for their work in the preparation of the figures and to Kathleen Sanders-Clymire who prepared the text.

The aerophotos reprodued in this volume derived from two sources. Those in Chapter 1 are from a series taken by the Compañia Mexicana de Aerofotos at a time immediately before the inception of the Teotihuacan Valley Project, probably in the decade of the 50's. Those in the succeeding chapters were taken by Cetenal in preparation for a series of maps first published in 1976. The aerophotography was probably taken a few years prior to this date. The maps of sectors of the valley found in Chapter 3 are xerox copies of Cetenal's map series. On the Compañia Mexicana de Aerofotos, very often the names of the communities that are on the photo are indicated and very often errors were made. For the correct names of these communities the reader is referred to Figure 3, a map of the 20th century settlement pattern of the valley.

Finally, the editors of this volume both wish to thank the various institutions that have participated in the accumulation of information presented in these volumes, the Pennsylvania State University, the University of Michigan, the University of Iowa, Dartmouth College, the Pan American Union, and most particularly the National Science Foundation. We also thank the Instituto Nacional de Antropologia y Historia for its official support of the various projects conducted over the past 35 years in the Basin of Mexico.

CHAPTER 1

THE NATURAL ENVIRONMENT AND 20TH CENTURY OCCUPATION OF THE TEOTIHUACAN VALLEY

by

William T. Sanders

1. THE BASIN OF MEXICO

Topography and Hydrography

The Basin of Mexico is comprised of a great elevated plain surrounded by mountains and hills: high mountain walls on three sides (Sierra Nevada on the east, Sierra Las Cruces on the west, Sierra Ajusco on the south) and a series of low, discontinuous ranges of hills to the north. The mountain walls have numerous peaks with elevations in the 3,000 to 4,000 m band and reach a maximum elevation of slightly below 6,000 m in the southeast with two snow-capped volcanoes, Ixtaccihuatl and Popocatepetl. The central floor of the Basin has a present elevation of approximately 2,236 m above sea level. The Basin measures approximately 8,000 km^2.

Before construction of the "Gran Canal," the Basin was a closed hydrographic unit, collecting water from hundreds of permanent and seasonal streams that were fed by springs, runoff from summer rains, and melt water from snowfields. These waters fed a chain of lakes with varying elevations. Colonial documents refer sometimes to three, at times as many as six lakes (based on such artificial divisions as dikes), and during part of the year they formed a single sheet of water. The lowest, and largest, was the centrally-located Lake Texcoco (or Lakes Mexico-Texcoco), connected on the north to Lake Xaltocan (or Lakes Xaltocan-Zumpango), and on the south to Lake Xochimilco (or Lakes Chalco-Xochimilco).

Lake Mexico-Texcoco was the lowest lake, the ultimate destination of all drainage and thus was extremely saline from the concentration of mineral salts. Lake Chalco-Xochimilco was fresh water and covered by floating vegetation ("so thick one could walk on it"); its surface was three meters higher than that of Lake Mexico-Texcoco, into which it drained all year. Lake Xaltocan-Zumpango was also situated at a higher level than Lake Mexico-Texcoco but drained into it only seasonally and was therefore more saline than Chalco-Xochimilco, except for small areas near local springs.

In the nineteenth century the lakes covered an average area of approximately 1,000 km^2 (one-eighth the Basin's area) extending about 120 km N-S by 70 km E-W. The average contour of the shore of Lake Texcoco was 2,240 m, although this varied from season to season and year to year. The lakes were shallow, varying from one to three meters in depth. During dry seasons they frequently shrank in surface area so that canoe traffic from lake to lake was interrupted for short periods.

Rainfall

Within the Basin, rainfall is sharply seasonal and is concentrated in the months from June through September. Rains usually begin in May and decrease sharply in October, with about five-sixths of the rainfall occurring between May 1 and October 1. Drainage from rainfall is extraordinarily vigorous and can be destructive, causing soil erosion so severe that canyon-like stream beds, locally called *barrancas*, have been created.

Length of the rainy season varies considerably from area to area and year to year, as does the amount of annual rainfall. Mean annual rainfall varies from south to north and from basin floor to adjacent slopes. In the northern Basin annual rainfall ranges from 500 to 600 mm, in the center from 650 to 750 mm, and in the south averages as high as 1,100 mm are recorded, all for the Basin floor. Rainfall for adjacent slopes (particularly on the middle flanks of the major ranges) is markedly heavier than that on the nearby plain, although there are few data for these areas. Averages of around 1,400 mm have been recorded for the slopes in the southeast. Internal droughts are common in the northern and central parts of the Basin during the rainy

season but there are no known recent cases of complete failure of the rainy season as a whole. Rains tend to occur in late afternoon and evening. Hail storms are also common during the rainy season, and very rarely in winter snow falls.

Considering only mean annual rainfall, the southern part of the Basin would seem to be the most favorable part for maize cultivation, without irrigation. In the central and northern parts of the Basin, except where soils are deep and loamy in texture, maize cultivation without irrigation is possible but crop security is low and production varies considerably from year to year. The least productive part of the Basin is undoubtedly the north where mean annual rainfall is lowest. Maize cultivation is exceedingly precarious in that area. Yields are generally markedly improved (in many areas doubled) by irrigation, and where soils are less than one meter deep, irrigation is absolutely necessary for effective maize agriculture. At higher elevations (with correspondingly higher rates of evapotranspiration) the problem is further aggravated.

Temperature is the primary factor limiting the upward expansion of agriculture. Modern peasant populations of the Basin reside within a contour strip ranging from 2,240 to 2,800 m above sea level. Above 2,800 m the normal frost-free season is too short for dependable maize cropping, and there is no permanent population of subsistence farmers above that elevation. Even those communities that lie between 2,600 and 2,800 m have an economy based partly on grazing and lumbering. At lower elevations frosts normally begin in October and last until the beginning of March. Maize, the staple crop (along with nearly all of the secondary pre-Hispanic cultivates), cannot be grown during this frost season. Maize is especially susceptible to frost damage, notably during the early phase of its growth. The range of inception and cessation dates of the frost season varies as much as that of rainfall. In occasional years frost begins as early as September or as late as December and may last through March and even April. Below 2,600 m, however, local elevations seem to offer more favorable conditions for agriculture than the plains proper, since frosts tend to settle in the lower areas. Particularly disastrous for agriculture based only on rainfall is a combination of a late inception of the rainy season and an early frost season, since crop planting must be delayed. Under such conditions plant growth is retarded so that the early frosts cause heavy damage. Of course, too early a planting is also risky.

Soils

The majority of the soils of the Basin are classified as vitric andosols in the new FAO soil classification. These are dark, friable soils that form under forest vegetation in areas of recent volcanic activity. Volcanic particles are found dispersed throughout the soil profile. The majority of the soils of the Basin have formed over a compact volcanic ash deposit locally called *tepetate* which, while permeable, acts to hold water very well. Soil depth varies considerably due to variations in intensity of erosion or angle of slope, and this variation has a striking effect on agricultural production, particularly in the drier center and north. Above 2,600 to 2,800 m podzol soils predominate. They are notoriously poor soils for agriculture, a further factor limiting its upward expansion.

Soil texture varies from sandy loam to clay loam; the most common soils are loamy, friable, and loose-textured and very dense, heavy soils are rare. Texture and moisture-retention qualities are ideal for primitive cultivation. These soils are, however, extremely susceptible to erosion. Sandy and clay-textured soils do occur in localized areas; the former in eroded slopes where the finer soil particles have washed out, the latter especially near the lake shore and along streams.

Natural Vegetation

It is difficult to reconstruct the natural vegetation of the Basin because at least 4,000 years of

agricultural exploitation have completely removed it from the belt of peasant occupation. Small areas of relatively unaltered vegetation can be used as a guide.

Broadleaf forest probably predominated in the southern Basin, and xerophytic or scrub forests in the north, with a gradual transition zone between them. Coniferous forest is the dominant vegetation between 2,600 and 4,500 m; above that are alpine meadows or tundra and finally, in the southeast, snowfields.

With respect to human occupation and land use, removal of the vegetation (in contrast to the tropical lowlands of Mesoamerica) presents no serious obstacle to the Mesoamerican farmer using neolithic technology. Above 2,600 to 2,800 m the pre-Hispanic population had an easily available source of forest products for construction, household technology, transportation, and medicine.

Summary, Basin of Mexico features

This brief survey of the geography of the Basin of Mexico reveals a number of significant factors with respect to its utilization by a farming population equipped with a technological complex comprised of neolithic tools, simple transportation, and a cereal (maize) as a staple food:

1. **Soils** are easily cultivated using neolithic tools, are generally fertile and capable of sustaining cultivation with modest application of simple soil restoration techniques (i.e. animal and vegetable fertilizers, crop rotation, short-phase fallowing, intercropping, floodwater and permanent irrigation, terracing). However, much of the terrain is sloping, where soils are markedly susceptible to erosion, and constant effort is required to control this destructive process.

2. The **plant cover** is fragile and easily controlled with simple tools.

3. The **rainfall-temperature regime** is favorable for maize cultivation only in the south. In the central and northern parts of the Basin the combination of early frosts and retarded rains, plus internal droughts, make maize cropping difficult and crop loss frequent.

4. **Permanent water resources** are available for permanent irrigation in a number of areas, and the numerous barrancas are sources of water for floodwater irrigation. Such systems, however, require intensive land use, heavy expenditure of labor, and supra-family, often supra-community cooperation to maintain, construct, and operate.

5. Since the summer rains generally provide adequate moisture in areas with moderately deep to deep soils, **preplanting irrigation** is a primary need, as it enables the farmer to get an early start on the rainy season and gives the plant more time for growth before the arrival of the fall frosts. Most of the humidity for plant growth is derived from rainfall, even in areas of permanent irrigation. This means that a small amount of early irrigation goes a long way, as will be demonstrated in the case of the Teotihuacan Valley. Mexican agronomers call this system *medio riego*.

6. The **lakes** were an enormously significant resource for the pre-Hispanic and Colonial population. They provided a natural transportation system for a people

lacking beasts of burden: the lakes linked all parts of the Basin, and most of the major Aztec period population concentrations were located near the shore or within the lakes. The lakes were important sources of protein foods (for a population with few domestic animals) and other products, especially salt. The freshwater Lake Chalco-Xochimilco was nearly covered by artificial, island-like gardens called *chinampas*, which were the most intensively cultivated and productive lands in Mesoamerica and provided much of the surplus food for the support of urban communities during the Late Aztec period.

7. Within the Basin there is considerable variation in geography, a feature that stimulated local specialization and trade. Variations in amount and distribution of rainfall, vegetation, topography, soil depth, water resources, elevation, and spatial position with respect to mountain passes and lake shores, along with the distribution of specialized resources (salt, clay, obsidian, lumber, lime, stone, etc.), all acted to promote this specialization and trade.

Ranges of small hills within the Basin tend to isolate parts of it into smaller topographic and hydrographic units. One of these is the Teotihuacan Valley, the subject of this volume. A detailed analysis of the geographic characteristics of this unit follows.

2. THE TEOTIHUACAN VALLEY

Topography and Hydrography

The Teotihuacan Valley is defined in this report as the drainage basin of the Rio de San Juan, and covers an area of 505 km^2. From Ixtapan, on the shore of Lake Texcoco, to Xaltepec, near the northeastern watershed, the Valley has a total length of 35 km. The elevation of the Valley floor varies from 2,240 to 2,300 m and slopes gently down from northeast to the lakeshore at the southwest end.

The southern and southeast edges of the Valley are bordered by a solid rampart of hills with tributary valleys and small intermontane plateaus, formed by the Sierra de Patlachique and Sierra de Malpais, with a maximum elevation of 2,800 m. These are spurs of the Sierra Nevada range. To the north, the valley is delimited by a string of isolated volcanoes separated by wide passes; major peaks here are Cerro Chiconautla (2,550 m), Cerro Malinalco (2,580 m), and Cerro Gordo (3,050 m). To the northeast, the Valley is open to the Tepeapulco-Apan plain with a low ridge serving as a watershed.

Figure 1

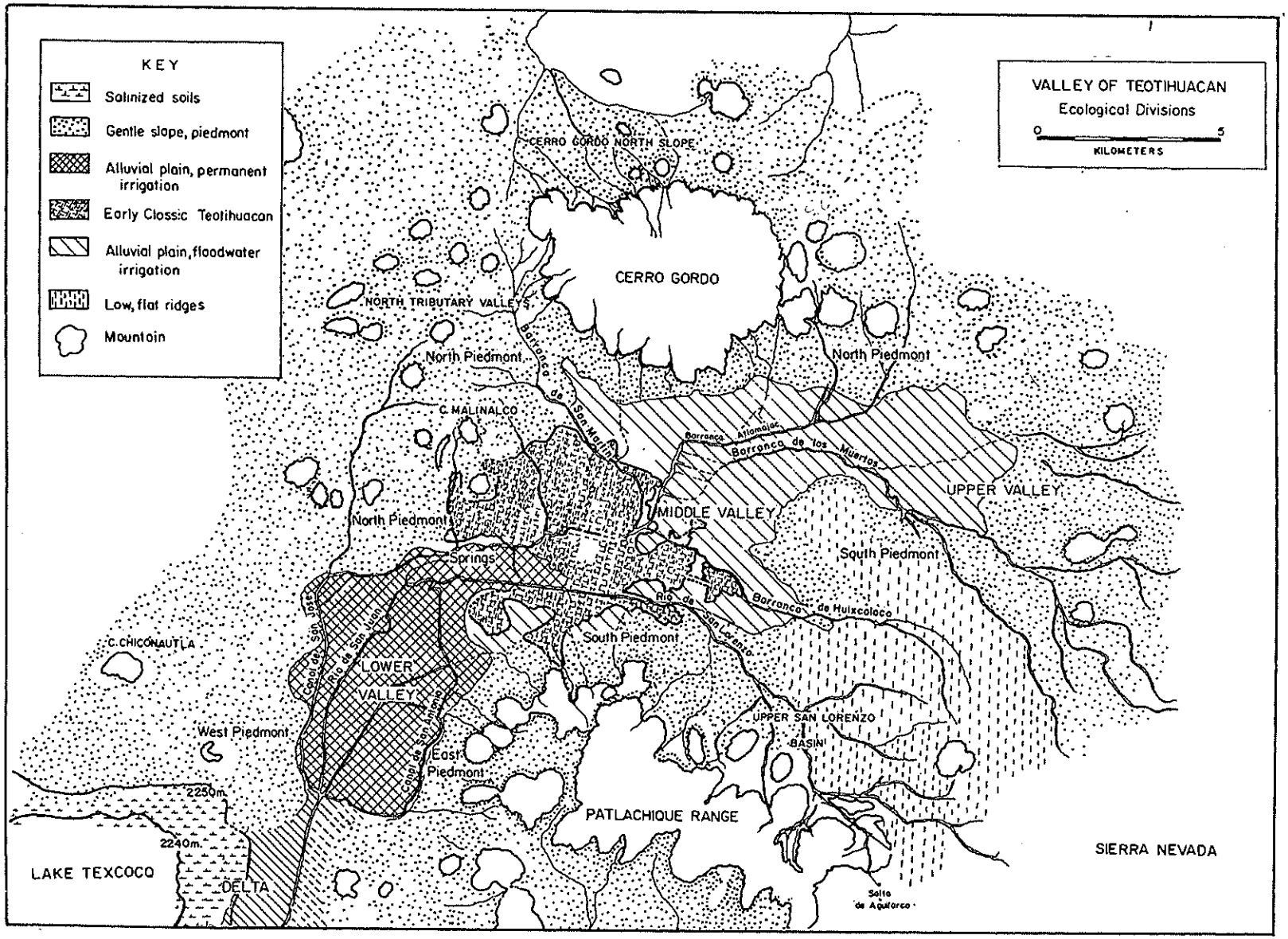
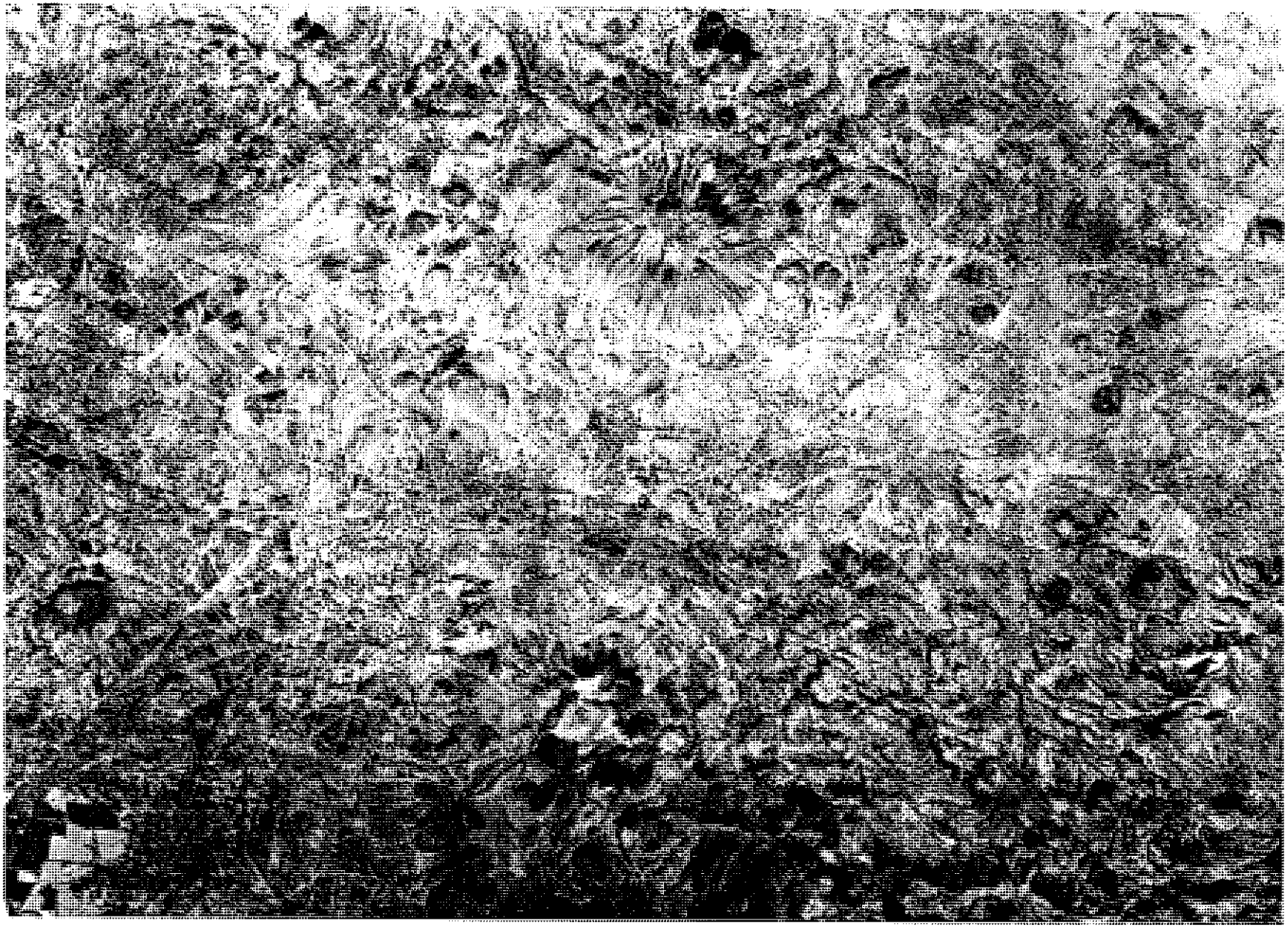

KEY
Salinized soils
Gentle slope, piedmont
Alluvial plain, permanent irrigation
Early Classic Teotihuacan
Alluvial plain, floodwater irrigation
Low, flat ridges
Mountain
VALLEY OF TEOTIHUACAN
Ecological Divisions
0
5
KILOMETERS
CERRO GORDO NORTH SLOPE
CERRO GORDO
NORTH TRIBUTARY VALLEYS
North Piedmont
North Piedmont
C. MALINALCO
Barranca de San Martín
Barranca Atlamaloc
Barranca de los Muertos
UPPER VALLEY
MIDDLE VALLEY
North Piedmont
Springs
South Piedmont
Río de San Lorenzo
Barranca de Huixcoloco
C. CHICONAUTLA
Canal de San José
Río de San Juan
LOWER VALLEY
South Piedmont
UPPER SAN LORENZO BASIN
West Piedmont
East Piedmont
Canal de San Juan
2250m.
2240m.
PATLACHIQUE RANGE
SIERRA NEVADA
LAKE TEXCOCO
DELTA
Salto de Agua Arco

Plate 1



The Valley as defined above is a hydrographic unit. Drainage is explosive and destructive, and all slopes have deep gullies or barrancas that carry runoff to the main stream, El Rio de San Juan, which in turn empties into Lake Texcoco. The flow of water in all of the barrancas is sharply seasonal and even during the rainy season water usually flows only a few hours, or at most a few days, following the torrential showers. The barrancas, Los Muertos, Atlamajac (also called Ixtetes), Huixcololco, San Martín and San Lorenzo, particularly the first two, are especially significant in agriculture. All of the mentioned streams join the Rio de San Juan above the town of Teotihuacan.

Approximately 80 to 100 permanent springs are located in a small area within and just outside the Villa of San Juan and the barrios of Puxtla and Maquixco. In 1922 Gamio estimated the system's annual flow at 31,000,000 m^3. He measured the flow in December (at the end of the rainy season) at 1,500 liters per second and estimated a probable annual average of 1,000 liters per second. In 1954 when Sanders studied the system the flow had dropped to 588.6 liters, a decline primarily due to perforation of wells upstream. By 1963 the flow had declined to 450 liters per second (Millon etal. 1962) and in 1975 a publication of *Recursos Hidraulicos* reported a further decline to 382 liters per second. This final reduction is part of a broader pattern of desiccation of the Basin of Mexico, produced primarily by Mexico City's water use.

Climate

Temperature and rainfall data at the one permanent meteorological station in the Valley (at the archaeological zone) for the period 1938-1963 are summarized in Table 1.

Generally speaking, these data indicate a pattern fairly typical of the Basin of Mexico as a whole but with certain local peculiarities. The low ranges of hills that define the Valley, act as an obstacle to free movement of moisture-laden winds into the valley, and reduce the annual rainfall to one of the lowest averages in the Basin of Mexico. At least four-fifths of the total rainfall falls in the period from June 1 to October 1. Inadequate precipitation for May planting is more common than in most stations in the Basin. The pattern of rainfall noted as characteristic of the Basin as a whole (brief, torrential, highly localized showers, late inception, and internal droughts) is nowhere as pronounced as in the Teotihuacan Valley. The extraordinary range of rainfall from year to year (almost 100%) and high frequency of years with below average rainfall both point out the difficulties for maize cultivation without supplementary irrigation.

It appears that rainfall is somewhat higher, possibly by as much as 50%, on the upper slopes of the Patlachique Range and Cerro Gordo, with perhaps less of an increase on Chiconautla and Malinalco. This observation is based on the relative lushness of natural vegetation, since meteorological stations are absent. Camphor forests and unusually good pastures are on the summit of Cerro Gordo.

The greater tendency for the rains to be late in inception and less abundant than in most of the Basin retards planting, slows down plant growth, and aggravates the early frost problem. As can be noted in the "times frost occurred" column, temperatures below freezing may occur during the period from October 1 to May 1. Normally, the frost season runs from November 1 to March 1, an extremely significant pattern in terms of land use.

Table 1

Annual Precipitation At San Juan Teotihuacan

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Maximum Rainfall	34.9	29.0	59.0	85.7	164.7	222.5	154.0	151.5	170.5	110.3	66.2	21.5
Av. Monthly Rainfall	6.3	5.1	10.97	34.89	64.64	92.92	87.87	98.86	75.47	37.87	17.05	4.48
Minimum Rainfall	0	0	0	0	16.8	21.0	25.7	13.0	31.0	0	0	0
Times Rainfall Above Av.	11	12	10	1						2	5	10
Times Rainfall Below Av.	15	16	14	11	12	15	11	11	15	14	14	15
Number of Years	24	24	24	23	23	23	24	24	23	23	23	24
Extr. Monthly Max.	29.5	29.0	31.5	34.0	33.5	38.0	30.5	29.0	28.8	28.5	28.5	29.5
Av. Monthly Temp.	12.46	13.41	15.50	16.99	17.38	17.10	16.32	16.23	16.01	14.70	13.75	12.44
Extr. Monthly Min.	-8.3	-6.0	-2.3	-2.5	1.3	1.8	3.3	3.0	0.5	-4.5	-4.0	-5.3
Times Frost Occurred	20	20	5	3						5	14	20
No. of Years	23	23	23	22	23	22	23	24	23	21	23	23
Monthly Evap. (Av.)	157.45	180.30	233.37	235.75	220.10	185.23	165.30	164.45	144.59	159.91	151.29	142.18

Annual Averages

Max. Ann. Prec.	791.5
Av. Ann. Prec.	547.54 (19 yrs.)
Min. Ann. Prec.	378.75
Prec. below av.	10x
Prec. above av.	9x
Av. Ann. Evap.	2210.28 (9 yrs.)

In the Teotihuacan Valley perhaps more than in any other part of the Basin, the timing of rainfall and frosts is of utmost concern to the peasant farmer; some crop loss is a common occurrence and crop disasters not infrequent. During five years of the project, 1960 - 1964, 1960 and 1961 were fair years with perhaps half of the unirrigated crops producing from fair to good yields; 1962 was a disaster year with the unirrigated crops a complete loss and even irrigated crops producing only one-half to three-quarters of normal yields; 1963 was a good year in which only maize crops planted on shallow soil failed to produce; 1964 was a poor year, almost as bad as 1962.

Based on observations made during this five-year period, it seems that there is an association between low rainfall and early frost conditions, and between wet rainy seasons and a late inception of frosts. Such a correlation would be of crucial importance in the study of cycles of climatic history of the Valley and land use patterns.

Soils

The subsoil of the Teotihuacan Valley consists of *tepetate*, a hard, compact, crumbly, earth-like formation that is relatively impervious to water, in contrast to the soil above it. According to Gamio's field study, it is composed of volcanic ash and redeposited by fluvial action.

Above tepetate, the organic or "A" soil layer varies considerably in depth over the Valley and is generally loamy in texture. Near the barrancas and lake shore, clay-textured soils are common and in badly eroded areas sandy-textured soils predominate. In general, soils on the plains are deeper and more finely textured than those on slopes; soils in the lower valley are deeper and finer textured than those in the upper valley. Most of the soil in the Valley is easily worked with simple tools and has extraordinary capacity for storing water. In areas where soil depth exceeds one meter, water may be retained for several months by using special techniques of working the soil. The less permeable layer of tepetate below acts as an artificial tank floor.

While no detailed soil maps of the Teotihuacan Valley are available, it is clear from field observations that the soils are rather typical of those generally found in the Basin of Mexico. One factor which seems to have affected soil fertility is the variation in the age of the geology of the surrounding hills. On the north and east sides of the Valley most of the surface geology consists of young (Pliocene-Pleistocene) lavas and tuffs (ferrobasalts, dacite, and latite); on the south, i.e. in the Patlachique Range, are much older volcanic deposits, dating from the Miocene. The Cerro Gordo-North Slope area is one of very recent volcanic formations, dating from the Pleistocene into the Holocene and consists of tuffs or lavas (ferrobasalts and obsidian). The great majority of the soils in the valley have weathered from recent volcanic activity and are characterized by high fertility. Today, with varying degrees of intensity of cultivation and application of soil restoration techniques, the soil varies considerably in the presence of these nutrient content, and greatly degraded soils are common. In general, soils of the Teotihuacan Valley are fertile, capable of sustained cultivation, and rarely fallowed. The major soil factor affecting productivity is depth. Soil depth of the alluvial plain varies from 0.3 to 3.0 m in the upper and middle valleys, and increases to 7 to 8 m near the lake shore. Soil depth on most of the slopes, however, is less than 0.5 m, and large areas of exposed tepetate are common.

Specialized Resources

Like the larger Basin of Mexico of which it is part, the Teotihuacan Valley, is characterized by definite ecological zonation and localized distribution of key resources. Lake Texcoco at the lower end of the Valley was an important source of salt, and several villages (Ixtapan, Nexquipaya, and Tequisistlán) specialized in salt-making in the sixteenth century, and still do so today. Although not as rich in aquatic life as the freshwater lakes, Lake Texcoco also provided some resources such as waterfowl, fish, reeds for mats and baskets, insect larvae and eggs. A major source of protein for the prehispanic population was the spirulina, an algae that grows abundantly in the saline lakes. Even today, although the lake has almost disappeared, the lake shore villages purchase excess water from the irrigation system, divert it into big earth-banked tanks in the lake bed, and raise fish.

Clay deposits for pottery and clay-textured soils for adobes are found all over the Valley but are especially extensive in the lake shore plain and along the margins of barrancas. Several villages specialize in pottery and adobe manufacture.

Obsidian sources are concentrated in the upper valley, in the hilly borders and barranca

profiles above Otumba. In the pre-Hispanic, Colonial, and Republican Periods, deposits of volcanic material varying in size from fine gravel to rock outcrops have provided material for building construction and are especially abundant in the middle valley.

Ecological Divisions of the Valley

On the basis of geographical variations, the Teotihuacan Valley may be divided into the four following broad ecological regions (Figure 1): the Delta, the Lower Valley, the Middle Valley, and Upper Valley. In each region, the hills frame an alluvial plain, each distinct in its access to water for irrigation. As is evident from patterning in the archaeological and historical record, these divisions played highly distinctive and varied roles in the history of occupation in the valley. (These regions are discussed in greater detail in Part 2)

The Delta is a fan-shaped plain along the lake shore, created by drainage of Río de San Juan, which is entirely artificially canalized as it flows through. The river is are deeply entrenched and provides little water to the delta, particularly in dry years. Furthermore, the delta is too far from the hilly flanks to benefit directly from runoff for floodwater irrigation. Soils in this low-lying (2238 m to 2240 m) area are salt-indurated, and salt-making has been a local industry for many centuries. Salt was a special lakeshore resources, found nowhere else in the valley; other such resources included waterfowl, fish and other lake organisms, extensive clay deposits. Isolated pieces of higher ground provided locations for Aztec period salt-making villages such as Santa Isabel Ixtapan del Sal (also the site of a **Paleoindian period** mammoth and human skeleton), and San Cristobal Nexquipayac. On its southern edge the delta merges into the Texcoco plain, and to the northeast it merges into the permanently-irrigated plain.

The Lower Valley extends from Tepexpan to the springs of San Juan Teotihuacan, and includes the permanently-irrigated alluvial plain, and the adjacent piedmont areas.

The irrigated plain is the prize agricultural land of the valley, a 4 to 5 km wide expanse of approximately 3,000 ha with a soil cover varying from 3 to 7 m in depth. At the northeast end of the plain is San Juan Teotihuacan, formerly one of the valley's six capitals of the Aztec period. It neighbors on the Teotihuacan Period city of Teotihuacan, reflecting the importance of the area. From the San Juan springs, water constantly flows through the plain in a complex network of irrigation channels.

The plain constricts at its southwestern end to only 1,500 m, between Tepexpan and Cuanalán, and then fans out into the lake shore plain or Delta, which in turn merges into the large Texcoco plain to the south.

Adjacent and parallel to the alluvial plain on each side is a narrow, gently sloping piedmont, varying in width from 500 to 1,000 m on the east side, to a band twice as wide on the west. In these two strips soil depth is extremely variable but generally has a modal depth of 0.2 to 0.6 m with much exposed tepetate. Soils are deeper where barrancas and their small flood plains traverse the piedmont. The steep, nearly denuded slopes of the Patlachique Range border the piedmont on the east side of the Valley, whereas the gentler slopes of Cerro Chiconautla and

Plate 2

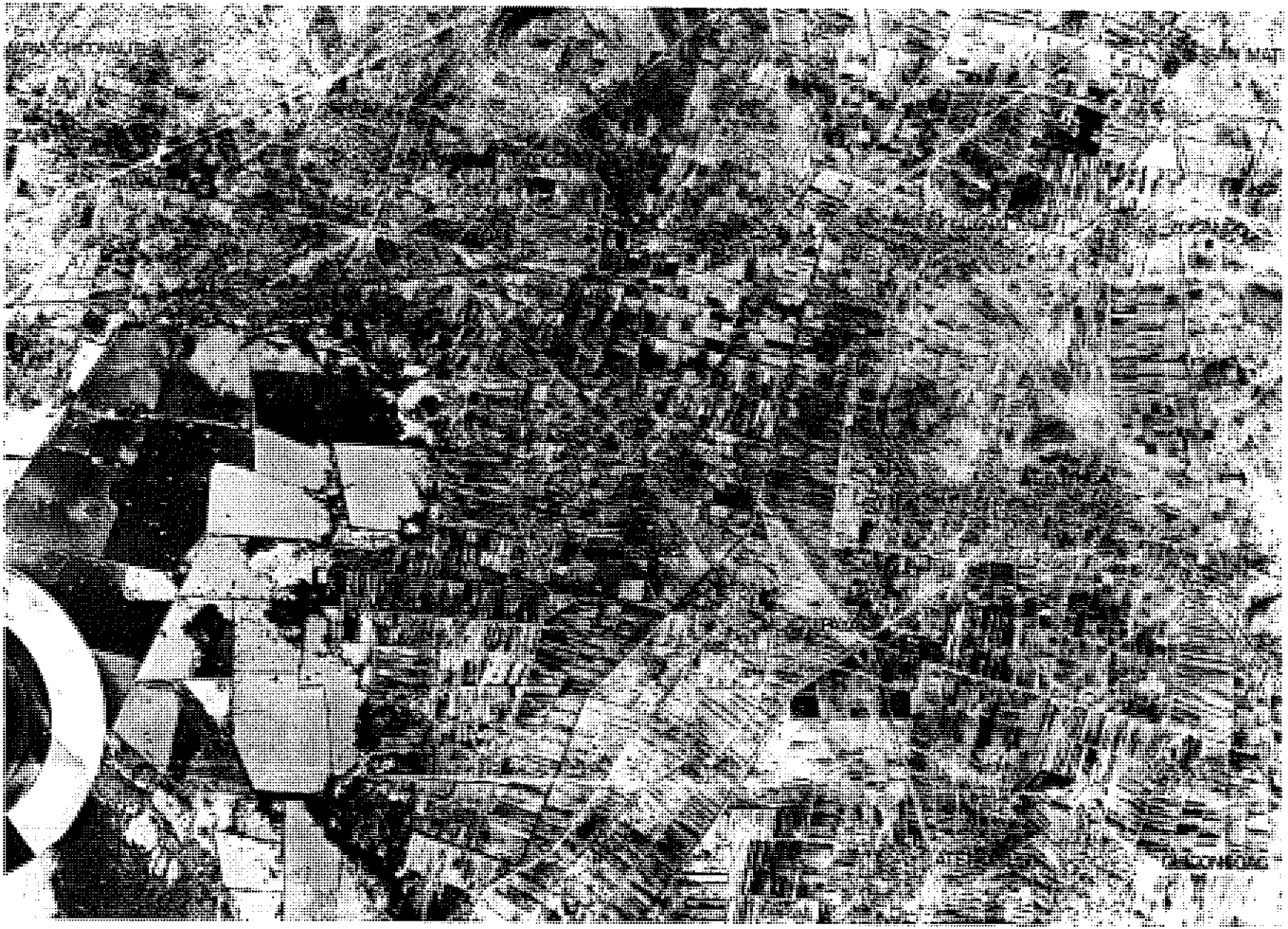


Plate 3

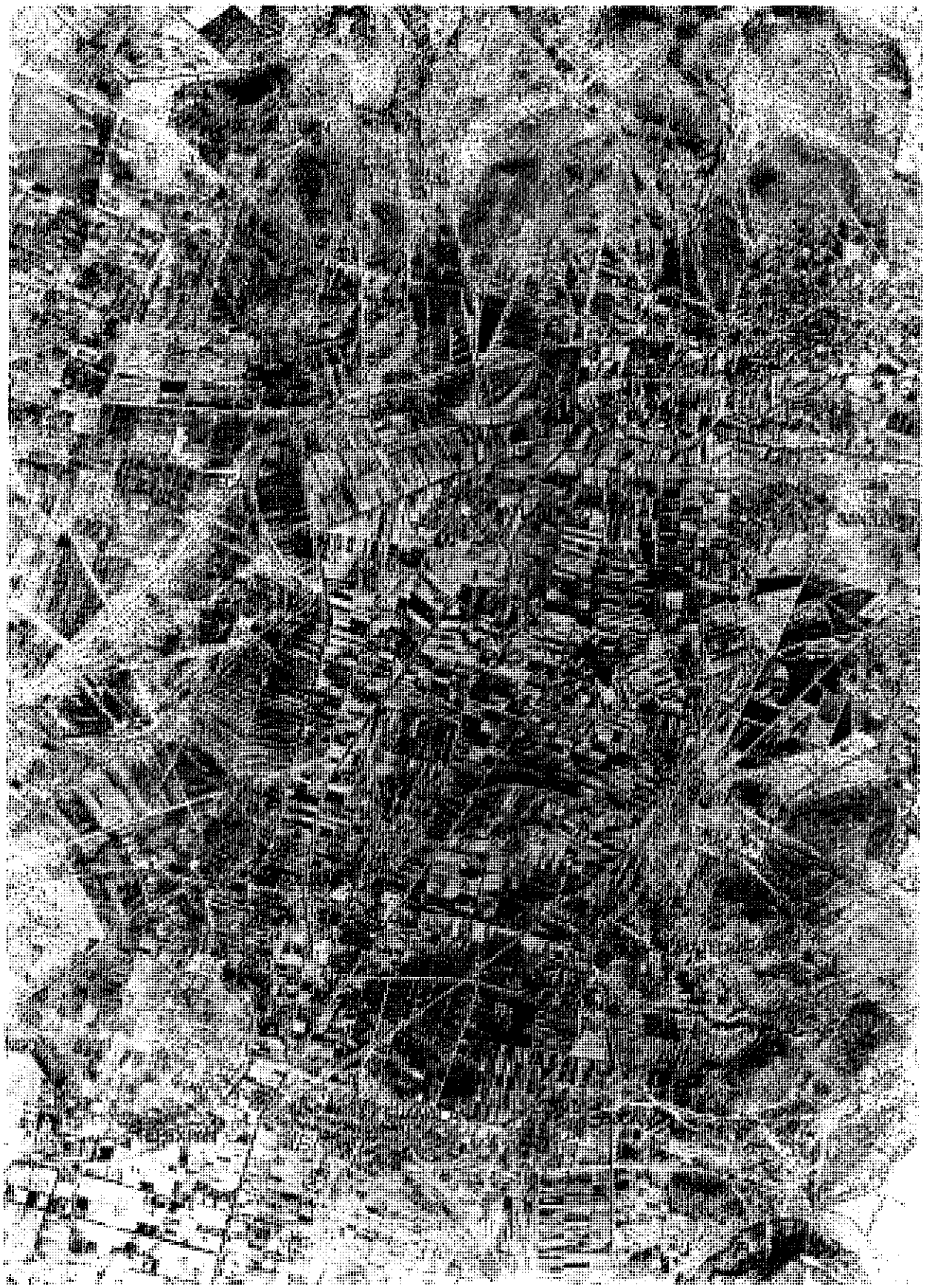


Plate 4

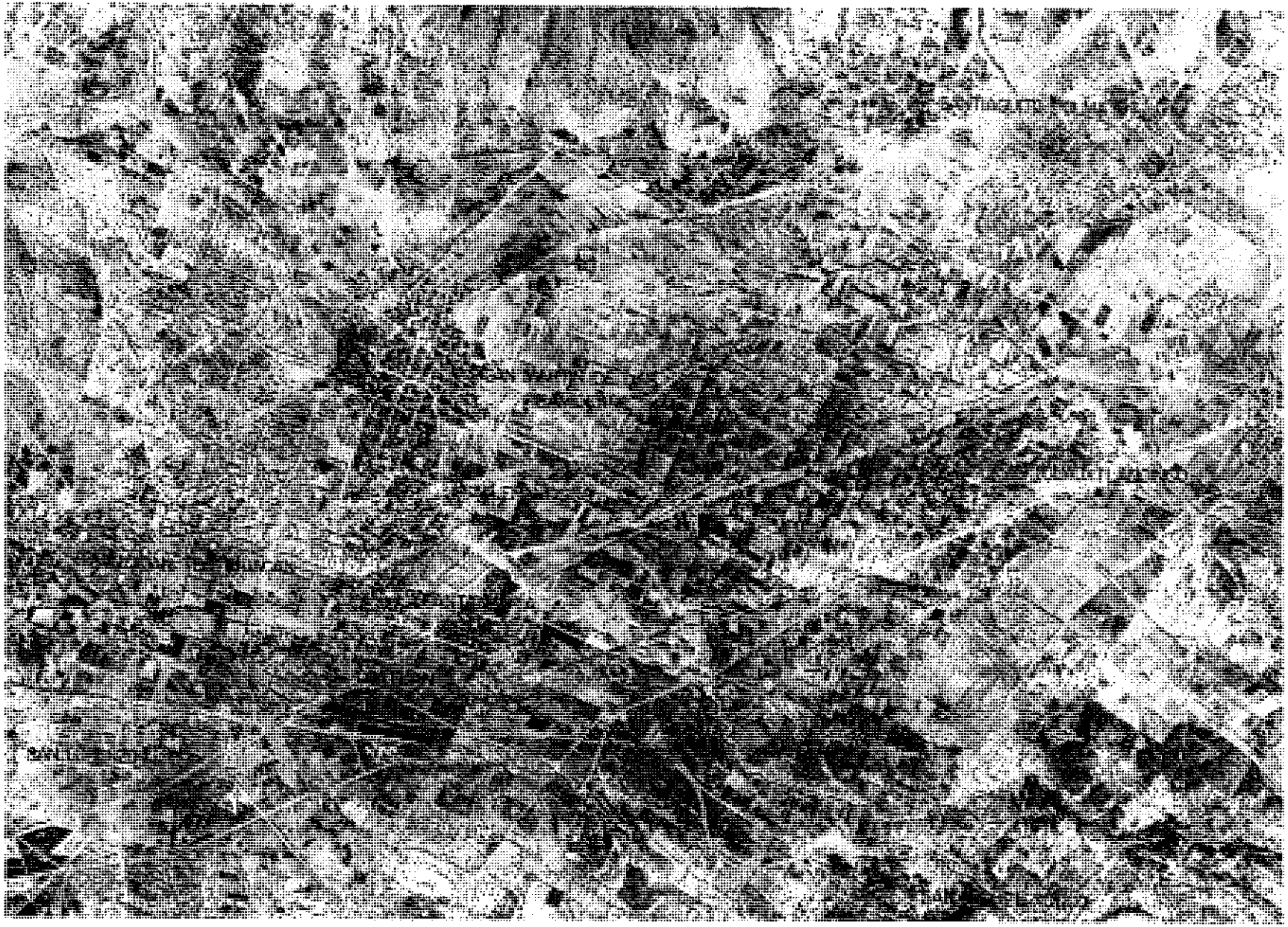
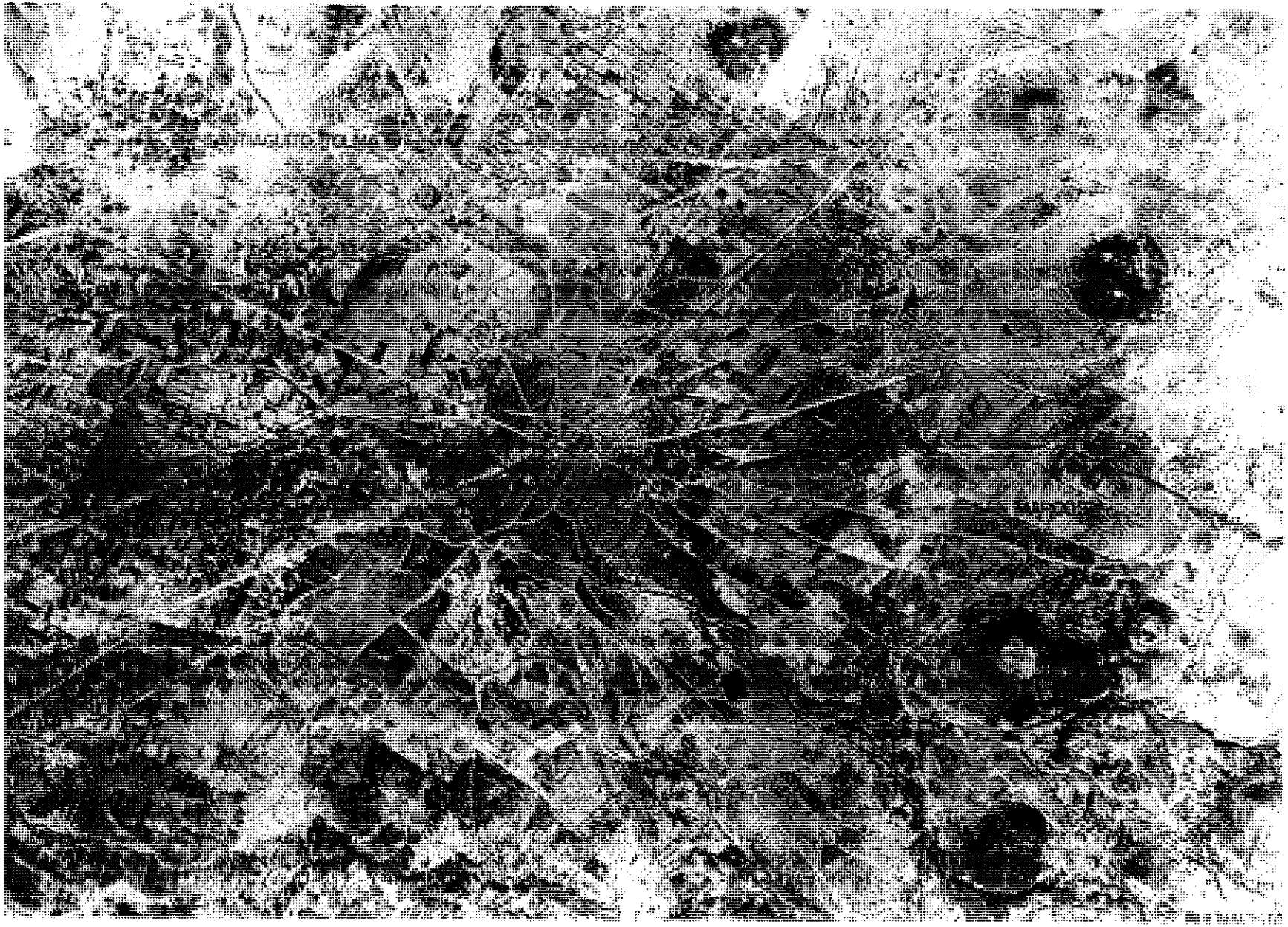


Plate 5



the Maravillas cluster of small hills to the west and north are terraced nearly to their summits.

The Middle Valley is equally complex in topography and hydrography, with numerous barrancas each with small flood plains separated by low ridges and hills. The largest of these flood plains extends from San Juan Teotihuacan to San Pablo Ixquitlán in the center of the Valley, where soils vary from 1 to 3 m in depth. Soil depth on the piedmont of Cerros Gordo and Malinalco and the Patlachique Range, and on low ridges or hills is much less. Agriculture in this area is fairly productive because of the combination of extensive areas of deep soil and reliable floodwater irrigation sources in the many shallow barrancas delivering rainfall runoff from adjacent hills. Special resources located in the area are good pottery clay, and abundant volcanic debris for construction materials.

Patlachique Range and the Upper San Lorenzo Basin This area is defined as a distinct ecological division for a number of reasons. Rainfall is undoubtedly higher than in the adjacent Valley floor, slopes are steeper, and soil cover much less than most of the Valley. It is also the largest continuous mass of high ground and therefore relatively frost-free. Along with steep slopes, however, small intermontane plateaus, valleys, and gently sloping surfaces have greater agricultural potential in terms of present-day erosion patterns.

Before intensive cultivation, there was undoubtedly a fairly deep soil cover, even on the steeper slopes. At one time, we suspect that the area had considerable vegetation and that many of the deep barrancas were probably small permanent streams. These characteristics plus the higher rainfall and relative freedom from frosts would have given the area unique advantages for primitive agriculture within the Teotihuacan Valley. Today, because of extensive erosion, it is primarily used for pasture.

The Upper Valley: from Xaltepec to San Pablo Ixquitlán. The town of Otumba is located in the center of this division of the Valley within a small oval depression of deep soil. The soil ranges from .5 to 2.0 m in depth and the depression has a diameter of 2 to 3 km. Surrounding this core of deeper soil to the north, east, and south is a band of gently sloping piedmont with thin soil, approximately 10 km in width. To the north and northeast this piedmont is delineated by a few low hills, to the south and southeast by foothills of the northern terminus of the Sierra Nevada or by the Patlachique Range. The upper valley is the least favorable area for agricultural exploitation today. Barranca runoff is abundant only to the south and even there the hills are so far from the deep soil core, and so deeply eroded, that very little floodwater irrigation is possible. Nearly all cultivation is *temporal* (i.e., based on rains) and it is primarily a zone of maguey cultivation. There are small, deep soil flood plains along the barrancas to the south that alleviate the problem somewhat, but the total acreage is small. A special local resource other than agriculture in this area for the pre-Hispanic Period would be obsidian.

The North Tributary Valleys. As has been noted, the hills that border the Teotihuacan Valley to the north are separated by wide passes. A network of barrancas draining into the San Juan River, in the middle and lower valley, originates north at these hills and enters the Valley by way of these passes. The area is characterized by small flood plains bordering the barrancas and badly eroded, gentle slopes. In part, its northern edge is defined by a cluster of small hills where erosion is less severe. North of these hills the drainage flows north to the Avenidas de Pachuca and geographically is not part of the Teotihuacan Valley.

Cerro Gordo: North Slope. The north slope of Cerro Gordo, strictly speaking, is not part of the

Teotihuacan Valley since the drainage flows northwest to the Avenidas de Pachuca. It was included in the original survey because of the presence of an extraordinarily heavy Teotihuacan occupation (Tzacualli through Xolalpan phases). It is an area of long descending ridges separated by barrancas with abundant runoff. At the time of our surveys, it was characterized by one of the most complex terrace systems in the survey area. The addition of this area, plus that part of the North Tributary Valleys that does not drain into the Teotihuacan Valley, increased the size of the Teotihuacan Valley project survey area to approximately 600 km^2 (505 km^2 of which is included in the Teotihuacan hydrographic basin).

Discussion

The descriptions of the natural environment of the Basin of Mexico provided by the *relaciones* of the sixteenth century demonstrate that there were no major differences between the environment then and in the twentieth century, other than those created by human action. The lakes have all but disappeared as the result of artificial drainage projects and erosion has destroyed much of the soil on slopes. A severe cycle of erosion followed the Spanish Conquest, and in the chapters on Aztec settlement patterns this evidence will be elaborated. Erosion has resulted in a widening and deepening of barrancas but the basic hydrographic system has changed very little since the sixteenth century. Streams that are seasonal now are described as seasonal in the relaciones. The relaciones also emphasize the scarcity of water, and many villages relied on jagüeys for most of their water supply. Aztec history is replete with references to droughts and frosts so that the two major problems faced by modern cultivators were problems then. In summary, the Aztecs of the fifteenth and sixteenth centuries faced the same problems of adaptation to their environment as do modern *mestizo* peasants and the responses were similar.

Modern Agricultural Practices and Land Use

Domestic Animals and Plants.

The basic subsistence crop in the Valley today is maize, consumed primarily as tortillas. Maguey and beans are significant secondary food plants, the former as the source of a fermented beverage called *pulque*. Minor food plants, whose products are consumed locally, are squash, *nopal* (the fruit is eaten fresh and young leaves are prepared as a green vegetable), and capulín (a native cherry). Along with locally consumed foods, wheat and barley are planted, primarily for export. In the area near the springs a variety of vegetables are produced for the Mexico City and San Juan markets. Several important aboriginal food plants consumed in the diet, such as tomatoes, avocados, and chile peppers, are rarely grown locally.

Most families have chickens and/or turkeys and consume and sell their products, a few have pigs, mostly for sale, and many have sheep and/or goats. In the lower valley, where the springs provide water for all-year pasture, or in the middle valley, where larger landowners have artesian wells, dairy cattle are raised. Our impression is that most animal produce is sold rather than consumed locally, and that beans are the primary source of proteins.

Maize, being the staple food, is generally grown everywhere, even in areas where soil depth and moisture are inadequate. There is a tendency to extend maize cultivation to the limits of the capacity of the area in years when the rains begin early. Several varieties of maize are known, including a fast- maturing, low-producing *tres meseño*, adapted for drier areas. Most maize, however,

requires abundant moisture and relatively deep soil. Consequently, the heaviest production is in the alluvial plains of the Delta, lower, and middle valleys. Production is also high on gently sloping terrain with good terracing. Wheat requires basically the same conditions as maize and is therefore grown primarily in the same areas but the amount of sown land is considerably less. In the lower valley it is planted as an irrigated winter crop following the summer crops. In the rest of the area it is planted during the summer rainy season. Beans and barley require less moisture and soil, and are grown primarily in the upper valley or on hilly terrain. In a general sense barley tends to replace maize up-valley and upslope. Beans, barley, squash, and even wheat may be interplanted with maize in exceptionally fertile soils.

Maguey is planted in a variety of situations, including houselot orchards or large fields where soils are thin. It is primarily planted, however, as a border around fields and terraces in the alluvial plain of the upper and middle valley, on gently sloping hillside or in closely spaced rows parallel to the slope in areas of medium to steep slope.

Nopal, in the 1960s, was almost always grown on houselot orchards, predominantly in the villages of the middle and upper valleys and in the North Tributary Valleys. Recently, with the expansion of the urban market, large areas of the alluvial plain in the same regions have been converted to nopal orchards.

Problems and Basic Techniques.

The major problems faced by the cultivators in the Valley today may be summarized as follows:

1. The precipitation pattern is characterized by rainfall that is very variable in quantity and duration from year to year, with frequent droughts during the rainy season, and a tendency to be torrential and highly localized.

2. Winter frosts occur normally during four months of the year. They also occur sporadically during an additional three months, thus reducing the growing season in some years to five months for pre-Hispanic cultivates. Within the Valley, frosts are more severe at lower elevations.

3. The combination of early and/or late frosts and retarded rains is a frequent occurrence.

4. The combination of scanty vegetation, loamy soils, torrential rains, and generally sloping terrain make gully and sheet erosion a serious problem.

5. As a result of the above factors, a high percentage of the Valley today must be classified as marginal land. Deep soil plains probably do not account for more than 100 km^2 of the 505 km^2 of the drainage basin.

The Valley today is intensively exploited. Only in the delta and lower valley, where communities are closest to Mexico City, are agricultural lands frequently left unused (a high percentage of the population in the former area work in factories in the city). Slopes too steep or too denuded of soil to be cultivated are used as pasture, and most fields are planted annually.

Today, the plow is generally used, even on terraces, and hoe tillage is rare. Basic techniques applied everywhere are: use of animal fertilizers, weeding by cultivation with the plow, crop rotation (although infrequently applied in small holdings), and interplanting.

There are, however, considerable variations in techniques of land use and cultivation dependent on crops to be grown, depth of soil, availability of water, and angle of slope. On the basis of these criteria the following agricultural systems may be defined: floodwater irrigation, permanent irrigation, temporal cultivation, terrace cultivation, chinampa cultivation, and nongrain cultivation. Each of these is discussed in detail below.

Floodwater Irrigation. This system is most highly developed in the middle valley alluvial plain but is practiced all over the Valley, where the combination of shallow barrancas and deep soil plains or gently sloping terrain occurs. In the lower valley it is a desirable auxiliary method to permanent irrigation. For effective application of this system a minimal soil depth of 0.5 m is required and at least one meter is desirable. The most careful preparation of the land in the entire Valley is applied with this system, because of the combination of fertile soils and irregular water resources.

Dams of loose stone, earth, or masonry are built across barrancas at selected spots where the latter are relatively shallow. Following a torrential shower, a considerable flow of water runs in the barranca. This is blocked by the dam and a temporary pond forms behind it. In some dams the water is diverted immediately into one or two primary canals. Secondary canals feed the water to the individual fields. Small temporary earth dams are built across the primary canals to divert water into the secondary canals in succession, and across the secondary canal to divert water into the individual fields.

The individual dams and primary canals are generally small and do not provide water for more than 50 to 100 ha of land each. A major barranca may have a chain of five or six such dam-canal complexes. Each dam has portable wooden floodgates which are closed and opened in succession as the water moves downstream. A single dam and its canal may serve lands belonging to residents of one or two villages and/or a hacienda, and are constructed and maintained by cooperative labor. Such cooperative groups, therefore, crosscut village membership. The variability and uncertainty of water flow make formal regulation of water distribution impractical. It is probably unnecessary anyway since there is normally either no water in a barranca or more than is needed. Lands further upstream, of course, have an advantage in that water from even brief showers may be utilized. Units located well downstream are those most affected by droughts. Most haciendas in the nineteenth century were located near the headwaters to insure first rights, either for irrigation or to supply jagüeys for livestock. Quarrels and even fights over water rights, although infrequent, have occurred.

The success of the system is based on the localized nature of rainfall in the Valley and the fact that slope areas receive more rain than the plains. Therefore, by an efficient use of the system the affectivity of the scanty rainfall is considerably improved. The system collects water from areas of marginal agricultural use and diverts it to areas of high productive capacity.

Dams and primary canal construction and maintenance are cooperative tasks frequently involving people from different social communities. One of the major problems is the removal of silt. Secondary canals are maintained by small groups of farmers who use them.

Since water resources are uncertain, special techniques of working the soil have been developed to conserve the humidity. The most intensive preparation of the soil is for maize. Fields may be

irrigated several times during the rainy season, but irrigation during May and the autumn months is especially valuable for the success of the system: the May irrigation to give the present year's crop a start, the autumn irrigation to store water for the following year. During the growing season, the soil is cultivated several times to keep the texture loose, facilitating downward drainage. In November, after the rainy season has ended and autumn irrigations completed, a thorough plowing called barbecho is given. The purpose is to turn weeds over and facilitate the final drainage. After plowing, a *rastrillo* (heavy board) is pulled over the field to smooth down the plowed surface and seal off capillary spaces in the upper levels of the soil, thus reducing evaporation of the stored water. In January, a second, shallower, more closely spaced plowing at right angles to the barbecho is applied, called the *cruzada.* This is also followed by a *rastreo* (application of the rastrillo). Very conscientious farmers may even plow a third time, diagonally.

The depth of the soil, presence of the relatively impervious tepetate below, use of earth banks, careful plowing and rastreo, floodwater irrigation, and loose crumbly soil texture all facilitate the storage of water in the lower soil levels. The upper soil level acts as a dry mulch, protecting the humidity below ,and by spring has the appearance of talcum powder.

Prior to 1950, these techniques were combined with a special planting method called *a cajete* or *a todo costo.* In March or April, possibly as late as May, depending on soil depth and frequency of irrigations the previous year, the land was given a *zurcada* or final plowing to loosen it for planting. Following this, small pits or *cajetes* were excavated with shovels in the loose soils at 0.5 to 1.0 m intervals down to the level of the humid layer of soil. Seeds were then planted in the humid soil and the pit partially filled with dry surface soil to seal off capillary action. The shallow depressions that remained served as catch basins for rain or irrigation water. The technique is extremely effective but laborious. Even with metal tools it requires 80 to 160 man-hours per hectare. Under reasonably good conditions crops may be planted as early as March or April and can withstand 60 days of droughts. If water is available for at least one good irrigation in May, crop loss is very rare, even with a retarded rainy season.

Since 1950, the cajete technique has been rapidly replaced by a new, faster method called *al tubo.* After the zurcada, a special steel plow with a deeper excavating share is used in combination with a *tubo* as a planting drill. The tubo or tube is a cylinder manufactured from two maguey *penca s* (leaves) lashed together and tied to the plow. The plow theoretically slices down to the humid subsoil, the seed rolls down the tube to this level and the soil falls back over the seed. Most farmers feel that the cajete system is more dependable (since the humidity level varies and in dry years the plow probably does not reach it) but the al tubo method is more economical. Only 30 hours of work are needed to plant one hectare.

Along with these humidity conservation practices, soil conservation is practiced as well. A major problem in the sloping areas of the valley is soil erosion. The practice of planting maguey around the borders of fields, usually on top of earth banks constructed to prevent runoff, has as a side effect the prevention of erosion. Fields are rarely rested and most of them are in continuous cultivation. The technique of floodwater irrigation not only brings water to the field but fresh soil in solution as well. Animal fertilizers are sparingly used, applied every three to six years. Maize is the dominant crop, with wheat or barley as secondary crops, frequently rotated with it. Beans are commonly interplanted with maize, and in exceptionally fertile soils, barley and wheat are sown broadcast between the rows of maize.

The result is a highly productive, intensive system of agriculture. At San Pablo Ixquitlán, a

village in the center of the Middle Valley alluvial plain, one of the informants stated that in a 10 year period, in seven years a field yielded fair to good maize crops with production ranging from 900 to 1,500 kg (kilograms) per hectare, three years were considered poor with yields ranging from 600 to 750 kg (during these years unirrigated lands were a total loss). The average yield over a 10 year period is probably around 1,000 kg per hectare. The same informant also stated that the mentioned 10 year period (1945 through 1954) was the poorest in the 30 years he had cultivated the land.

Specific data from other fields at San Pablo and San Martín tend to confirm these figures. The *Secretario Ejidal* of San Martín in 1953 estimated that if the floodwater system was managed with maximal efficiency, the alluvial plain of the middle valley (called locally *La Vega*) should yield an average of 1,200 to 1,500 kg per hectare. This figure, then, would represent a theoretical maximal productivity in terms of present-day technology and climate.

Permanent Irrigation. As we previously stated, approximately 80 springs with a permanent water flow are located at the Villa of San Juan Teotihuacan, and in the two barrios of Puxtla and Maquixco. Gamio's field group (op. cit.) estimated an annual flow of 31,000,000 m^3 of water. The measured flow of water in December at that time (1922) was 1,500 liters per second (at the end of the rainy season). They estimated a probable average flow of 1,000. By the mid 1950s the output had dropped to an average of 588.6 liters per second. The decline is apparently due to perforation of artesian wells up-valley by large landowners. The discussion of irrigation below is based on the water availability at the time of Sanders 1954 study.

As Gamio stresses, the system is primarily one of drainage and is technologically simple. Water is collected from the springs by means of small earth ditches and diverted into a single canal immediately above Maquixco. Below Maquixco, at a place called "La Taza", the canal divides into two main branches, the canal of San Antonio with an average flow of 200.26 liters per second, and the San José with 287.32 liters per second. There are also two smaller canals that derive their water from local springs at Maquixco, the canal of Texcalac (50.36 liters per second), and Cadena (12.66 liters per second). Near Atlatongo are some very small springs, at a place called "El Tular", that provide an additional two liters.

Before the agrarian reforms, the water was controlled by the four big haciendas of Cadena, San José, San Antonio, and Santa Catarina. After the reform, it fell under the jurisdiction of the Mexican government, and a set of water regulations was designed to administer the system. Fifteen villages or barrios, and five haciendas or ranchos cultivate lands supplied by the system with a total area under irrigation of 3,652 ha, of which 3,373 are assigned to the villages and barrios. Two barrios of San Juan Teotihuacan also use the water directly from the springs before it reaches the taza. The 15 villages and the haciendas and ranchos, are organized into a Junta called the "Junta de Los Pueblos de los Aguas de los Manantiales de San Juan" with its center at Calvario Acolman. The primary function of the Junta is to implement the water regulation laws established by the federal government. It does not have the power to change them.

The holdings of each village are divided into two divisions, "pequeña propriedad" and "ejido". These broad divisions may also be broken up into water distribution units depending on the canal from which the water is supplied. The Junta meets monthly and consists of one elected representative from each hacienda or rancho and two from each village and barrio (one from the ejido, the other for pequeña propriedad) who in turn elect a president. Water is assigned on a day, hour, minute schedule from each canal for each of the large units, such as the ejido or pequeña propriedad of a particular village. The large units in turn have an internal regulation system by land

holdings. It requires approximately four to six hours to irrigate one hectare of land from the San Antonio Canal.

As we have emphasized previously, most irrigation in the Teotihuacan Valley involves a single pre-planting flooding of the field to give the crop a head start on the growing season. Most of the humidity for plant growth is derived from the summer rains. The importance of this pre-planting irrigation is clearly demonstrated by the concern of the individual farmer over his share, especially the timing, and the almost continuous disputes between villages over water theft. Since most of the moisture used by the crop is based on rainfall, however, the relatively small amount of water flowing from the springs goes a long way and involves a far greater number of people and communities than would be the case in a desert valley.

Each farmer in the Valley receives water normally once or twice a year. Using the figure of four to six hours of water needed per hectare from one of the main canals, theoretically the system could be used to irrigate 4,350 to 6,600 hectares of land. Actually, the situation is not quite as favorable as far as maize or other pre-Hispanic crops are concerned. Maize must be planted no earlier than March 1 or later than June 15 for maximum production, or over a period of three to three and one-half months. If pre-planting irrigations for maize were confined to that period this would mean only 1,080 to 1,620 hectares of land could be irrigated for maize per year. Actually lands can be irrigated as early as December 1 or as late as June 30 and still be planted in maize. In the case of the former, the lands are flooded in December, January, or February, but planting is delayed until March. The soil is thoroughly worked and prepared to store the water in the manner noted for the middle valley. Each farmer receives his share at a different time each year to avoid unfair assignments since the ideal time for planting is May and for irrigation is March. The total amount of irrigable land for maize then ascends to 2,544 to 2,716 hectares. The amount of land classified by the Junta as *tierra de riego* is close to these figures. The situation is further alleviated by the fact that some pre-Hispanic crops, such as beans, mature faster than maize and can be irrigated as late as June or July. It is very probable that in pre- Hispanic times lands that were irrigated as early as December or January or as late as June were planted with crops that were less demanding than maize. If Gamio's data are to be trusted, all of these figures would need revising upward 50% with the former greater flow of water (1,000 liters per second).

Today, a number of farmers raise small herds of dairy cattle and plant their fields in alfalfa or clover. Some European crops, such as wheat, are frost resistant and are therefore grown during the winter season so that there is a high percentage of land that is double-cropped. The usual pattern is to plant maize in the spring, followed by wheat in the fall if the farmer has two or three water allotments in a given year, followed by a single summer barley crop the second year without irrigation. The exact order is a highly flexible one based on the number and timing of irrigations in a given year. If maize and wheat are to be grown in a single year, at least three rations of water are required, since wheat grown during the dry season would require two irrigations (pre-planting and again during the growing season).

One of the villages, Atlatongo, has special rights to a continuous flow of water (38.0 liters per second) from the San Jose Canal. This claim was apparently based on a resurrected colonial document and is a constant source of dispute. This had been reduced to 18.3 liters on the basis of the new regulations established in 1959.

The alluvial plain below the springs is traversed by a vast network of secondary and tertiary canals, each of which must be cleaned annually. The main canals and springs are cleaned by all of

the villages, under the direction of the Junta, in September and October. Each village sends its own allotment of men and the total number of workers may reach as high as 800. Secondary and tertiary canals are cleaned by smaller work gangs involving farmers who use the particular canal. On this level the work is as informally organized as in the middle valley.

Characteristic, then, of the system is a pyramid of cooperative work gangs that acts as a powerful integrative factor on the infra-community, community, and supra-community levels. The system also, however, has disruptive qualities that produce community rivalry and conflict. Water theft is the primary source of conflict and verbal disputes are frequent, at times evolving into physical conflict, as Millon and his co-workers have demonstrated (Millon, Hall, and Diaz 1962). This combination of integrative and disruptive effects of the administration of the system has theoretical significance which we will develop further in Chapter 9.

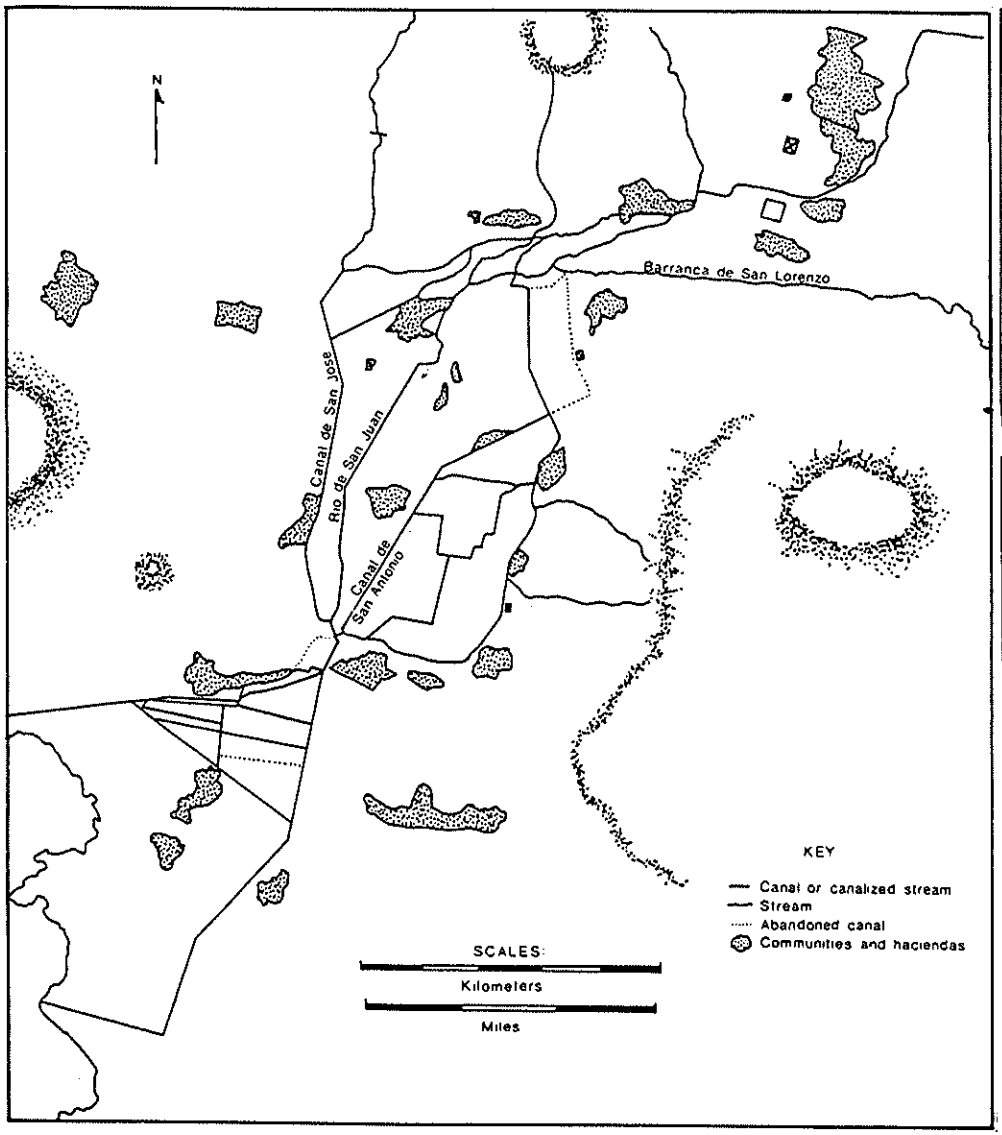
Techniques of preparation of the soil are similar to those used with floodwater irrigation, including multiple plowing, use of earth banks, crop rotation, fertilizers, cajete or al tubo planting, and interplanting. An additional technique for fertilizing the land was once used by the haciendas. This involved annual flooding of the land with water from the barranca system to introduce fresh soil since the spring water was relatively free of sediments. It was called *enlame* (see Gamio, 1922).

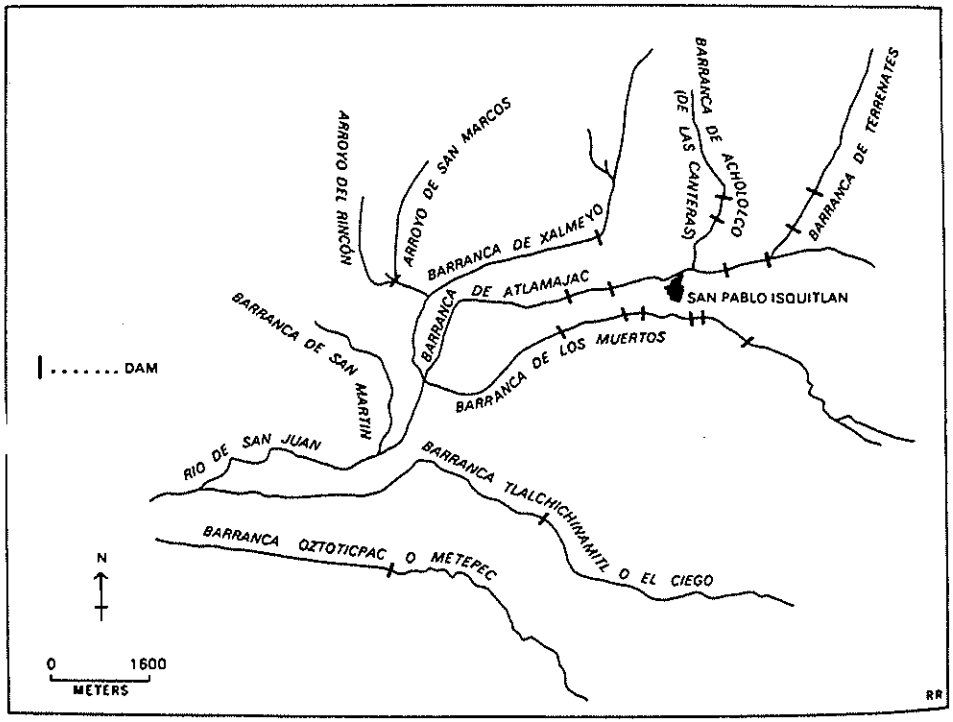
Yields of maize vary considerably depending on the date of planting and the quality of the rainy season. At Atlatongo, the most favorably located community, production ranged from 900 to 2,700 kg per hectare with a probable mode of 1,500 to 2,250 over a 10 year span. Over a two-year period, a one hectare field in the irrigated plain near Atlatongo averaged 1,875 kg of maize, 1,400 kg of wheat, and 1,400 kg of barley plus small quantities of interplanted beans and squash. At Acolman, at the mouth of the lower valley, average maize yields drop to 1,350 kg and wheat to 1,200. These figures are undoubtedly more applicable to the irrigated plain as a whole.

If these figures are dependable and the 3,600 hectares of land served by the system were all planted in maize every year, it could supply maize for a population of 31,500 people. Assuming Gamio's figures of water flow for the springs to be correct and applying them to the Conquest Period means that the spring system may well have supplied maize for some 50,000 people. All such figures are hypothetical and undoubtedly too high since not all land would be planted in maize in any single year.

Figure 2

A





B

Note: The Barranca de San Lorenzo In 2A is the same stream as the Barranca of Oxtoticpac or Metepec in Figure 2B

Temporal Cultivation. Generally speaking, in the Mesoamerican Highlands the term temporal refers to agriculture in which the humidity for plant growth is derived primarily from rainfall. In the Teotihuacan Valley we are using the term to refer to a rather casual-extensive system of farming which is practiced over much of the piedmont areas and the alluvial plain of the upper valley. The system is common in areas of relatively thin soil (below 0.5 m) and gently sloping terrain and involves a minimal amount of labor and low productivity. All archaeological evidence suggests that it is a system of marginal agriculture developed in post-Hispanic times as the product of erosion of terrace systems.

A similar kind of extensive cultivation may have been practiced in the past, during phases of relatively low population density, without the plow. It is also practiced today in the alluvial plain of the middle valley where floodwater systems have not been built recently, or have fallen into disuse. It may be combined with incipient maguey terracing, but fields lack the relatively close spacing of the lines of maguey that are required for effective erosion and water control.

The majority of land cultivated with this technique is planted in barley and maize, with beans as an important secondary crop. Maize cultivation is extremely precarious and its practice is a reflection on the significance of maize as a food plant and the deficiency of better lands. Complete crop loss is a frequent occurrence, especially with maize. Barley and beans are much more secure crops. It is difficult to establish the average productivity of such lands since this depends on the vagaries of rainfall, variations of soil depth, and the crop planted.

The following data are from San Francisco Mazapan and refer to flat terrain with a depth of 0.5 to 1.0 m, lands which would normally be cultivated using the floodwater system, and would be considered relatively productive within the category of temporal. Between 1945 and 1953, a poor period, a test field yielded the following crops: five barley crops with yields ranging from 300 to 1,200 kg, or an average of 600 kg. One year maize yielded 900 kg per hectare. Over a 25 year period a yield in excess of 600 kg for barley or of 900 kg for maize occurred only eight times.

At Santa Maria Coatlán, a village with lands similar to Mazapan, the Secretario Ejidal in 1955 stated that 1937, 1938, and 1939 were all exceptionally good years in which yields of maize over the ejido ranged from 1,500 to 1,800 kg. Between 1940 and 1053, a generally poor period, the range on fields in which a crop did mature was from 450 to 900 kg; but in many years numerous crops were a total loss. Over that period the average yield was probably not over 500 kg. The year 1954 was good with yields ranging from 1,000 to 1,500 kg. The data indicate a fertile soil but variable productivity, because of the uncertainties of rainfall. In areas with less than 0.5 m of soil the picture would be much more dismal.

Techniques of cultivation in this system include the fall barbecho, spring zurcada, some crop rotation and very infrequent fertilization. Many fields do not have earth bank retaining walls and are not adequately protected from erosion. Since many of the lands cultivated using this system are of low productivity, most farmers do not use soil or humidity conservation practices, the result of which is further deterioration. Planting is done by a system called *tapapie* in which one man plows while the other walks behind dropping the seed and covering it with his feet. One special technique, used in years when the rains are delayed, is to plant the special, rapidly maturing, black maize called tres meseño. It has low productivity but is well-adapted to withstanding drought and matures rapidly, thus escaping the autumn frosts even when plantings are delayed until July 1.

Terrace Cultivation. The primary difference between terrace agriculture and temporal cultivation

lies in the degree of application of certain water conservation practices known to the present-day peasant population. The degree of application of such techniques is linked with a variety of factors, mostly demographic in nature. The sixteenth and seventeenth century decline and consequent abandonment of fields, recent population growth and urban migration, and loss and recovery of lands to the haciendas are important factors. The borderline between terrace cultivation on the one hand, and temporal cultivation on the other is a vague one. The term "terrace agriculture" is applied here to situations when the terrain is sloping, where runoff is being checked by stone, earth, or maguey embankments to the degree that soil depth in slopes exceeds 0.2 to 0.3 m, and where downslope drainage is controlled. As the archaeological data will demonstrate there is reason to believe that most of the gentle-medium sloping terrain in the Teotihuacan Valley that is today cultivated using the temporal system was covered by complex and carefully constructed terrace systems in 1519.

Following the Conquest, several processes occurred that resulted in a deterioration of many terrace systems and their conversion to marginal land. Slope areas in the Teotihuacan Valley should generally be considered as marginal lands that may be converted to productive lands by a heavy investment of labor, but nevertheless remain peripheral in value to the alluvial plain in village economy.

Between 1519 and 1720 there was a disastrous demographic decline all over Mesoamerica, the product of the introduction of European diseases. In the Teotihuacan Valley the population declined at least to one-third of its former number by 1560, to one-fourth by 1580. Accompanying this population decline, a second process called *Congregación* occurred, in which the Spaniards, to facilitate conversion and taxation, moved small communities or dispersed populations into other settlements (towns, large villages, or new population centers). In the Teotihuacan Valley this occurred in the early decades of the seventeenth century.

The displacement of the population of numerous small communities from marginal areas, the fact that terrace agriculture generally was an economically marginal system, and the general decline of population, all permitted a general reduction of agricultural land in production and resulted in the abandonment of many terrace systems, thus exposing them to erosion. Furthermore, the rapidly expanding use of such domestic animals as sheep and goats, and conversion of more distant agricultural land to pasture, stepped up the erosional process. Terrace systems in this area require constant maintenance and care. Once abandoned, the process of erosion is rapid and there are no large areas of sloping terrain in the Valley that have completely escaped the process. It is probable that 40% to 60% of the gentle to medium-sloping terrain in the upper and middle valley has a soil cover of less than 0.2 m of soil today.

During the nineteenth and twentieth centuries, most of the land of the Valley was gradually incorporated into large haciendas, practicing basically an extensive rather than intensive system of farming. However, the *hacenderos* did partially canalize the barrancas and develop elaborate maguey terrace systems that have partially restored the area.

As the seventeenth and eighteenth century erosion progressed, only terrace systems located near villages managed to survive. Well-maintained systems occur today at Belén, Tolman, Santiago Tepetitlán, and Oxtotipac, within the Valley, and also on the northern slope of Cerro Gordo. Generally, terrace systems in relatively isolated parts of the Valley tend to be better preserved, and more thoroughly utilized than those in the lower valley. Such communities are more dependent on agriculture than those lower down, where the urban labor market absorbs a growing proportion of the peasant population into non-agricultural activities. Ambitious attempts at land reclamation on

slopes are most commonly found in the more isolated areas. Apparently when recent population growth produces pressures, the more isolated communities respond by building terrace systems; where facilities for commuting to the city are available, the population responds by working part or full-time in the city.

The most impressive system of terracing in the survey area is located near the modern villages of Maquixco Alto and Colhuacán on the north slope of Cerro Gordo. Topographically, the area appears as a series of long, gently sloping ridges extending outward radially from the main mass of the hill, each separated from the next by barrancas.

Because of the height of Cerro Gordo and the closeness of the agricultural area to the upper flank of the hill, considerable runoff is available for floodwater irrigation. The ridges are covered with terraces and the lower and middle segments of the barrancas are frequently partially absorbed by check dams. The total area today presents a very complex picture of deep gullies, sedimented barrancas, large patches of bare tepetate, sections of new lands reclaimed from tepetate, old and disintegrating terrace systems, and well—maintained, productive terraces.

Terraces in all stages of growth, construction, and deterioration may be seen. There is considerable variation in soil depth, slope angle, crop use, affectivity of erosion control and water conservation. Where terraces are carefully maintained, there is practically no free-flowing drainage. The terraces are arranged in vertical strips of parallel lines running downslope with very shallow, main canals running between the strips. The upper corner of each terrace is equipped with a low bank of earth that projects into the main canal, that automatically diverts part of the flow into the terrace, a self-flooding system. All water derives from flash floods that follow showers.

The most effective terracing occurs just east, north, and south of the village of Maquixco Alto. In these areas soil frequently exceeds one meter in depth, the lower edge of the terrace has a high earth bank (frequently planted in fruit trees or maguey), the surface of each terrace is completely level, and the sides have earth banks to prevent lateral erosion or loss of water. In the most developed terraces the water is not directly diverted into the field but into a ditch located along the upper edge of the field and situated just below and parallel to the lower bank of the terrace just above it. The ditch breaks the force of the water as it enters the fields, holds it and prevents gulling of the field. Terraces generally vary from 5 to 20 m in width, but this is a highly variable feature depending primarily on slope angle.

Most of the deep soil terraces are planted in maize, frequently interplanted with wheat, *habas* (a Spanish bean) or squash. Such lands are as productive as the floodwater irrigated plain of the middle valley. This part of the survey area had a lush, almost jungle-like appearance in 1963 (with the maize crop two to four meters high, fruit trees and maguey along the terrace banks, closely-packed, interplanted secondary crops, and natural vegetation), in startling contrast to the vegetation-bare tepetate wastelands only a few hundred meters distant. There is little doubt that careful terracing is an extraordinarily effective solution to the problem of hillside agriculture in the Valley. The controlled drainage, use of earth banks, and deep soil with high water storage capacity all act to reduce crop loss to a minimum.

Much of the land in the survey test zone today has a soil cover of 0.0 to 0.5 m with large areas of exposed tepetate (approximately 55%). Traces of old terraces are found all over this area. Scattered throughout this part of the zone are numerous, recent reclamation projects, all small in size and constructed by groups of only familial size, many occurring even in areas of bare tepetate.

Techniques of recovery involve the following steps:

1. Excavation of a trench 0.3 to 1.0 m deep into the tepetate, parallel to the slope, the length of the future terrace.

2. Tepetate extracted from the ditch is then pulverized to manufacture soil.

3. A series of shallow pits is excavated at 1 to 2 m intervals, about 0.3 to 0.5 m deep in a row just above the trench and paralleling it.

4. Young maguey plants are planted in each pit, and the pit is then partially filled in with crushed tepetate.

5. Blocks of tepetate, adobe, chunks of rock combined with earth are used to build a low wall between the maguey plants to form a terrace facing. Crushed tepetate may also be heaped over this to form a continuous bank.

6. A lateral bank is constructed on each side of the terrace using the same method.

7. In some cases the surface of the tepetate for a width of 5 to 10 m behind the bank is worked over with a pick to manufacture a layer of soil.

Once completed, the banks trap free-flowing drainage as it moves down the slope. Such water contains fragments of tepetate and coarse soil particles which are gradually heaped up behind the banks to form a delta of new soil. After a few years, a layer of soil 0.1 to 0.2 m deep forms behind the bank for a width of 2 to 5 m, depending on the quantity of soil particles available on the slope above and the steepness of the slope. At this time beans or barley are frequently planted. The texture of the soil in this early phase is usually quite loose, sandy, and very light in color. The maguey has meanwhile grown to the height of a meter or a meter-and-a-half and new terraces are being constructed above. After five to ten years, the planting of barley and beans and growth of weeds adds organic matter to the soil, and soil depth has increased to 0.3 to 0.5 m, and the tres meseño maize may be planted. After 10 to 20 years, highly productive terraces with deep, loamy, dark- colored soils have formed. This technique is extraordinarily effective; it is doubtful that any land is completely unreclaimable using the system in the test zone.

The majority of the terraces today have soil depths varying from 0.2 to 1.0 m. One can see such terraces in all stages of growth or deterioration. Some are obviously new, others are abandoned and still disintegrating. Such disintegration takes place both laterally and vertically. In cases where the lateral banks have not been carefully maintained, the terrace gradually washes away from either side into an adjacent barranca, gully, canal or down into a lower terrace. Breaches in the lower banks form easily. If a breach occurs in the lower bank of one terrace the flow of water erodes gullies in the terrace immediately below, first washing out the soil, then cutting deeply into the underlying tepetate, forming a miniature barranca. Once this process has advanced, the surface of the terrace presents an undulating appearance; water flow becomes uneven (much of it lost laterally), and the water flowing through the tiny barrancas begins to tear down the next bank below and the process is repeated down through the terrace system. Terraces in a relatively advanced state of decline are usually planted in barley, if used at all, and are frequently less productive than new terraces, even

with their more fertile soils, because of the loss of water. Well-kept but still relatively new terraces (5 to 10 years old) are usually planted in barley but may have several rows of maize at the front end, where soils are deeper, and barley at the upper strip.

Another, similar technique of land reclamation which, according to local informants, was initiated approximately 50 years ago, is that of constructing check dams in the barrancas. The idea is similar to terrace-building on tepetate slopes, except that accumulation of soil in a barranca bed is much faster than that on slopes. A low stone and earth wall is constructed across a barranca bed. In a single year enough soil accumulates behind the wall to permit barley planting. Each year the height of the wall is increased; the soil layer behind this wall increases in depth and fans back to form an increasingly more extensive delta. Finally a wall 9 to 10 m high may result and the entire barranca may be filled in with soil for distances of 30 to 50 m upstream behind the wall. The completed walls are impressive works, yet are the product of the labor of one farmer and a few assistants. Such check dams, if isolated, are very unstable. The erosive force of water flowing through a barranca is great and even well built *presas* (as they are called) can be torn apart and washed downstream in a few seasons. Stability can be maintained only if a series is built, one directly below the other, so that each terrace acts as a buttress for the one just below. Once this process is completed, erosion is no more serious a problem than in ordinary terracing.

There are several barrancas near Maquixco Alto and Colhuacán that have become completely silted in by this method and converted into lands as productive as any in the lower valley. Not only do the check dams permit the accumulation of deep soils, but such soils have higher humidity because of their location in depressed areas.

Terrace maintenance is an arduous and never-ending task. Erosion is a constant threat. Although no detailed study was made, there seems to be a very close relationship between the condition of terraces and the distance from house to land, population pressures and degree of dependence of the landowner on agriculture for subsistence.

The community of Santa Maria Maquixco is a Low-Density Compact village (see discussion below), roughly rectangular in shape, covers an area of 15 ha and has a population of approximately 400 people. Houselots are relatively large and usually planted in maguey or nopal, or used to keep domestic animals. A few families live isolated at distances up to one km from the village. The best terraces are located near the village or near the houses of isolated families. Apparently, it is difficult to maintain terrace systems when they are located more than 300 to 400 m from the farmer's house.

Chinampa Cultivation. A system of cultivation very similar to that practiced in the southern part of the Basin of Mexico occurs in the area around the springs of San Juan Teotihuacan. This system, called chinampa cultivation, is probably the most intensive and productive kind of agriculture practiced in the New World in pre-Hispanic times. The main characteristic of the system, as practiced in the south, includes the construction of artificial islands within freshwater lakes. These islands are built of alternate layers of mud scooped from the lake bottom and vegetation collected from the surface. After the island has reached a height of a few inches above the lake surface, *huejote* trees are planted along the edge to retain the soil. The islands are usually in the form of long narrow rectangles which facilitate bucket irrigation and natural inward seepage of water from the lake. The soil is very rich in organic matter, porous, very dark in color, and land use is extraordinarily intensive; no chinampas are rested for more than three to four months a year. By the use of seed beds, a continuous succession of crops in all stages of growth (mostly vegetables for the Mexico City market) may be seen on a single chinampa. To maintain such a demanding cycle of

cropping, fertilizers (in the form of fresh mulch and floating vegetation) are periodically added to the chinampa. Crops are irrigated by scooping or splashing water onto the chinampa from canoes, or by poles and buckets from the chinampa itself. All preparation of the soil is done by hand tools.

As the system was expanded, most of the surfaces of Lake Chalco-Xochimilco and Lake Mexico (a part of Lake Texcoco diked off from the main lake) were reduced from open lake into a network of chinampas and canals. An added advantage of this system is that produce could be loaded from chinampas into canoes, and poled directly to the urban markets along the lake shores, or to towns within the lakes, such as Aztec Tenochtitlan and colonial Mexico City. The growth of urban centers in and on the lakes in the Aztec period was, in part, correlated with the evolution of this system of agriculture.

In the area around the springs at San Juan, a system of agriculture very similar to the chinampas is practiced today. The total area involved is small, not over 100 ha, but with more humid ground water conditions in the past, it may have been several times as large.

In this area the water table is high, frequently no more that 0.3 to 1.0 m below the surface. Farmers simply excavate trenches down to water level around long rectangular plots of land which are similar in shape and size to true chinampas. The ditches have a constant supply of water due to seepage. Huejote trees are planted along the edge as in the Southern Basin.

Concomitants of chinampa agriculture are: a focus on truck gardening, intensive land use with seed beds, scoop irrigation and hand techniques of working the soil. Here, however, animal fertilizers are used, presumably because the soil does not have as high an organic content. Today, with the gradual dropping of the water table, much of the land has been converted to maize cultivation. Apparently, there is still enough subsoil moisture to permit early planting of maize without irrigation (such lands are called *tierra de humedad* in Mexican agronomy), but not enough for maintaining standing water in the canals for irrigation. Farmers who still plant vegetables tap water from the spring system and apparently have rights to use the water when they need it. Probably the highest maize yields in the Teotihuacan Valley are achieved here. Because of the humidity of the soil, crops may be planted early and grow faster so that the first harvest of the year occurs in these lands. Much of it is sold as *elotes* or boiled fresh corn, at relatively high prices.

Nongrain Cultivation. Most of the previous discussion has primarily involved grain crops, especially maize. Vegetables, mostly European in origin, are grown in the chinampas, but the produce is primarily consumed by town and city dwellers. There is, however, a variety of minor, locally consumed crops that are planted in houselots, interplanted with grains, or planted along terraces or canals. These include European cultigens such as apples, pears, peaches, apricots, habas, figs, and pomegranates, and native plants such as avocados, chayote, beans, squash, and capulín. None of these has any great dietary or commercial significance.

However, two indigenous, xerophytic cultivates, nopal and maguey, are of considerable dietary and commercial value and are well-adapted to the natural environment.

Nopal is a fleshy, succulent cactus that produces a fruit called *tuna* which has a very high sugar content. The young leaves are also cooked as a green vegetable. There are a number of varieties, one producing fruit all year round, others during late summer and early fall. The commercial varieties are of the latter type and most of the produce is sold in the urban markets. Generally, nopal is a houselot orchard crop, but occasionally outlying fields are planted entirely in this crop. At times

it is planted along terraces instead of maguey. Young plants are imbedded in excavated pits, frequently in areas of exposed tepetate, to provide extra moisture even though the nopal has great drought resistance qualities.

More important for subsistence is the maguey or agave. From it is made a significant staple food, a beverage called pulque. As a food, pulque contains a variety of minerals and vitamins otherwise lacking in the diet, and has the added advantage that it can be produced throughout the year. Maguey has an enormous advantage over all other crops, in that it requires a minimum of moisture and soil. Even the most severely eroded slopes can be planted with maguey.

The average maguey plant in the Teotihuacan Valley takes from 8 to 10 years to mature, then produces four to six liters of pulque daily for a period of three to six months. After that the plant must be replaced. This means that between 16 to 40 plants must be kept in various stages of growth for each one in productivity to insure a daily supply of four to six liters. The plant also had a variety of other uses in pre-Hispanic times (cordage, cloth, awls, roofing, sugar, vinegar, honey, fuel, and solid food from the cooked roots, hearts and leaves). Post- Hispanic uses would include fodder for domestic animals, planting drills, and wrappings for barbecues and steamed meat dishes. The pencas or leaves have a variety of casual uses, e.g. drinking and eating utensils, rollers and ramps. Its use as fuel is extremely important since, by Teotihuacan times, all other sources of fuel must have been very scarce in the Valley.

The importance of maguey in the history of the Valley was undoubtedly great in the pre-Hispanic periods, but its importance has undoubtedly grown with the colonial and recent progress of erosion. This is especially true in the upper valley with the growth of the haciendas in the nineteenth century.

As we have noted previously, maguey is planted in a variety of situations. Typically, agricultural terraces on gentle to medium slopes have a maguey border, to help retain soil and water. On steep slopes, it is planted in closely spaced rows parallel to the slope with very narrow, uncultivated terraces between the rows. In some cases each plant may have a small, individual, half-moon stone terrace. In the upper valley, on areas of relatively level ground, but thin soil, large fields may be completely planted in rows of maguey.

Summary

In summary, then, agriculture in the Teotihuacan Valley today has the following characteristics:

1. Humidity regulating techniques: Chinampa cultivation, spring-fed irrigation, terracing, and floodwater irrigation combined with specialized planting techniques.

2. Soil conservation techniques: Use of maguey, earth, and stone terraces, irrigation (bringing in soil and minerals in solution), canalization of drainage to control erosion, check dams to reclaim barrancas, use of tepetate to manufacture soil, crop rotation, fallowing, fertilization and interplanting.

3. Miscellaneous patterns: Use of plows, orchard crops, use of marginal land for grazing, extensive agriculture, maguey cultivation.

4. Crop assemblage: Maize as a staple; maguey and beans as important secondary goods; a great variety of minor crops for sale and consumption, nopal, barley and wheat as cash crops.

Demography and Settlement Patterns

This part of the Chapter will be devoted to a detailed analysis of recent population distribution in the survey area and will attempt to answer the following questions:

1. What changes have occurred in the number of people utilizing the resources of the Valley over the past 50 to 60 years?

2. What are the variations in population density within the Valley?

3. What factors, ecological and non-ecological, are responsible for the recent population distribution?

4. In what kinds of physical communities is the population distributed and what are their characteristics?

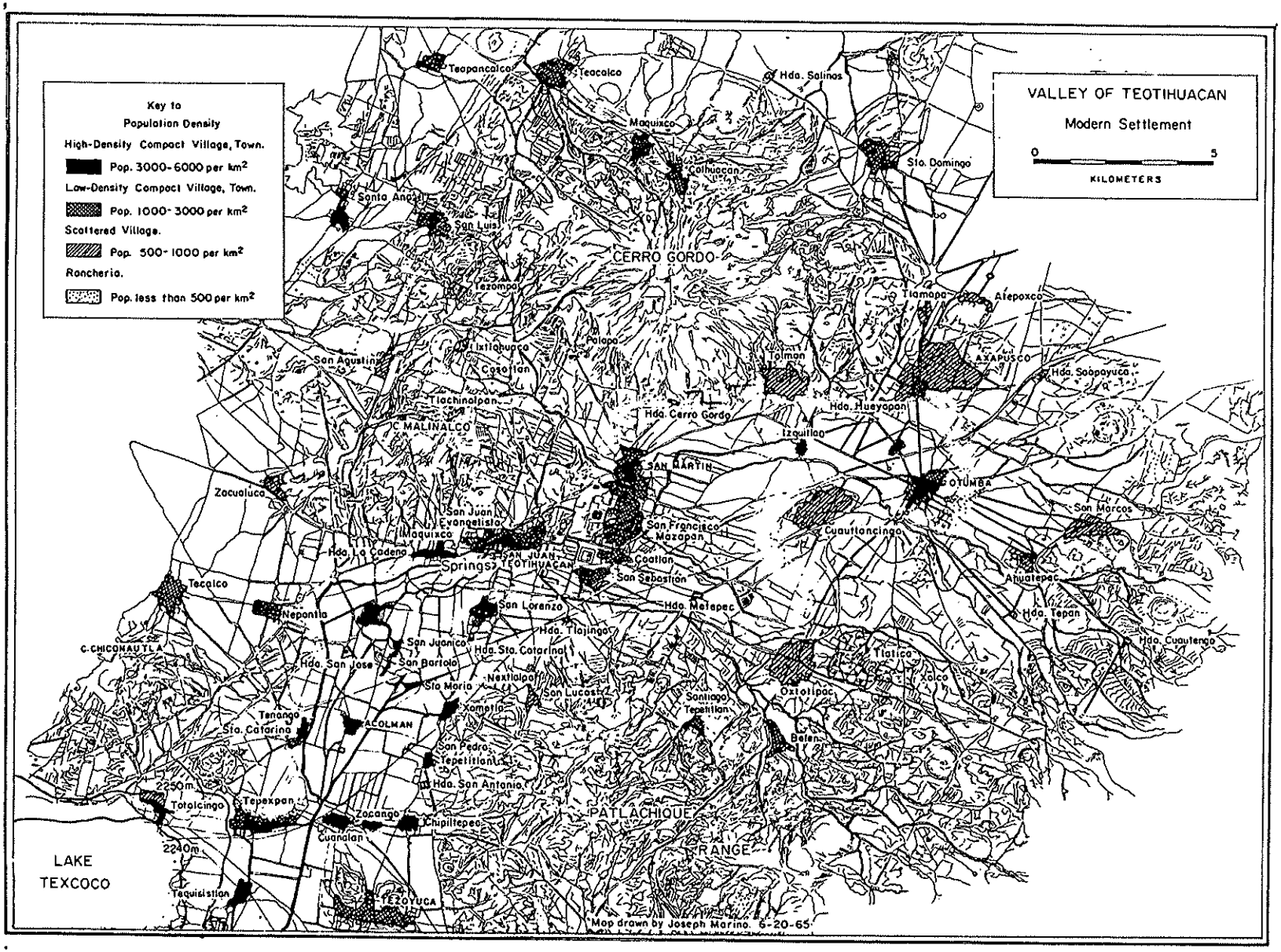
5. What factors have produced the specific characteristics of the various types of communities?

6. What factors determine community locations?

7. To what degree is there a coincidence between physical and social population units?

8. What are the social, economic, and religious interrelationships between communities?

Figure 3


Key to
Population Density
High-Density Compact Village, Town.
Pop. 3000-6000 per km²
Low-Density Compact Village, Town.
Pop. 1000-3000 per km²
Scattered Village.
Pop. 500-1000 per km²
Rancheria.
Pop. less than 500 per km²
VALLEY OF TEOTIHUACAN
Modern Settlement
0
5
KILOMETERS
Teapancalco
Teacalco
Hda. Salinas
Maquixco
Colhuacan
Sto. Domingo
Santa Ana
San Luis
CERRO GORDO
Tezompa
Tlamapa
Afepoxco
Ixtlahuaca
Palapa
San Agustin
Cosotlan
Tolman
AXAPUSCO
Hda. Soapayuca
Tlachinolpan
Hda. Hueyapan
Hda. Cerro Gordo
MALINALCO
Izquitlan
SAN MARTIN
COTUMBA
Zacualuca
San Marcos
San Juan Evangelista
Maquixco
San Francisco Mazapan
Cuautlancingo
Hda. La Cadena
Springs
SAN JUAN TEOTIHUACAN
Coatlan
San Sebastian
Ahuatepec
Tecalco
Nepantla
San Lorenzo
Hda. Metepec
Hda. Tepan
Hda. Tlajinga
C. CHICONAUTLA
San Juanico
Hda. Sto. Catarina
Hda. Cuautenco
Hda. San Jose
San Bartolo
Tlatico
Nextlalpa
Sta. Maria
San Lucas
Xolco
Oxtotipac
Santiago Tepetitlan
Tenango
Sto. Catarina
ACOLMAN
Xometla
Belen
San Pedro Tepetitlan
Hda. San Antonio
2250m
Totolcingo
Tepexpan
Zocango
PATLACHIQUE
Chipiltepec
Cuanalan
RANGE
2240m
LAKE
TEXCOCO
Tequisistlan
TEZOYUCA
Map drawn by Joseph Marino. 6-20-65

Today, the state of Mexico is comprised of political districts called *municipios*. These vary considerably in areal extent, population, and the patterns of population distribution within them. In the survey area in the mid 1950s they ranged in size from 25.93 to 256.51 km^2 and in population from 2,531 to 15,226. In the country as a whole these ranges are considerably greater.

Except where large cities affect the situation, municipios tend to have populations in the thousands and tens of thousands. They are political divisions, units of self-government with an officialdom headed by a *Presidente Municipal*, an elective office. One community or locality in each municipio is the seat of government and is called the *cabecera*. All or parts of the following municipios lie within the survey area: Calvario Acolman, Atenco, San Martín de los Piramides, San Juan Teotihuacan, Tezoyuca, Axapusco, Nopaltepec, Otumba, Temascalapa, and Ecatepec. Table 2 presents a rough estimate of the fraction of each municipio that lies within the survey area and recent population history by municipio. Seven municipal cabeceras lie within the survey area (Acolman, San Martín, San Juan, Tezoyuca, Axapusco, Nopaltepec, and Otumba).

There is some difficulty in estimating the population actually residing in or utilizing the resources of the Valley since all data are by municipal district. The chart suggests a decline of population between 1900 and 1910, presumably the end of a long trend of nineteenth century decline produced by the growth of haciendas; but after 1910, the data indicate a continuous accelerative growth. In 1910 the population for all municipios was 52,308. It climbed slowly to 54,000 in 1930. Since the latter date, the pace has increased with 59,041 in 1940 and 72,790 in 1950.

The primary factor that has led to this accelerated growth is improved general health, most particularly the reduction in infant mortality. This change, in turn, is the reflection of major processes that have been operative in Mexico since the 1920s: increasing industrialization and urbanization, with their impact on economic growth and improved transport, the agrarian revolution, which engendered not only increased economic security but the beginning of social progress that has improved health conditions in the rural areas. Utilizing the estimates of the percentage of municipios lying within the survey area as a base, the figures for the survey area would probably be close to 35,000 in 1910 and 45,000 in 1950. Recent censuses, therefore, show a range of population varying from 35,000 to 45,000 or a density of 47 to 55 persons per km^2.

Although the phenomenal growth of the city over the past 30 years has undoubtedly had some demographic effects on the Valley, most of the population was, in 1964, either rural in mode of life, or participated in urban activities that served the local rural population. Perhaps the 1930 census would be a reasonable base line for estimating the present-day demographic capacity of the Valley (since this would predate the growth of the city). All such estimates, however, must be qualified since they would assume that substantial conversion of extensively cultivated slopes to intensively cultivated terraces is not possible. Furthermore, it must be stressed that in 1930 the Agrarian Reform was only a decade old and still could not have had much effect on population growth. A possible compromise in assessing the recent demography with respect to an agrarian economy would be to use the 1940 census, since Mexico City's economic impact on the area at that time was minimal.

Table 2: Population History by Municipio

	Surface Area Km²	Population					Fraction of Municipio in Survey Area
		1900	1910	1930	1940	1950	
Acolman	86.29	5822	5522	5827	7234	9422	all
Atenco	72.24	3848	3275	4463	5023	5425	1/3
San Martin	57.79	Non Existent		3717	4171	4718	all
Teotihuacan	75.41	5175	5570	5418	6667	8348	all
Tezoyuca	25.93	1837	1709	1960	2161	2531	all
Axapusco	256.51		7944	7049	7662	7598	1/3
Nopaltepec	76.20		2580	2333	2709	2931	2/3
Otumba	172.59		11264	7167	7584	8407	all
Temascalapa	147.85		7074	7304	8136	8191	1/4
Ecatepec Morelos	143.30		7320	8762	10501	15226	1/6
	1114.11		52308	54000	59848	72796	

Table 3: Occupation and Land Ownership in Selected Communities

	Farmers	Nonfarmers	Nonfarmers Possessing Land
1. Compound Community of			
San Juan Teotihuacan			
La Villa	8	199	11
Purificacion	20	53	6
San Juan Evangelista	30	47	11
Puxtla	11	15	10
2. Rural Settlements			
Cuanalan (Compact Village)	66	24	0
Tepetitlan (Scattered Village)	32	11	7
Palapa (Compact Rancheria	69	4	0

Table 4: Social And Physical Communities By Population Intervals

Population Group	Number of Social Communities	Number of Physical Communities
0 - 100	3	3
101 - 200	9	7
201 - 300	7	4
301 - 400	7	5
401 - 500	10	7
501 - 600	3	3
601 - 700	7	7

701 - 800	3	3
801 - 900	3	3
901 - 1000	3	3
1001 - 1500	2	2
	57	47

Each municipio crosscuts our ecological divisions. In addition, the population density varies considerably over the survey area and only rough estimates, based on municipal variations, can be made. Acolman, a municipio with the majority of the lower valley alluvial plain lying within it, had a density in 1940 of 84 per km^2. Axapusco, located in the thin-soil, sloping piedmont in the upper valley, recorded only 30. These two figures, in a general way, show the range of productivity of the various segments of the Valley today.

The ecological significance of the spring-fed irrigation system is shown in sharp relief when we realize that the 3,600 hectares of land served by it are a significant factor in the economy of 21 rural communities (approximately one-third of the total number of communities) with a total population in 1940 of 15,000 people. Approximately one-third of the population had an agricultural economy at least partly based on an area comprising only 6% of the land surface.

Within the municipio, the population is distributed and organized in a series of population or administrative units variously called *villas, cabeceras, pueblos, barrios, colonias agrícolas, ejidos, rancherias, ranchos, estaciones*, or *haciendas*. The term *villa* or *cabecera* is applied to the administrative center of the municipio, with villa usually being reserved for larger, more urban cabeceras. The title villa frequently dates back to the Colonial Period. All of the others are politically dependent communities. The term *pueblo* or *barrio* is used for old, physically and socially semi-autonomous settlements of subsistence farmers. The term barrio, as applied to these communities, is a survival of the 16th century pattern in which all dependent communities were called barrios (or estancias), and the term barrio was a direct translation of the Aztec word *calpulli*. Colonias agrícolas and *ejidos* have similar economic or social functions but are new, government-sponsored communities. *Rancherias* are dispersed communities of subsistence farmers. *Ranchos* and *haciendas* are large, commercial-agricultural or livestock-raising, landholding units, and *estaciones* are small clusters of railroad employees living near the station. Each of the barrios, pueblos, ejidos and colonias agrícolas has a locally elected official called a *delegado* who represents the unit in the municipal center.

Excluding Ecatepec, where modern factory construction has converted much of the municipio into an economic suburb of the capital, approximately 25% of the population resides in the villas or cabeceras of the nine municipios, and at least 70% resides in the various types of dependent communities occupied by subsistence farmers (i.e., rancherias, barrios, pueblos, ejidos, and colonias).

In the above discussion the population has been analyzed entirely in terms of *political* divisions. Socio-economically, the settlement pattern may be analyzed as follows (the entire discussion below refers only to settlements in the survey area).

Excluding commercial establishments like ranchos, estaciones, and haciendas, there are 70 social communities in the Valley. These correspond to the mentioned political units. Each has a patron

saint and a church, most have communal lands for pasture (agricultural land is individually owned or worked), each has a strong sense of social identity and a general feeling of suspicion and even hostility toward outsiders.

In the majority of cases these social units are also physical communities but approximately 20 are attached to other communities. In all but one case, the attached communities are equal in status, at least in recent times. The exception is San Juan Teotihuacan, one of the two communities we are classifying as urban. In cases of such compound communities, all but one of the communities concerned are called barrios rather than pueblos; but as we noted previously, physically isolated social communities may be called either pueblos or barrios.

Of the 50 physical communities, two may be classified as urban, five as having some incipient urban traits corollary to their political rank as cabeceras (two of the cabeceras are located outside the survey area) and 41 as rural. In 1940, 10% of the population of the survey area resided in the two urban communities of San Juan Teotihuacan and Otumba, 18% in the six incipiently urban (this includes Tepexpan, which although not a cabecera, has some urban traits), and 70% in the rural subsistence communities.

There is considerable variation in the characteristics of rural communities. All have some kind of socioreligious center, usually a plaza with a church, a small shop or two, and a school. Some may have a municipal building for meetings. Many of them have very irregular street plans, especially hillside communities; others have a grid of streets 100 m square. All but a few are nucleated communities, that is, the houses are located in a restricted, easily definable residential area with most of the agricultural land located outside of it. Basically, our definition of rural refers to mode of subsistence, communities in which at least two-thirds of the population derives most of its income from agriculture. There is considerable variation in population size, plan, and compactness. Table 4 illustrates variations in population size by physical and social community (1940 census).

Variations in rural community population density are so striking that this criterion has been utilized to establish the following community typology. Community population density refers to the density within the area defined as the residential segment of the community territory. There is an almost complete continuum of density variations so that the following types are rather arbitrarily delimited:

1. *Rancheria.* Pattern in which all or nearly all of the agricultural land used by a householder lies close to his residence. This type is absent in the Teotihuacan Valley but does occur on the Gulf Coast. In this case the physical community and the sustaining territory are the same.

2. *Compact Rancheria.* A vaguely defined residential zone, separate from the sustaining area, exists in this type, but the houses are very widely spaced, with much intervening agricultural land.

The densities of several test cases averaged around 200 to 300 per km^2, much too high for a true rancheria (if located on the eroded piedmont of the Valley), but so dispersed that one hesitates to call such communities nucleated. This is a rare settlement type in the Valley.

3. *Scattered Village.* A very common type of community in the area. It differs from the Compact Rancheria in that most of the agricultural land is located outside the village. Houselots, however, are large, usually planted in maguey or nopal but not infrequently in grain crops. Also, empty cultivated fields frequently occur dispersed through the settlement area. These are terminologically distinguished by the local villages and referred to as huertas, whereas fields outside the village area are referred to as campos. Such settlements very rarely have regular street grids. The density varies from 500 to 1,000 per km^2.

4. *Compact Low-Density Village.* Numerous villages in the Valley have densities ranging from 1,000 to 2,500 per km^2. Many houselots have maguey or nopal orchards, or stalls for domestic animals, but the houselots are smaller than in scattered villages and grain cultivation is rare. Regular street grids are more common in these communities than in scattered villages.

5. *High-Density Compact Village.* Densely nucleated communities, with small houselots occupied primarily by residences and courts, and with very little agricultural activity in the residential zone. Regular street grids are common. Densities range from 2,500 to 5,000 per km^2.

There seems to be a rough correlation in the Valley among the following variables: rural community density, ecological location, formality of houselot and village plans, the amount of agriculture practiced within houselots, average family size, and degree of closure of houselots. The more nucleated the community, the greater the tendency to a formal plan of streets and lots, although the correlation is not exact (see Charlton 1970). Perhaps the most regularly laid out community is San Martín de los Piramides with a density of 2,500 per km^2. (This may be due to the fact that it is located on the ruins of the ancient city, and the modern grid may be in part conditioned by the ancient street pattern.)

All of the High-Density Compact village communities are located on the edges of (or within) fertile alluvial plains; the Low-Density Compact and Scattered Villages are situated in areas of less productive hillsides, and Rancherias are located in very marginal agricultural areas.

Table 5: Classification of 20th Century Settlements of the Teotihuacan Valley by Settlement Density

Community	Population 1950	Density per ha	Type
San Juan Teotihuacan	4537	25.63	High density compact town and barrios
La Villa de San Juan	2294	57.35	High density town
Barrio: San Juan Evangelista	665	-	High density compact barrio
Barrio: Puxtla	205	-	Low density compact barrio
Barrio: Purficacion	1373	-	High density compact barrio
Otumba	1,919	32.04	High density compact town
Atlatongo	1145	48.5	High density compact village
Calvario Acolman	1062	42.06	High density compact village
Santa Catarina Acolman	592	42.5	High density compact village
Maquixco-Bajo	673	42.06	High density compact village
San Martin de las Piramides	3197	40.0	High density compact village
Cuanalan	1541	23.4	Low density compact village
Belen	988	22.3	Low density compact village
San Esteban Axapusco	1,010	20.2	Low density compact village
San Fransico Mazapan	1143	20.2	Low density compact village
Tecuatitla	281	14.9	Low density compact village
Santa Maria Maquixco	348	19.1	Low density compact village
San Cristobal Colhuacan	306	10.9	Low density compact village
Actopan	1,179	12.5	Low density compact village
Santo Domingo	687	11.0	Low density compact village
San Felipe Zacatepec	426	17.0	Low density compact village
San Pablo Xuchi	236	10.0	Scattered village
Santa Maria Cholpa	227	9.1	Scattered village
Santiago Tepetitlan	2036	5.3	Scattered village
Santa Maria Palapa	388	4.2	Compact rancheria

In the Teotihuacan Valley we define the urban community as follows: a physical and a social community that is the product of a complex of historical processes. These processes are: demographic growth, nucleation, and social differentiation (including economic specialization and social stratification). Any one of these processes in a given area may occur independently and as an isolated phenomenon. Nucleation, for example, may occur as a response to warfare (need for common defense), environment (conditioned by distribution of water resources), agriculture (if cooperation of large numbers is needed), or a variety of other factors, without any of the other processes being involved.

When these processes do occur dependently and as a functionally related, evolutionary system, then the total process may be called urbanization. The analysis, therefore, of the history of urbanism in a given area should involve the study of each of these processes, the nature of their interaction and the factors involved in the development of each process.

Since urbanization is a historic process, one should expect to find communities in all stages of urbanization, in any one point in time, in any area where urbanism is part of the cultural pattern. In the Teotihuacan Valley the modern communities occupy an almost complete continuum of urbanism from rancherias to towns. In two communities, San Juan Teotihuacan and Otumba, the process has evolved enough to call them towns, here defined as a transitional community between village and city.

In terms of the above discussion the most urban community in the Valley is San Juan Teotihuacan. Administratively and socially, the community is a compound settlement, consisting of the Villa and three attached barrios (Puxtla, Purificación, and San Juan Evangelista). A complete census was taken of the Villa, barrios of Puxtla and San Juan Evangelista; Purificación was sampled by Richard A. Diehl. In the census, such data as the age, sex and kin relationship of the residents of each house or apartment, their occupations, land ownership, house plan, and construction materials were collected. The data are partly summarized in Table 3, with three rural settlements added for comparison (Cuanalán was partially sampled, in the other two a complete census was taken).

In the case of Purificación, local resistance to the census forced us to stop about halfway through. Most of the resistance involved higher status groups so that the percentage of nonfarmers in this barrio is probably close to that of the Villa itself. There are numerous workshops and stores in the barrio, indicating a high index of urbanism. The suggestion of a decline in population of the Villa (compared to earlier government censuses) that appears in the chart is not correct. It is based on the fact that there is a large army barracks in the town that is included in the official census, but excluded from ours. The contrast between the Villa and its barrios and the three rural communities, in economic specialization is striking, especially between the Villa (or most urban section of the community) and the villages. Purificación and Puxtla are clearly more rural, but are still more urban than any of the rural communities, and the rancheria is the most rural of all.

Since it is a municipal center, there are numerous specialists in government (local, state and federal), specialists in communications (i.e., telephone, telegraph operators), resident religious specialists, and merchants, barbers, carpenters, mechanics, blacksmiths, washerwomen, bakers, jewelers, masons, milkmen, shoemakers, tailors, laborers, household servants, and shop employees or clerks. Only 38 families who practice specialized occupations own land, in a sample of 352 nonfarming families in the total community.

Plate 6

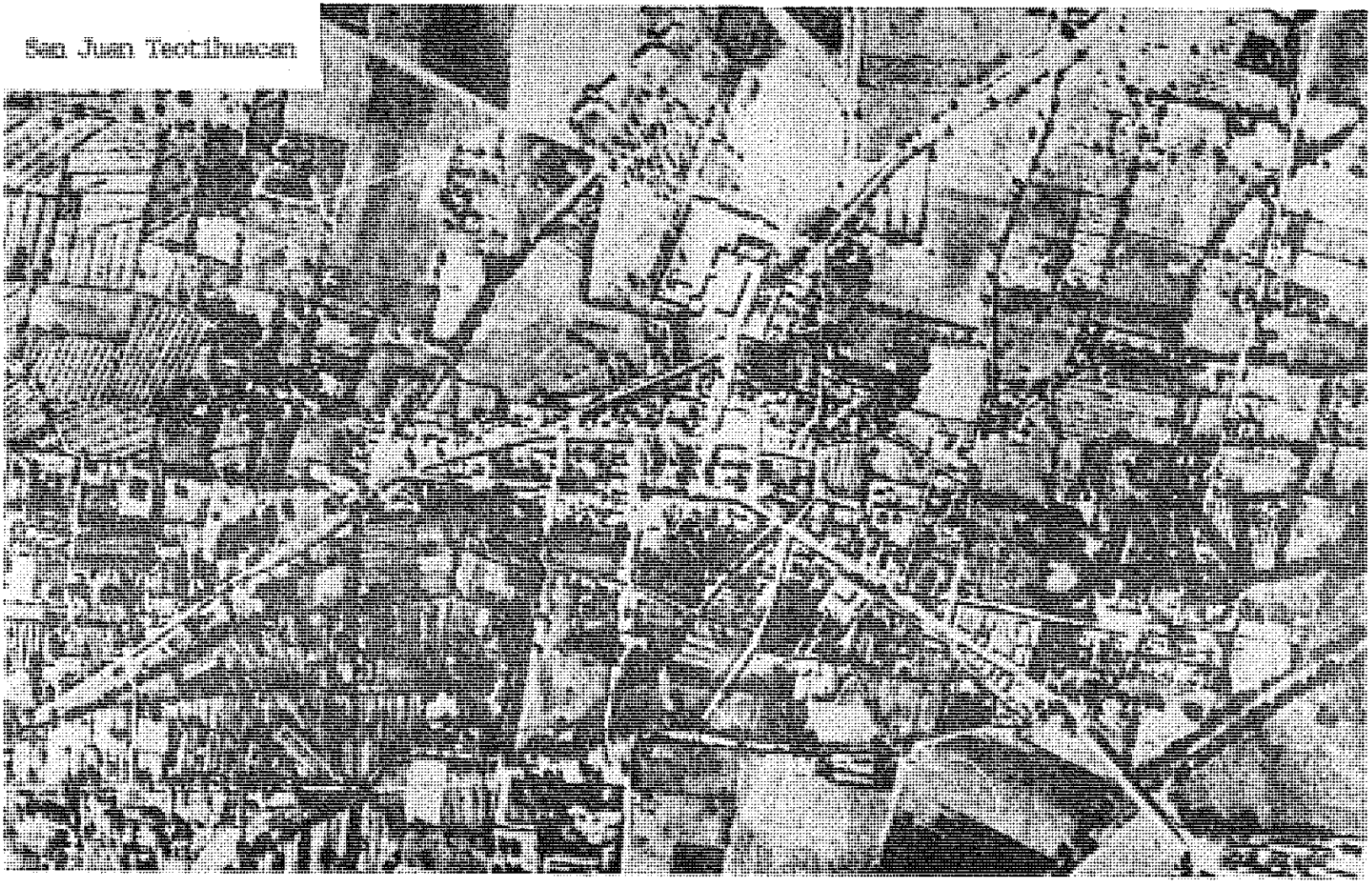
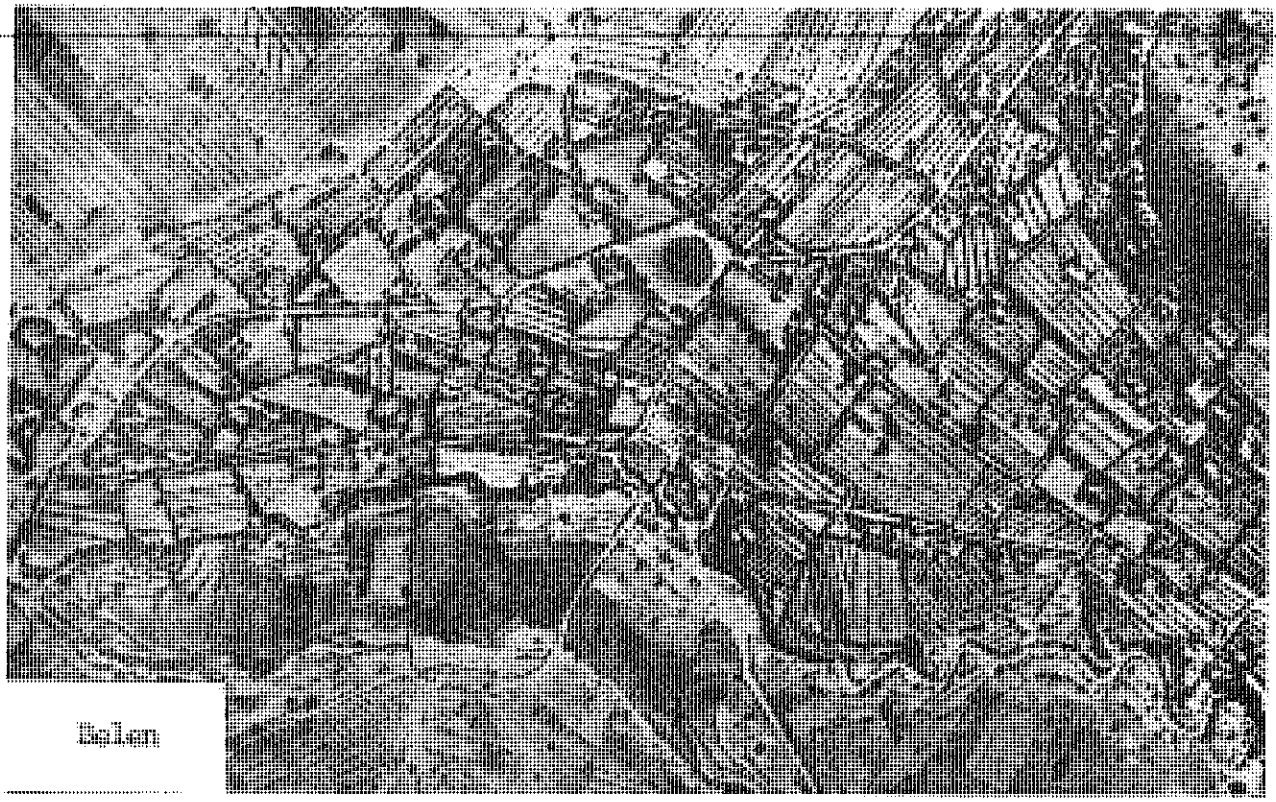
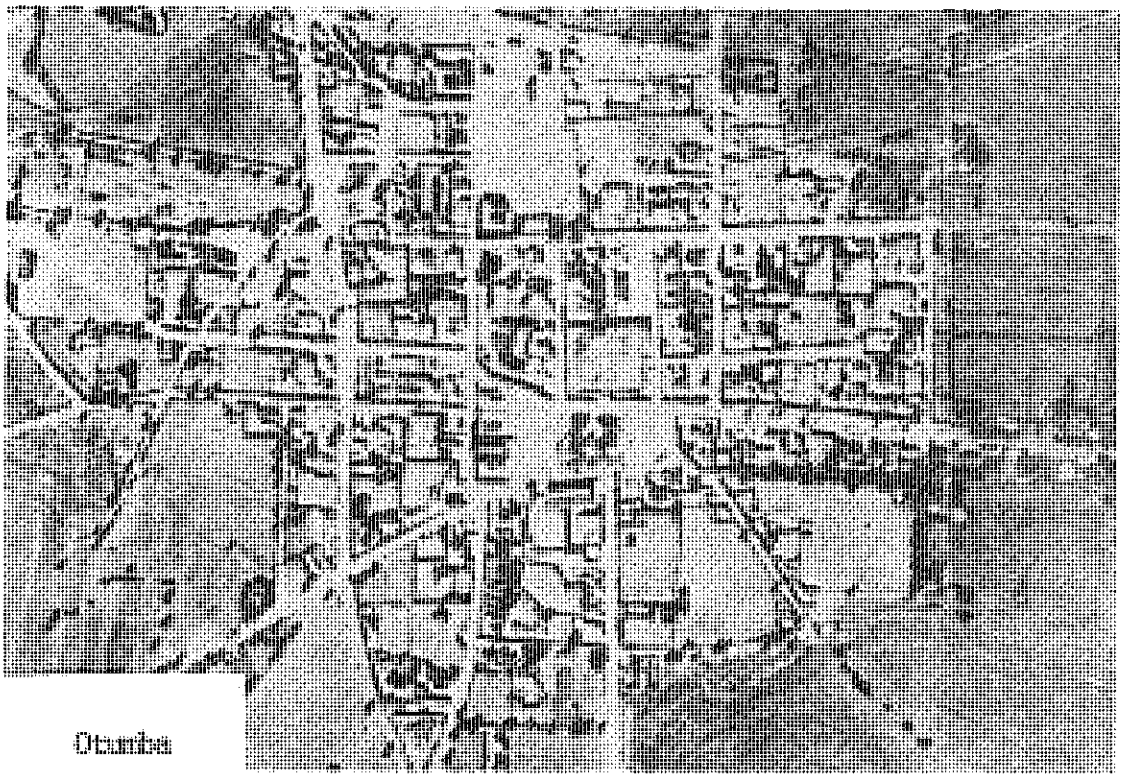


Plate 7

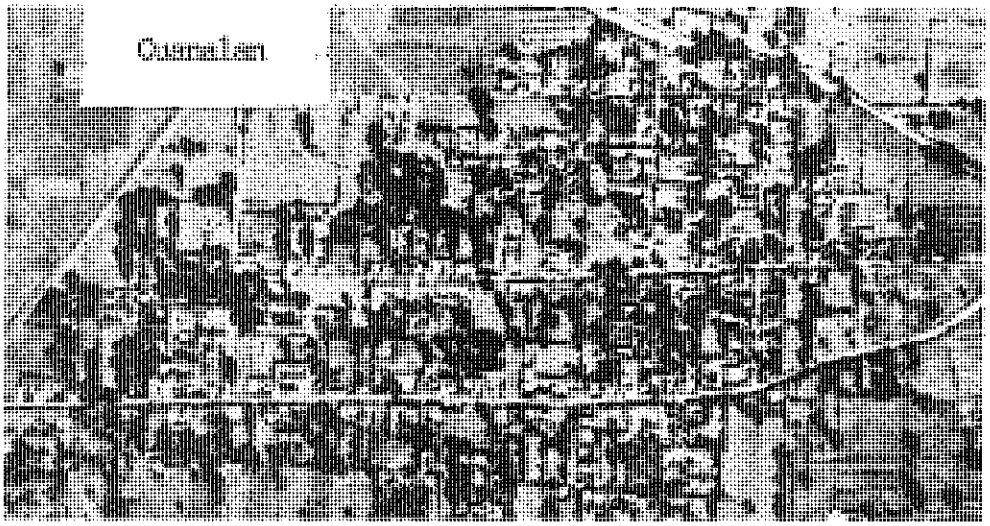


A



B

Plate 8



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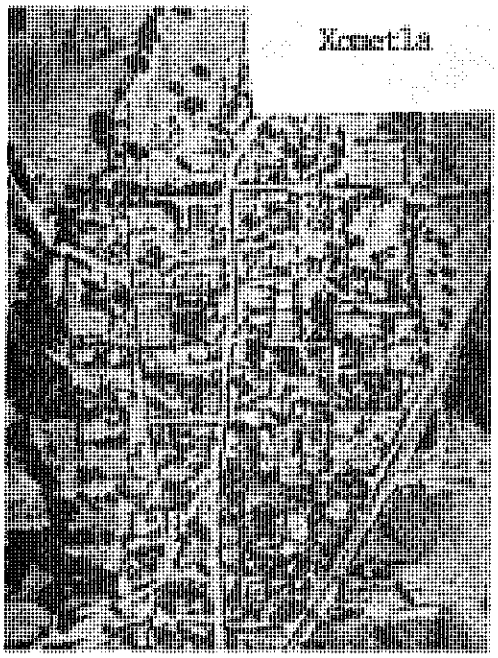
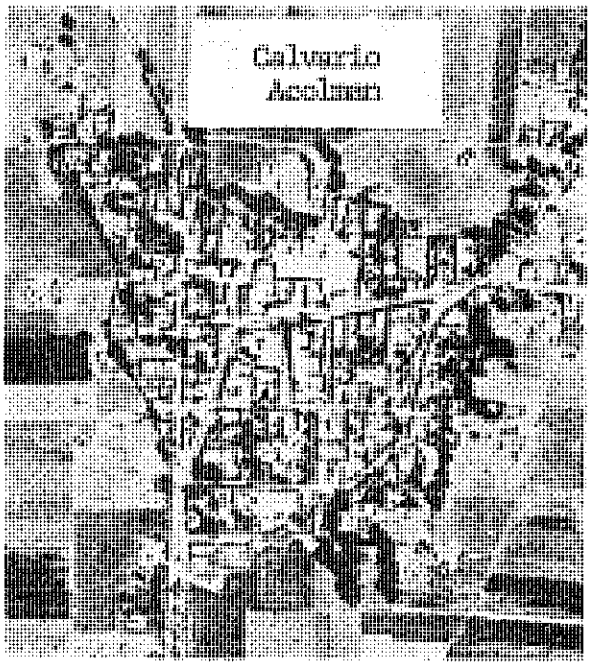


B



C

Plate 9

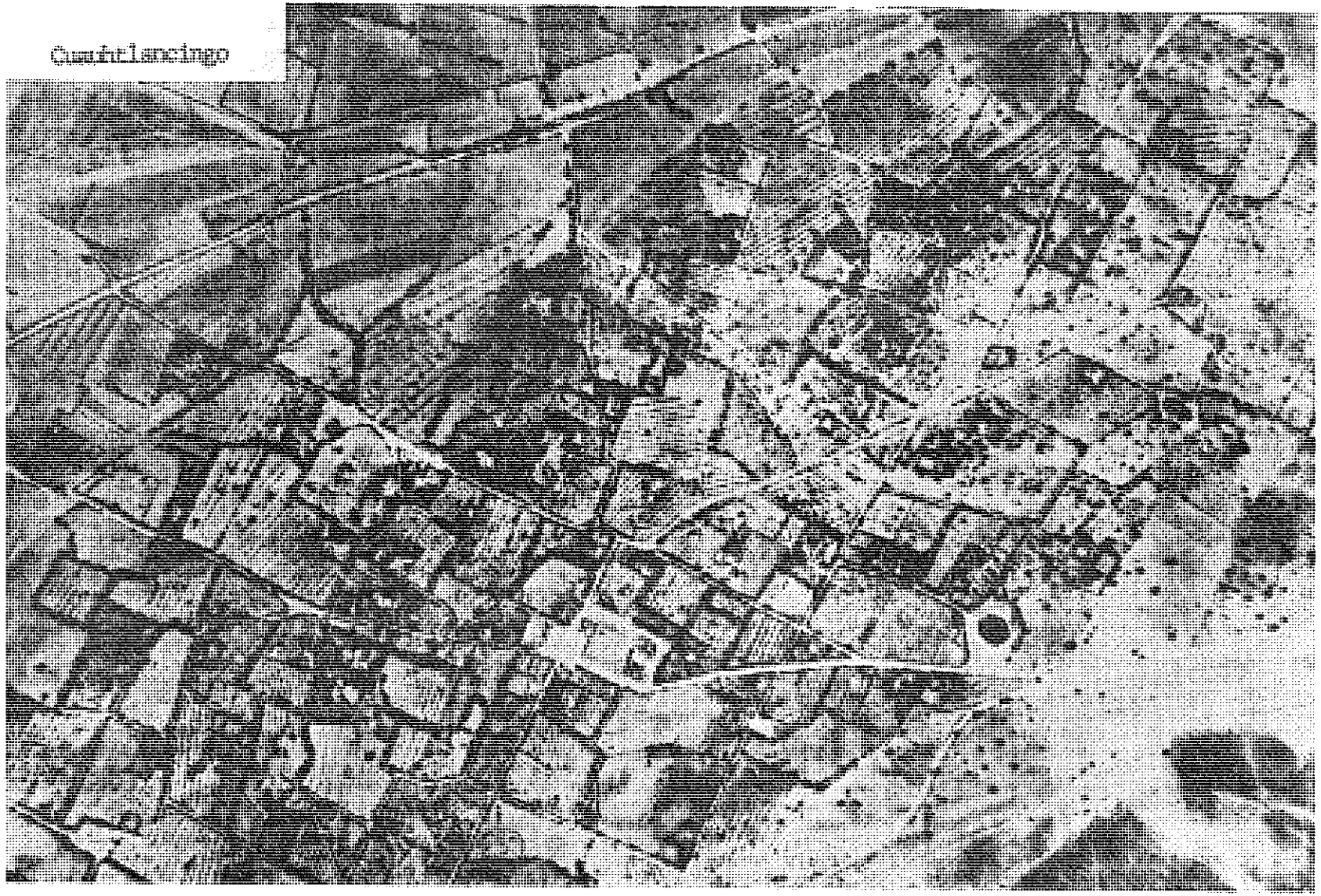
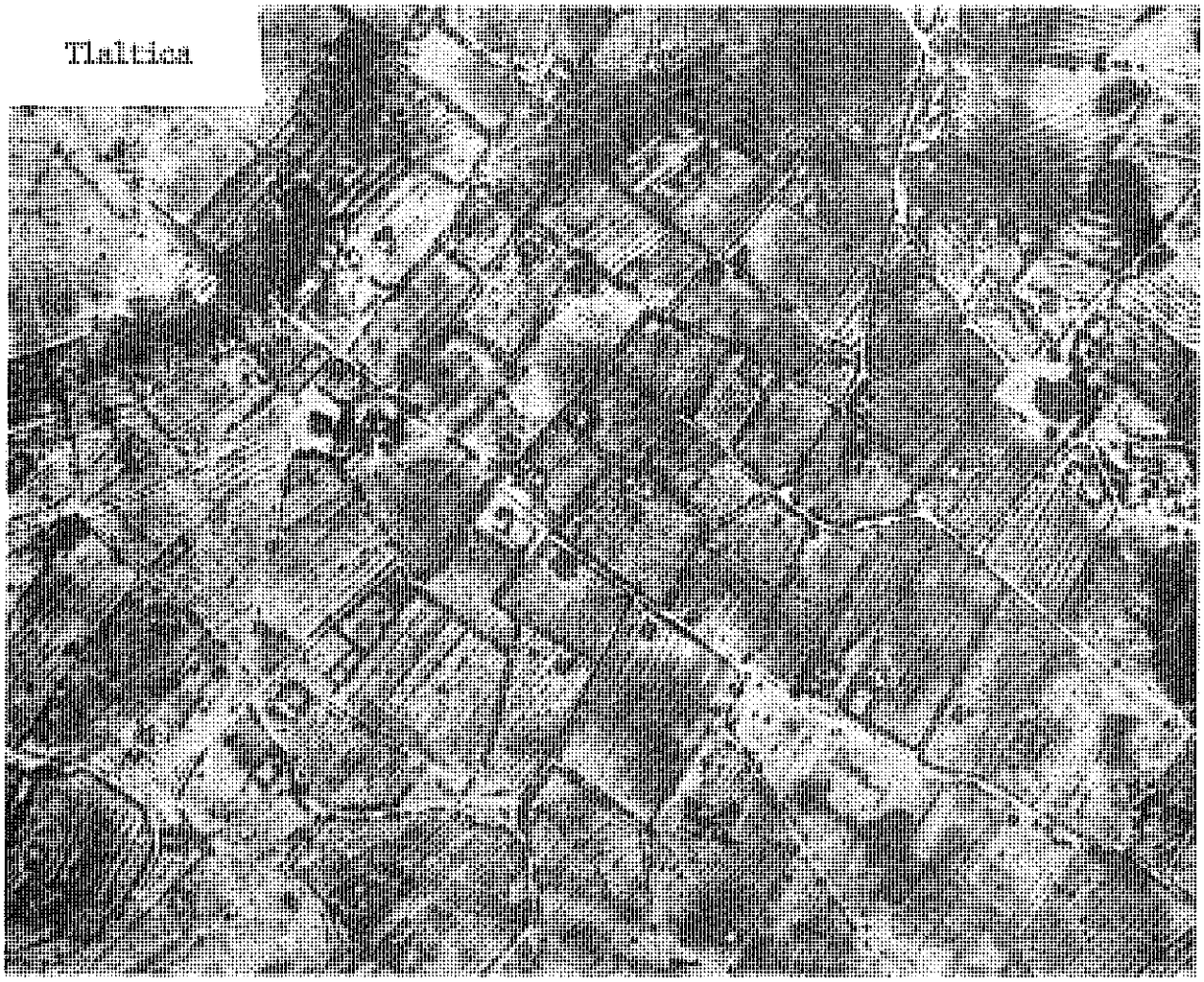
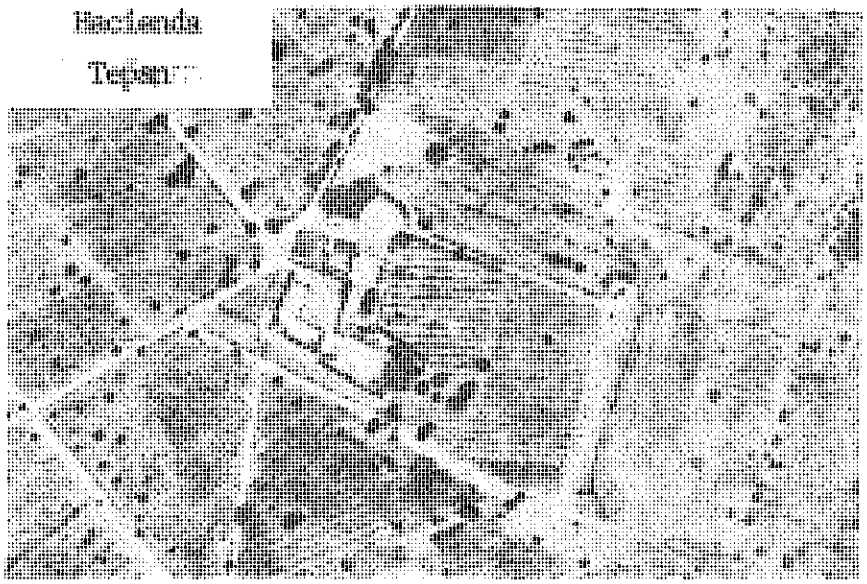


Plate 10



A



B

Other indications of a higher index of urbanism at San Juan Teotihuacan are the presence of a large paved plaza, large municipal buildings of stone, earth and plaster, over 100 commercial establishments (including restaurants and bars), a large permanent market (held daily but with Monday a major market), several schools (including a regional high school), a parish church, and many large substantial residences. Each of the barrios has its own church but is without a resident priest, a situation also typical of rural communities. Otumba, the other true town in the survey area, shows many of the above traits, but is a smaller community. It is the only other community with a market, in this case meeting on Tuesdays. In recent years, a small Sunday market has been held at Tepexpan.

With the exception of the attached barrios, the physical and the social communities in the Teotihuacan Valley coincide in most cases. All communities have churches and plazas as architectural referents to the community as an organized group. Cabecera churches are usually larger than those of dependent communities. In the case of San Juan Teotihuacan (one of the compound communities), one social community enjoys higher status and prestige than the others and its church is considerably larger, but the other barrios do have their own churches, indicating social differentiation. One could probably define the social communities of the Teotihuacan Valley today and their status positions on the basis of a "surface survey" alone, although it would be difficult to precisely delineate their boundaries.

Below the level of the community there are no intermediate social groupings, at least of the territorial type, between it and the family. The following is a discussion of the demography and settlement pattern of this latter social group, beginning with a brief summary of house types and construction.

The three materials commonly used are adobe, stone, and brick. In most cases, one type of material makes up the majority of the construction in a single house, but at times all three may be found in a single houselot. Adobe is generally the most common material, and it is most popular in the lower valley and Delta. The adobes are rectangular, mold-made and laid in mud mortar. Nearly all adobe walls have at least a few courses of stones laid in mud at the base. Walls are frequently plastered over with lime, so at first one does not get the impression that the house is built of adobe. In the middle and upper valley adobe is used, but many of the buildings are of split or roughly cut stone laid in earth mortar or, less frequently, laid dry. Doorways are usually faced with more regular cut stone. In some villages almost all of the buildings are of stone. Constructions of baked bricks are found throughout the Valley but do not make up the majority of buildings in any community. At times they too are plastered with lime, but the common practice is to leave the bricks exposed.

Floors in poorer houses, and rural houses in general, are of tamped earth; in wealthier houses usually a subfloor of bricks, stone, or concrete is built with or without a tile surface. Roofs are of very variable construction. The most expensive roof is flat, constructed of bricks laid in concrete over wooden beams, topped by a layer of cement or earth and lime plaster and equipped with a system of drains. Most rural houses have a roof sloping in one direction, constructed of wood covered by a layer of tezontle gravel and earth or by hemicylindrical, overlapping tile.

In the more compact rural communities and in the periphery of towns, the houselot is usually defined by a high adobe wall or fence built of tightly-spaced organ cactus, nopal, or maguey. In the more dispersed settlements, the house lot is not completely walled but is often partially shielded by zones of these plants. In others, houses are associated with terraces and are completely open. Inside there are usually several buildings of the types described, which serve such specialized functions as sleeping, cooking, and storage. They are small, frequently separated, and usually placed against the wall or fence, leaving a sizable open courtyard area as a work space. Parts of the courtyard, especially in the more dispersed communities, are planted in nopal or maguey. In the more densely clustered communities the courtyard may have no cultivates except a few fruit trees. This type of houselot is usually associated with the poorer types of houses, i.e., dirt floor and earth or tile sloping roof.

In a few cases of wealthier families in the villages, and of most of the structures in the more urbanized central portions of towns, a more compact houselot is the rule. The houses are predominantly of the flat, brick–concrete type with constructed floors. In this case structures are conjoined, sharing walls and a continuous roof, and strung along the periphery of the houselot forming a solid outer wall on the street, interrupted only by doors, and, more rarely, windows. One or several courtyards of varying size may be in the interior.

Charlton (1970) refers to these various types of houselots as walled, obscured and open. The distinction is a crucial one with reference to the problem of defining differences between urban and rural. There is almost a perfect continuum in their respective distributions within towns like San Juan from the center to the peripheral barrios and between true towns, incipiently urban cabeceras, and rural communities.

Furthermore, within the densely nucleated Villa of San Juan itself one can trace, urban block by urban block, the process of urbanization even among the compact houselots. In some blocks the roofed areas involve nearly two-thirds of the total surface area of the block, and population densities run from 10,000 to 12,000 per km^2; in others perhaps only one-third of the surface area is covered by roofed structures and the population density drops to 4,000 to 5,000 per km^2.

The distinction between the more open and the walled houselots also reflects differences in socioeconomic alignment and relationships. Dispersed houselots are normally the residences of either a single nuclear family or a nuclear family with additional relatives.

In Cuanalán approximately 30% of the sampled households had a resident population exceeding the size of the nuclear family. In such cases the social group tends to be three generational but is not a normal extended family, i.e., it may include either one of the four surviving grandparents, a married couple and their children. Furthermore, all eat together and share kitchens and living facilities so that the plans of such houselots are similar to the normal, isolated, nuclear family households.

In the case of the urban walled houselots the following variations were noted:

1. An entire urban block may be owned by one family who resides in a unit composed of a single, large, open courtyard and a large number of rooms; the rest of the block is divided up into small apartments of a single or a few rooms, and rented to socially unaffiliated families. Some of these rented rooms or apartments may be used as workshops, shops, or as a combination of either with residence. In some cases a large apartment may have its own small courtyard or else a group

of small apartments may share a courtyard.

2. An urban block may be divided into several separately owned divisions. In some cases the owner of one will use all of the space (a large apartment complex with a courtyard) for his family or the owner may reside elsewhere and rent all of the property.

With the exception of the few cases where several small apartments are grouped around a small courtyard and therefore share a street entrance, each living unit has its own egress directly from the street; the blocks do not have communal main entrances, nor does the population of a single property share a common central courtyard. There are no common ritualistic structures and in no way do the occupants make up any kind of organized social groups.

Thus far, the discussion has been focused on community settlement patterns and typology. It now remains to define the zonal patterns; i.e., the distribution of communities over the survey area.

We have previously noted the demographic significance of the lower valley - Delta area. Three of the cabeceras of the municipios are located in the lower valley Delta (Acolman, Atenco, Tezoyuca); one on the west shore of Lake Texcoco outside the survey area near the old lake shore (Ecatepec); one at the head of the irrigation system where the lower valley begins (the most urban and largest community, San Juan); one in the middle valley on the edge of the alluvial plain (San Martín); and three in the upper valley, one in the deep soil plain (Otumba), another on the piedmont (Axapusco), and the other on the periphery of the piedmont-hill juncture (Nopaltepec).

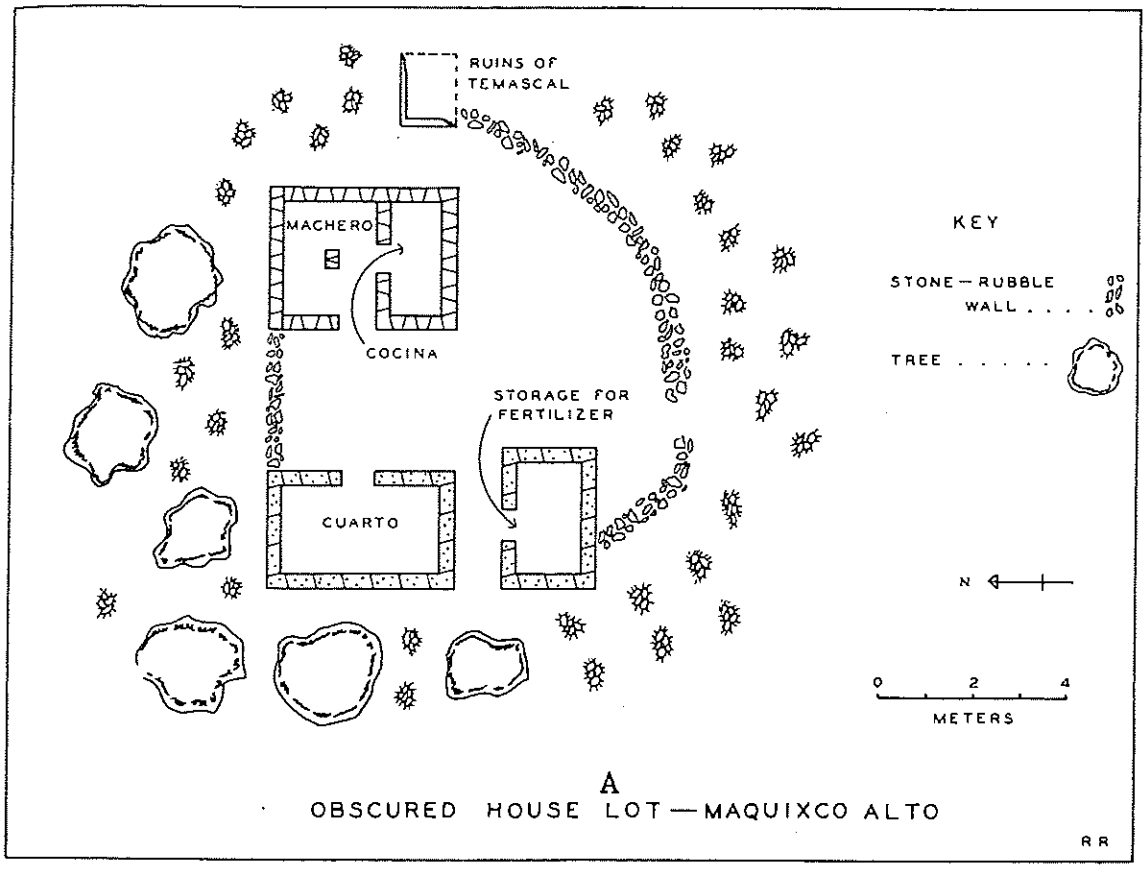
In the Delta, villages tend to occur either on the old lake shore (Tequisistlán, Ixtapan, Nexquipaya), on the flank of Cerro Chiconautla at the edge of the plain (Totolcingo, Chiconautla, Tepexpan-Chimalpa) or on the flank of an isolated hill (Tezoyuca).

Three strings of settlements are in the lower valley, one along the west piedmont, another along the east piedmont (in both cases on the edge of the alluvial plain) and a third running down the center of the plain.

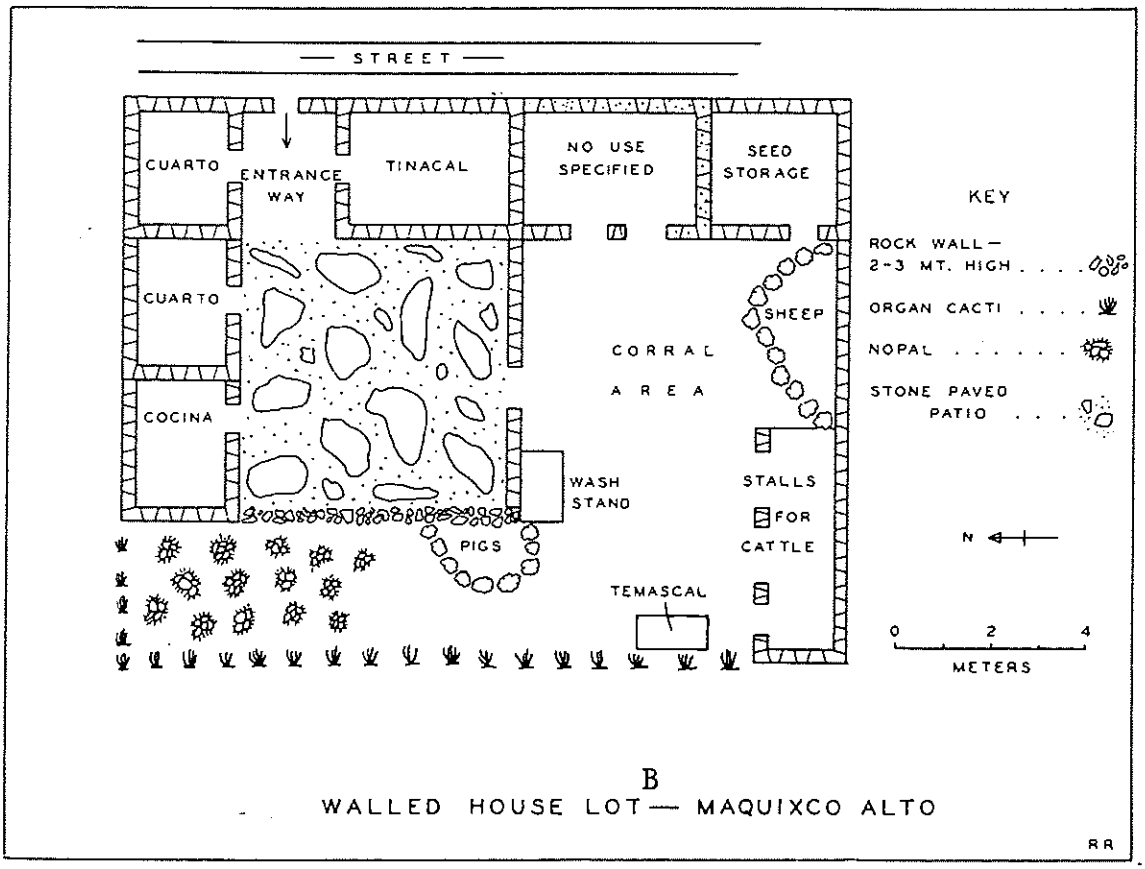
Santa Catarina Acolman-Tenango, Tecalco, Maquixco Bajo, and the barrio of San Juan Evangelista are located along the west piedmont. Cuanalán-Zocango, Chipiltepec, San Pedro Tepetitlán, Xometla, and San Lorenzo are located on the east piedmont. The central strip includes Calvario Acolman, San Bartolo-San Juanico, Santa Maria Acolman, and Atlatongo. The first is situated on a low natural elevation in the plain; Atlatongo is just within the plain, but near its edge.

The major factors operating in the determination of site location seem to be a combination of ecological and historic. Premium agricultural lands, such as the irrigated plain, are rarely used for residence, and the tendency would be to locate villages in the poorer areas. The position on the plain's edge places the farmer as close to the good agricultural land as possible, located him conveniently close to his fields on the piedmont and pasture land in the hilly flanks. Village holdings tend to crosscut each of these ecological components, except those located in the center, which possess mostly irrigated plain.

Figure 4

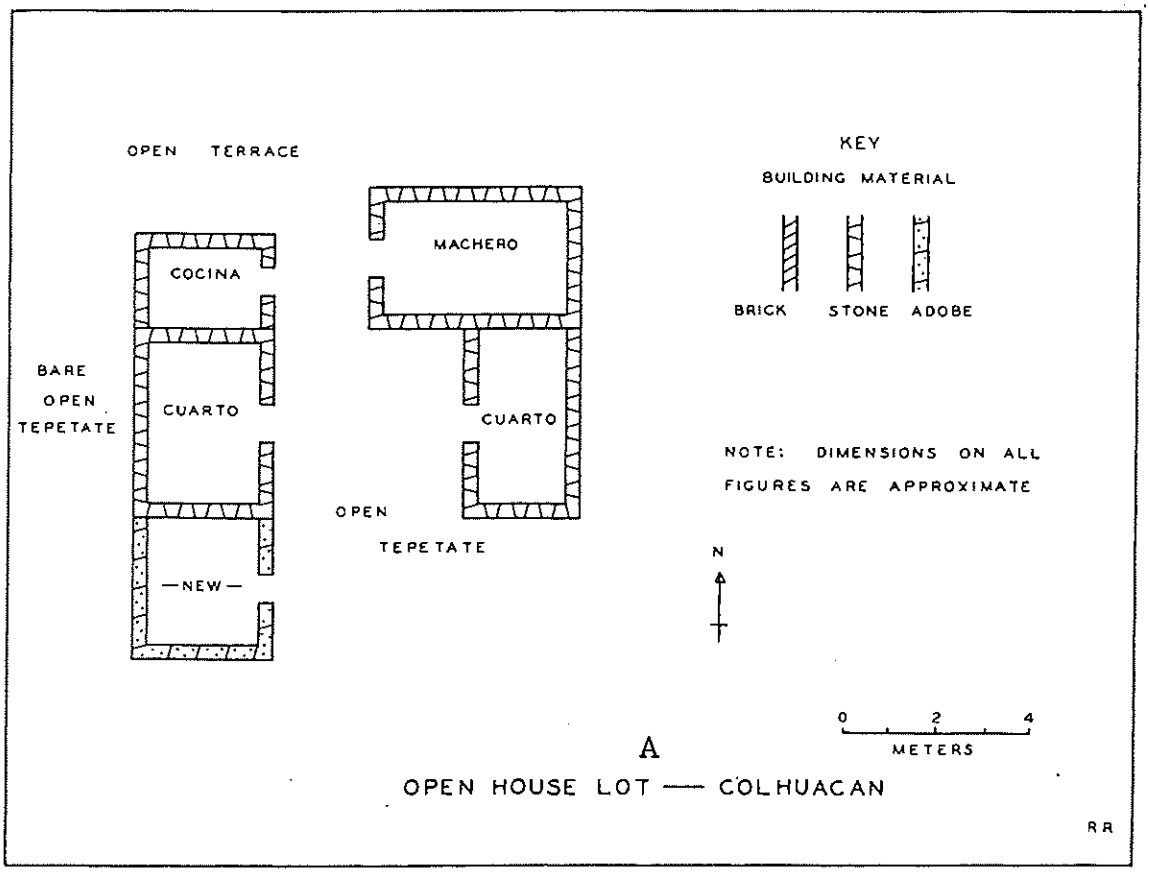


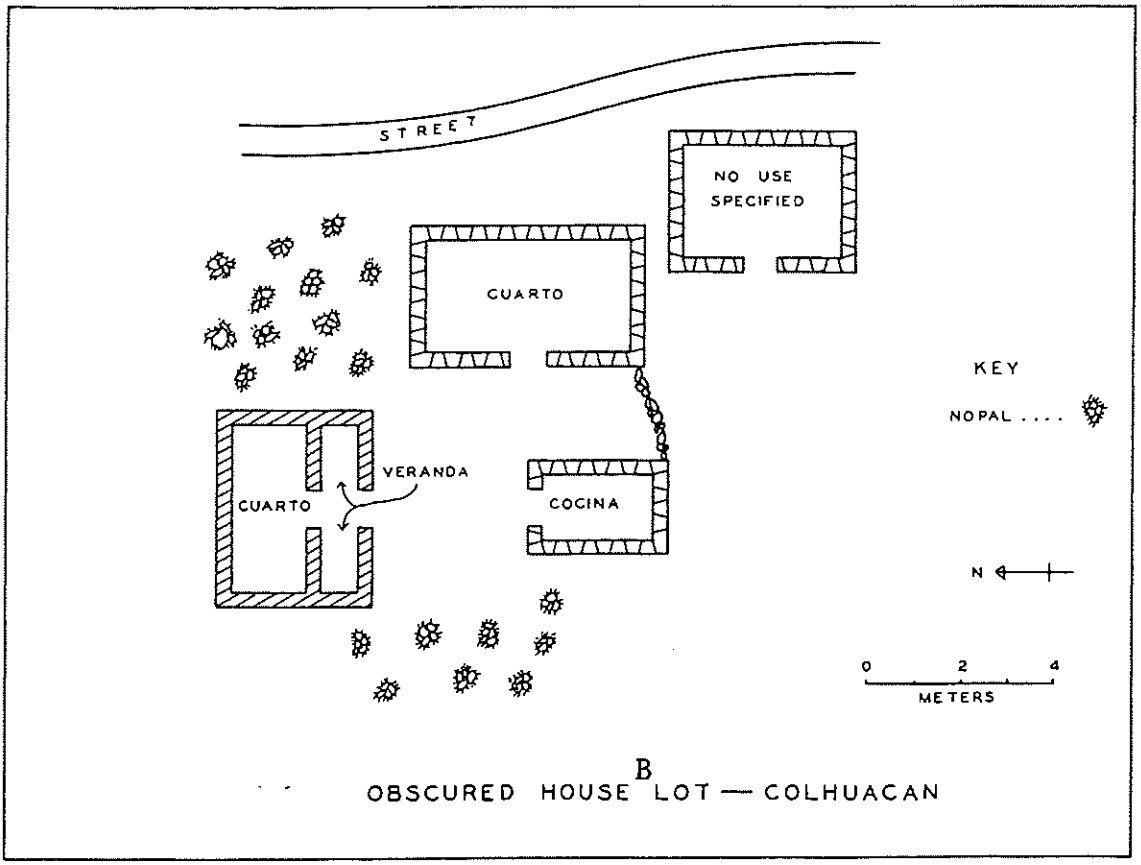
A
OBSCURED HOUSE LOT — MAQUIXCO ALTO
RR



B
WALLED HOUSE LOT — MAQUIXCO ALTO
RR

Figure 5


OPEN TERRACE
COCINA
CUARTO
—NEW—
BARE
OPEN
TEPETATE
MACHERO
CUARTO
OPEN
TEPETATE
KEY
BUILDING MATERIAL
BRICK
STONE
ADOBE
NOTE: DIMENSIONS ON ALL
FIGURES ARE APPROXIMATE
N
0 2 4
METERS
A
OPEN HOUSE LOT — COLHUACAN
RR


STREET
NO USE
SPECIFIED
CUARTO
VERANDA
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COCINA
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NOPAL . . . .
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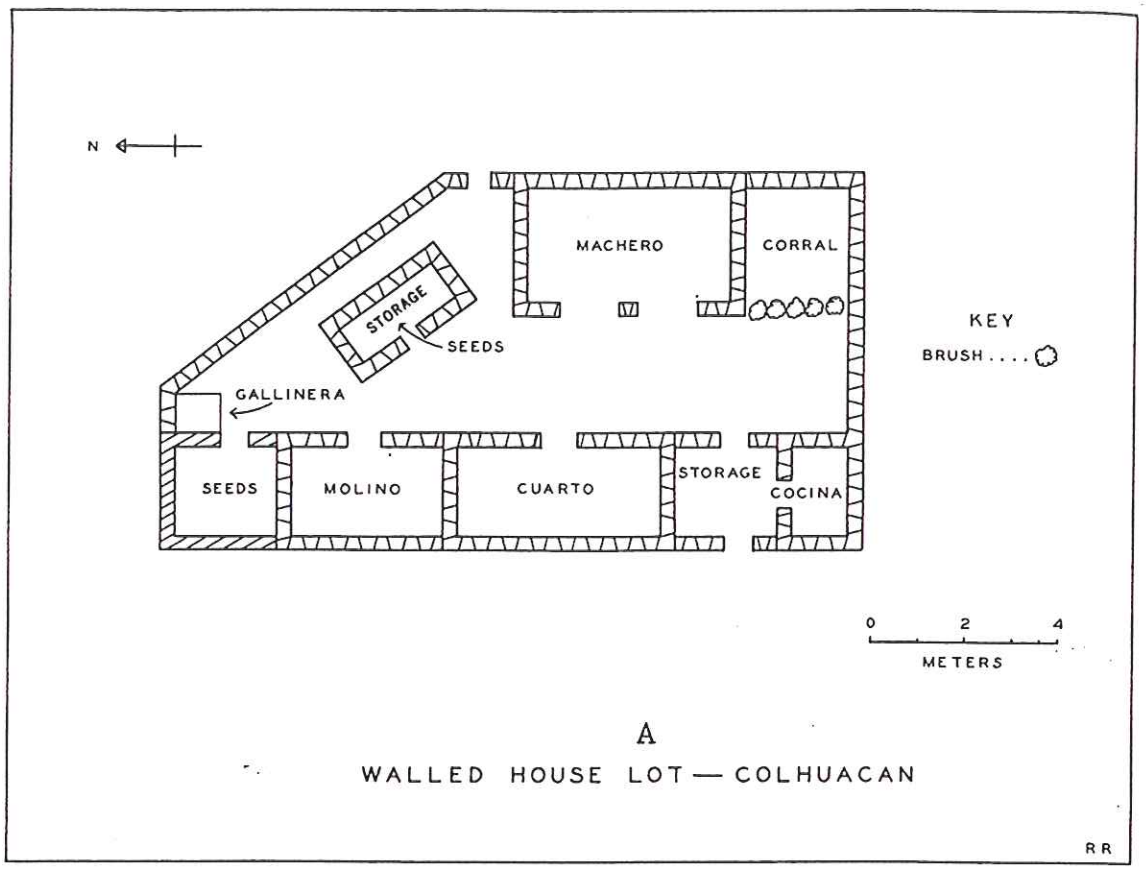
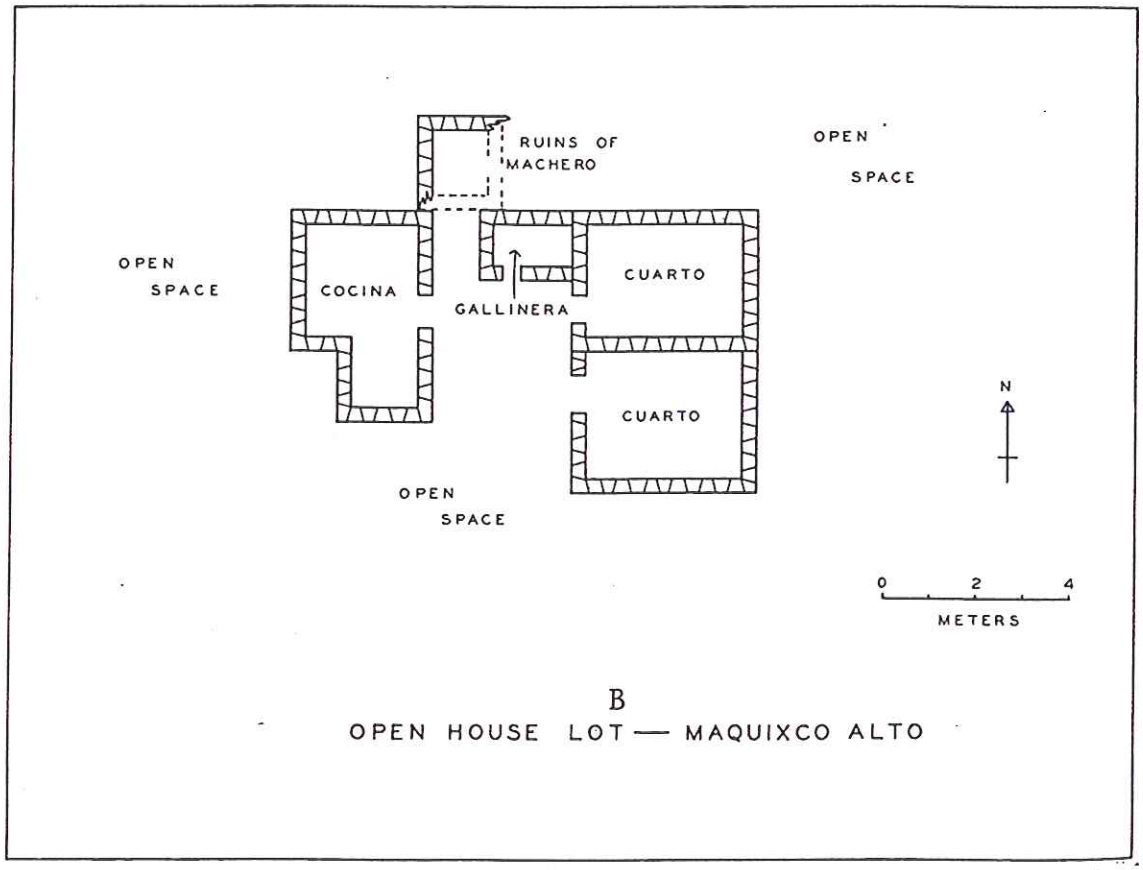
METERS
B
OBSCURED HOUSE LOT — COLHUACAN

Figure 6


N
MACHERO
CORRAL
STORAGE
SEEDS
KEY
BRUSH
GALLINERA
SEEDS
MOLINO
CUARTO
STORAGE
COCINA
0 2 4
METERS
A
WALLED HOUSE LOT — COLHUACAN
RR


RUINS OF
MACHERO
OPEN
SPACE
OPEN
SPACE
COCINA
CUARTO
GALLINERA
CUARTO
N
OPEN
SPACE
0 2 4
METERS
B
OPEN HOUSE LOT — MAQUIXCO ALTO

The narrowness of the alluvial plain (three to four km^2) means that lands are readily available to a population residing in either a continuous linear strip on each side (which would seem to be the most convenient arrangement) or a series of small, regularly spaced, compact villages (the present pattern).

The cluster of villages on the lake shore is the product of historical tradition. The pattern relates to an earlier period when they specialized in the manufacture of salt and extraction of other lake products. Villages on the north piedmont are aligned along the modern highway, which closely approximates the position of the Colonial Camino Real and probably the old Aztec route through the Valley (see Chapter 8). Whether Aztec villages were built along older trade routes or the trade routes followed village distribution may be argued, but such routes, once established, would certainly operate to stabilize community location. The fact that the villages in the plain lack, or have very little piedmont-hillside land is probably the primary factor in their location within it. Atlatongo does possess a sizable holding on the piedmont. Here I suspect that the primary factor is the position of the canal, with the special privilege of a constant flow of water for village use. Most of the irrigation villages do obtain much of their household water supply from the canal system.

The location of the largest and most urban town, with the biggest market, midway down the Valley, and near the springs reflects certain ecological factors at work. The control of the springs has been a constant factor in the power structure of the Valley for at least 600 years, and probably at least 2,000.

In the middle valley, the same basic principle of distribution applies. San Lucas, Santiago Tepetitlán, Belém, Tolman, Oxtotipac, and Cuautlancingo are all located outside the alluvial plain, either on semi-isolated hills or on the piedmont. In this area, however, the communities are located at the upper edge of the piedmont, where it joins the steep slopes of Cerro Gordo and the Patlachique Range. Two factors are probably operating here. One, the alluvial plain is much smaller, and the piedmont more extensive with many small irrigable flood plains so that the latter is a more significant element in the village economy. Two, water supply, a serious problem in this area, is resolved by the construction of jagüeys. Jagüeys are large artificial pits dug down into the tepetate, often to depths of from 3 to 30 m. Water is diverted from the barrancas and stored in the jagüey throughout the year. Since they are uncovered, and some water loss occurs through the tepetate, they are dug deeply and a large supply of water is needed. Best locations for jagüeys would therefore seem to be at the upper edge of the piedmont to catch runoff immediately, before it dissipates into the deep barranca beds.

In the upper valley the town of Otumba is located partly within the small deep soil plain, an unusual setting. Actually the plain is so small here that it cannot be considered a major ecological factor. In Colonial times a major problem produced by the selection of the site was water supply. It was met by the construction of a very impressive aqueduct bringing water from Cempoala, located outside our survey area. Nearly all of the other communities are located in positions similar to that in the middle valley, a ring around the upper edge of the wide piedmont strip and at the base of isolated hills in the north and the main range in the south.

Today there are no villages in the Patlachique Range, a reflection of its marginal agricultural value.

The studies of the natural environment and the present-day occupation of the Teotihuacan Valley

were conducted to provide models for the interpretation of prehispanic land use- and settlement-patterns. The major geographic factors that affected the prehispanic population still affect today's population: the high percentage of sloping land, the relatively low rainfall, presence of a frost season, the hydrology and limited distribution of permanent water, and the generally friable, fertile soils are the key variables that maize farmers must adapt to. The major change in the natural environment in the valley since the Spanish Conquest are of anthropogenic origin: the massive erosion on sloping terrain and lowering of the water table have significantly reduced the carrying capacity of the valley and in the following chapters we will demonstrate the population in 1519 was considerably larger than in the mid-twentieth century. To a great degree the present-day settlement rather than resembling the Aztec, more closely reflects Colonial Spanish manipulation of the Aztec population, primarily through the congregracion policy. Nevertheless, the distribution of population today does approximate the Aztec, as does the location and centers of political, religious, and economic institutions. The form of and size, however, of the prehispanic rural communities was very different, as was their density on the landscape.

CHAPTER 2

METHODOLOGY

by

William T. Sanders

1. LOCATION AND LIMITS OF THE SURVEY AREA

The Valley of Teotihuacan is found in the northeastern corner of the Basin of Mexico. Impressive mountain walls hem in the Basin on all sides, except for much of the northern edge, limited only by a series of low hills. As a result, the lower lakes of the extensive lake system, found covering much of the floor of the great basin, were saline, as are their remains today.

The Valley of Teotihuacan opens onto the northeastern shoreline of the largest of the saline lakes, Lake Texcoco. A subunit of the Basin of Mexico, the Teotihuacan Valley is delimited on its western flank by Lake Texcoco and Cerros Chiconautla and Tlahuilco. The Lower Valley is delimited on the north, in part, by a low range which includes, from west to east, Cerro Zacualuca, Cerro Maravillas, Cerro de la Calavera, and Cerro Malinalco. The Middle Valley is walled off on its northern edge by the great bulk of Cerro Gordo and its attendant ridges, the Upper Valley by a low range of hills to the northeast. To the east and south, the Patlachique Range forms a continuous, limiting rampart for the entire valley.

The area of surface reconnaissance explored by the Teotihuacan Valley Project covered not only the 500 km^2 of the Valley of Teotihuacan itself, but included an adjacent area north of the valley proper, including the northern slopes of Cerro Gordo, and the northern part of the North Tributary Valley zone, which in Aztec times were politically dependent on the Valley of Teotihuacan centers of Tepexpan, Acolman, and Teotihuacan (Gibson 1964:48-49). We calculate this area as embracing an additional 50 km^2, bring the total area of the Teotihuacan Valley Project Survey to 550 km^2.

2. METHODOLOGY: GENERAL ASPECTS

The survey methodology used in the Teotihuacan Valley Project has been described in detail in the second volume of this series. We will very briefly summarize this information here.

The objective of the survey was 100% coverage - that is, we intended to examine every square meter of the surface of the Teotihuacan Valley. Between 1960 and 1962 a number of field workers, in teams varying from one to three, but usually working alone, conducted general survey. What this involved essentially was systematically walking over the ground by defined units, the units being houselots and agricultural fields, visible on a set of 1:25,000 aerophotos. Sites were roughly located on acetate tracings from the photos, a preliminary assessment of the date of occupation was noted, and a tentative site number assigned. Sites were numbered consecutively (as they were encountered), starting with number one for each of the major chronological periods used in our dating system. For example, the first Formative site discovered was assigned the number TF-1, "T" for the Teotihuacan Valley, "F" for the Formative period; the first Teotihuacan Period site was numbered TC-1 ("C" for Classic period), the first Toltec site was numbered TT-1 and the first Aztec site was assigned TA-1.

The second phase of the survey involved intensive examination of the located sites, using a survey schedule (see Appendix A) and was conducted from June 1963 to September 1964. The schedule included data on the natural setting, both general and specific; contemporary utilization of the site area; and archaeological data. Amplifications of the original aerophotos, varying in a scale from 1:3500 to 1:4500 were used to plot architectural features and variations in the density of the

surface artifacts. In the site descriptions and on the maps examined in this volume, we have standardized this scale at 1:4000. Many sites were also surface sampled. Sampled sites included virtually all of the pre-Aztec sites but only about 25% of the Aztec sites, because of the great number of the latter. Because of this relatively low percentage of sampled Aztec sites, we do not have a very good handle on the size and distribution of the Early Aztec phase occupations (i.e. Aztec 2). Because none of the students who participated in the survey were familiar with the entire chronological sequence, we organized the survey in a series of teams, each headed by a student who was knowledgeable with respect to one of the ceramic periods used in the dating of sites, i.e. Formative, Teotihuacan, Toltec, and Aztec. In the cases of multi-component sites surveys were sometimes conducted several times by each of the survey teams, each one looking for the amount of debris, architectural, occupational, and artifactual found on such sites for particular time phases.

During the 1963 season, Jeffrey R. Parsons and William T. Sanders independently, in separate areas of the Valley, and for different reasons, designed a different survey procedure. One of the major problems with many Aztec sites was the definition of exactly what a site was, i.e. where its limits were to be placed. This was a particular problem in the Upper Valley where house sites seem to have been almost equally distributed over the interfluves of the numerous barrancas, and with no clear spatial separation of sites. Parsons then shifted to a new method where each field, or houselot, visible on the aerial photograph, was treated as a unit and information compiled for individual fields. Site definition was then left for analysis at a later date and at this point the site forms were assembled.

At the same time Sanders, while surveying the North Slope: Cerro Gordo zone, and especially the Maquixco Alto sub-zone, faced a different problem. Settlement was not only dense and virtually continuous over the test area but multicomponent as well. It was very difficult to immediately sort out the various chronological components, as accomplished in the general survey. Therefore, he shifted to the same procedure; i.e. each field was treated as an archaeological unit, a detailed description of the archaeological remains found was compiled, but in this case combined with information on modern land use. Because the area seemed particularly interesting, in terms of the ecological approach used in the project, this latter was a further stimulus to a field by field approach. While every field was not surface sampled, large numbers of surface samples were collected. In essence, what Sanders and Parsons were doing was combining the general survey and intensive survey into one single field operation. This has been the survey procedure used since the Teotihuacan Valley Project, for surveying other portions of the Basin of Mexico, by Parsons, Blanton, and Sanders including the Temascalapa Regional Survey. Besides the site forms, Sanders, when he conducted the Cuauhtitlan and Temascalapa Regional Surveys, designed a field form, summarizing the data on each surveyed unit (see Chapter 6).

A special problem encountered over the course of the years, in the preparation of the publication of the Teotihuacan Valley Project, are the long time intervals between the analyses of the field and laboratory data and writing of the reports. Volume 1, on the Geography, Presentday Occupation, and 16th century Population of the Teotihuacan Valley was published in 1970, the Formative volume in 1975, the Toltec volume in 1986, and the Teotihuacan Period volume between 1994-1996. In 1997, 1998 and 1999 we are preparing the Aztec period volume for publication. This lengthy duration of publication has presented a number of problems. Of least significance to the editors, but perhaps important to others, are the changes in format, cover, printing style and techniques of reproduction of plates and figures as the series has evolved. A more important problem, however, is the constant change in the site catalogue with consequent changes in site designations. This will undoubtedly cause some confusion to the users of the earlier volumes of the series, or of the dissertations written

over the years, based on the survey data.

Because of the way the survey was conducted and sampling procedures used at the sites, and because the analyses of the ceramic samples took place over a period of thirty-five years, a number of chronological components went unnoticed in the general survey, and were not detected until reexamination of the samples from the intensive surveys. Hence they were not tabulated in the earlier volumes. Compounding this problem, many sites in the Teotihuacan Valley are multicomponent sites. Because settlements varied considerably in internal residential density from very tightly nucleated to very dispersed communities, and because some were earlier, and hence partially buried by later occupation, some components were not easily detected without substantial surface sampling and analyses of the samples. In this volume a final chart is presented in which all site components are ultimately defined and designated using our numerical system.

The general problems found in our survey as a whole were discussed in Volumes 2 and 4. In this volume we will discuss some of the specific problems encountered in our Aztec period survey.

3. SPECIAL PROBLEMS OF THE AZTEC SURVEY

The Teotihuacan Valley Project lasted from June 1960 to September 1964. During that time we completed the intensive survey of virtually all of the pre-Aztec sites. Because of the great number of the Aztec sites and because we had a virtual epidemic of hepatitis among our survey crew, we were unable to complete the survey of the extremely numerous Aztec sites. Jeffrey Parsons, worked as a graduate student during three of the four years of the project, wrote his Ph.D. Dissertation on the Aztec ceramics collected by the excavation and survey teams at the University of Michigan. Upon completion of the dissertation he received an appointment there as an Assistant Professor. In 1966, while occupying this position, he received an NSF Grant and completed a survey of Aztec sites on the south piedmont of the Middle Valley and on the eastern slopes of Cerro Gordo. During that same period i.e. from the end of 1964 to the end of 1966, Thomas Charlton, as part of his Ph.D. field work, conducted surveys around Maquixco Alto and Colhuacan. Since then he has done extensive surveys in the Upper Valley, and some of this data has been included in this volume.

In 1977 Sanders directed a surface survey within a region of approximately 150 km^2 north of the Teotihuacan Valley, a region here designated as Temascalapa Region. The pre-Aztec occupation of this region was originally prepared as a Masters Thesis, by Melisa Diamanti. Larry Gorenflo is editing this pre-Aztec material for a separate publication, and in the process has prepared maps for all of the time phases of the Temascalapa Region. We have included the Aztec occupation, which was not included in the Master Thesis, as Chapter 6, and written by Larry Gorenflo, in this volume. The rationale here is that virtually all of the Aztec period occupation consists of rural sites that were subject to Teotihuacan Valley towns during the 16th century and the jurisdiction of those same towns included virtually all of the two regions. It seemed appropriate, therefore, to combine this data and, in essence, write a political geography of a number of 16th century Aztec kingdoms. These same kingdoms served as jurisdictional units during the Colonial Period, with a number of modifications, and with additional changes they are municipal divisions in the valley today.

A series of special problems were encountered in the survey of the Aztec sites and these may be

summarized as follows:

1. First is the ubiquity of the remains of this period. A few Aztec sherds can be collected in almost any agricultural field or house lot in the Basin of Mexico. Sanders remembers a Mexican colleague, he believes it was Noguera, who in hearing of our survey problem suggested that a more economical approach would be to record absences of Aztec ceramics rather than presences! Our solution was only to consider as residential sites those field units where we recorded a minimum of light occupation, using our quantitative scale (see discussion below). We did, however, record the presence of scanty or very scanty occupations and we have interpreted their presence on field survey units as evidence of exploitive activities, particularly agricultural. Even this solution presented problems for the survey because of the abundance of Aztec sites and the limitations of time and money. In the Teotihuacan Valley Project General Survey we located approximately three hundred sites (and added an additional 168 during the Temascalapa Region Survey). As a consequence we could not intensively survey all of the sites in the Teotihuacan Valley. Fortunately we have some data from general survey on the unresurveyed sites and also have somewhat more data on multicomponent sites that were intensively surveyed by the Formative, Teotihuacan, and Toltec survey teams. These teams recorded Aztec occupation, although not in the same detail. A problem in these cases, however, is that Aztec rural sites are generally dispersed and cover much more extensive areas than the older sites and so the data collected by those teams does not include all of the data on the Aztec component.

2. The second problem was the location and cultural continuity of Aztec sites with the Colonial and later 20th Century communities in the area. This was a particularly acute problem in the case of the towns, since large compact 20th Century communities occupied the sites of the Aztec towns, and surface observations were often difficult or impossible because of the destruction of the Aztec architectural features and post-Conquest building on those sites. Even in cases where observation might have been possible we ran into social problems in houselots surveys, i.e. when the owner refused permission to enter the lot. Most residents, it should be emphasized however, were very cooperative and friendly. In many cases, even where we were granted permission to enter the lot, in the more denser settled communities, the houselots were small, a high percentage of the household space was covered with buildings and the balance, the open space, was often paved, minimally leveled and consisting of a hard packed earth surface, that yielded little or no evidence of Pre-hispanic occupation. This was particularly true in what we have classified as high-density compact rural communities.

3. The vast majority of Aztec rural sites were quite dispersed and occurred in the gently to medium sloping piedmont and were more available to survey. This area was very intensively settled in Aztec times and our data suggests that it was covered with carefully maintained earth and stone terraces. Unfortunately, with the population decline of the 16th century and the implementation of the Spanish Congregacion policy, many of these areas were abandoned from agriculture and converted to pasture for goats and sheep. A rapid process of sheet and gully erosion occurred which has at least partially destroyed all sites. In many cases structural remains were either absent or consisted only of a dense scatter of rocks and sherds, indicating the presence of former house sites. Because of partial destruction of remains on Aztec sites, the product of the erosion mentioned before, we have to extrapolate for those areas of sites that have suffered destruction, in order to obtain a complete picture of the Aztec community. Because of these conditions there are problems of reconstructing the plan and density of the original Aztec settlement.

4. Complicating, but also complementing our surface survey, was the fact that for this period we have abundant 16th century post-Conquest documentation of community location, political and economic relationships among the communities, and censuses. Changes in all of these characteristics, however, did occur during the period from 1519 to 1580, the date of the Relaciones Geográficas. Because of the epidemics the population declined to approximately one quarter of the 1519 level by the end of the 16th century. Also during that period, political, and religious relationships among the communities changed as well (see discussion of this in Chapter 12). Beginning in the middle of the 16th century and accelerating towards the end of the 16th and into the early 17th Century, the Spanish government initiated a policy called Congregacion, to facilitate conversion, tax collection, and administration. They forced the rural population living in numerous, small, dispersed communities to reside in larger, more densely concentrated ones, either towns or villages, often imposing on these communities a grid pattern. Usually a previously occupied site was selected, but often entirely new locations were used for this relocation program. In the Teotihuacan Valley most of the effects of this process occurred during the first two decades of the 17th Century so that pre 16th century maps and censuses of settlements are likely to reflect the Pre-Conquest Aztec pattern. Fortunately we have a very detailed Relación covering the Lower and Middle Teotihuacan Valley and adjacent portions of the Temascalapa region. It is called the Relación de Tecciztlan (Tequisistlan) y su Partido and this document includes a map of the entire corregimiento, including the locations of roads, towns, dependent villages, streams, and in the case of the Lower Teotihuacan Valley, even the major canals of the irrigation system. Rural communities, however, are located on the map simply as churches and the map does not give any indication of the nature of the residential pattern around them; whereas the towns are shown, not only including the church, but market places and even some of the streets and residential areas. A major problem is that the more compact 20th Century villages of the area may have been entirely the product of Congregacion and may not have Aztec occupations beneath them.

5. A major problem with both the Teotihuacan and Aztec period sites is the dating of structural features on multi-component sites. It appears that Teotihuacan Period residences involved substantial amounts of stone in their construction and when abandoned leave very prominent mounds. Furthermore, many of the residences were large multi-family in type, like those found in the Teotihuacan city and even the smaller residences were generally larger than Aztec houses, and hence resisted destruction by erosion. Teotihuacan Period villages furthermore are generally very compact settlements. Because of the concentration of rock and earth this tends to discourage cultivation on these sites, at least until the beginning of the 1970s, and the shift from animal drawn plows to tractors. Aztec sites usually have some preserved architectural remains, but the residences are smaller in size and generally tend to be more dispersed.

In the case of sites which have both Teotihuacan and Aztec population therefore we have the serious problem of dating the surviving architecture. This is a particularly acute problem with the smaller mounds. When Sanders wrote the 1965 preliminary report on the Teotihuacan Valley Project, based on our excavations at the TC-8, site he assumed that all of the smaller mounds on multi-component sites were Aztec date, and that all of the residents of such sites during the Teotihuacan Period lived in large multi-family apartment houses, like those excavated at TC-8. In the preparation of the Teotihuacan Period final report, however, a closer examination of the surface survey of Teotihuacan Period sites revealed that in some of these sites, where the Aztec occupation was either absent or insignificant, there were numerous residential mounds smaller than those of the mode at TC-8 and so the problem remains. We concluded that on most of the rural Teotihuacan sites, the majority of the residents did reside in much smaller houses than at TC-8, although they

were generally larger than those found on Aztec sites. On those Teotihuacan sites where we do have large apartment house type residential remains, Aztec sherds often appear in our samples from these larger mounds. Excavations in Mounds 1 and 4 at TC-8 revealed Aztec structural features in the form of smaller residences built on the larger mounds of the earlier time period.

Formative and Mazapan sites, in contrast, frequently lack structural remains and it appears that the houses during these periods were built almost entirely of perishable materials (wattle and daub) or adobes. The settlements also tend to be smaller, and in the Mazapan case were even more dispersed than the Aztec settlements. Often the presence of some of these sites was not detected in general survey, and they were not intensively resurveyed by the Formative and Toltec teams. This was a particularly problem in the case of the Mazapan sites, where surveys indicate the presence of many hamlet type settlements. Some of these were discovered in our reexamination of the surface samples collected by the Teotihuacan and Aztec survey teams. In Volume 3, dealing with the Teotihuacan Period, which was published after Volume 4, which treated of the Toltec Period we presented a table summarizing the discoveries of new sites, including some from the end of the Formative Period, particularly the Patlachique and Tzacualli phases, and the Mazapan phase of the Toltec Period.

The reader will note some puzzling discrepancies and inconsistencies in the enumeration of mounds found in the site survey. This is the product of the variable and constantly changing manner in which the survey was conducted. During the general survey of the Lower Valley it seemed to us that site definition was relatively simple and we started the intensive survey with those sites. We numbered the mounds for each site separately beginning with Mound 1 as a starting point and then numbering the mounds in a continuous series as they were discovered in the resurvey of the site. As the intensive survey proceeded, however, we encountered numerous problems of site definition, particularly in the middle and upper part of the valley, but even in the lower valley, and often the survey teams crossed over the boundaries of neighboring sites, numbering mounds as they were encountered, providing some inconsistency in mound sequencing. Sites frequently were defined after large areas were surveyed. As we proceeded up valley the problem became increasingly acute and very often large areas were mapped as a unit without any reference to site definition. Sites were defined or redefined when large strips were completed. By the time we surveyed the Upper Valley in 1964 and particularly during the 1966 season this became the standard procedure. For this reason, in some areas of the valley mound numbering for each site is separate, whereas in other areas the mounds were numbered in sequence for a series of neighboring sites. In a number of sites, because no descriptions of mounds were compiled in the site descriptions, mounds were not numbered.

In preparation for publication we thought about the possibility of renumbering all of the mounds in a consistant series starting with 1 and running through all of the sites in a single numerical system, but we decided against it because of the problem of future use of our field records by other scholars and also because of the possibility of errors being committed in this enumeration process.

4. SITE TYPOLOGY

In this report a typology of sites is presented that is basically descriptive but involves some functional interpretations as well. Our survey schedule includes data on the size of the site; variations in density of surface artifacts; notes on the kinds of artifacts; architectural features, such as mounds of varying types; and specialized features such as canals, terraces, hearths, burials, and walls.

Sanders (1957) conducted a study of 20th Century settlement patterns of the Teotihuacan Valley, for his doctoral dissertation, both in terms of settlement typology and regional distribution. The data were combined with new data from the Teotihuacan Valley Project and published as two chapters by Diehl and Charlton respectively, in the first volume of this series (Sanders etal. 1969, see summary in Chapter 1).

With respect to contemporary community typology, we make a distinction between rural and urban settlements. Rural means that at least 75% of the population received the bulk of their living from agricultural or some other extractive activity. Urban refers to communities in which this figure falls well below 75%. The term "town" is used for settlements with populations in the thousands, and "city" for those in the tens of thousands. Towns, today, are always tightly nucleated with minimal population densities of over 50 people per hectare. Material manifestations of towns include large size, high density of population, public and commercial spaces and associated buildings, and significant variations in the size and quality of residences.

Rural communities were classified as "villages," "hamlets," or "rancherias." Hamlets are nucleated settlements with populations of below 100 and villages are nucleated settlements with over 100 people. Rancherias are dispersed rural settlements, i.e. where each householder has most of agricultural land between his house and that of his neighbors. Furthermore, a considerable range in settlement density among the villages and hamlets was noted, ranging from as low as 5 to as high as 50 per hectare. Some rural settlements in the southern part of the Basin of Mexico had densities as high as 120 per hectare, the highest density we recorded in any settlement. Even in the settlements of low density, however, where some houselots were planted in crops, the majority of the agricultural land lay outside of the residential area of the village, so one can see a clear differentiation between settlement and the farm holdings on the aerophotos used in the general survey. The villages with the highest densities had virtually no crops within the village area and the houselots consisted of earth or paved patios. While village densities vary along a continuum within these extremes, Sanders developed a typology of villages based on population density intervals as follows: scattered or dispersed villages (5 to 10 persons per hectare), low density compact villages (10 to 25 persons per hectare), and high density compact villages (25 to 50 persons per hectare). Even during the initial field season in 1960, considerable variation was noted, in those sites where architectural preservation was good, in the density of residential mounds, and the variation seemed to parallel the variety in 20th Century villages.

According to Charlton, this variety, on the simplest level of evaluation, relates to family size. This, in turn, relates to land tenure; in villages situated in areas of relatively restricted tracts of high quality land, the family tends not to segment after a child's marriage, thus forming an extended family. In villages situated in areas where there are extensive tracts of marginal land, however, families tend to segment. Since the variation relates to exploitative systems, it was thought that it would be useful to classify rural archaeological sites by population density.

A major problem in application of the classification to all prehistoric sites lies in the fact that, in many cases, architectural remains were absent or sparse. Here we made the assumption that the density of surface refuse, in the form of broken artifacts ought to relate in a general way to the original density of houses and, inferentially, of populations. This supposition was checked in the 1960-1961 seasons, where sites without architecture were compared to those with architecture in terms of density of surface debris; there seemed to be a close correspondence. The correspondence also checks well against the observation of refuse density as light, medium, or heavy, in contemporary villages - i.e., it correlated with the three village types of scattered, low density compact, and high density compact. Finally a distinction is made among the villages, referring to some as small villages (i.e. population between 100-499) and large villages (populations 500 and over).

There are a number of precautions one must take in order to apply this typology to a large regional survey since much of it is based on population size and population size is very difficult to reconstruct from archaeological remains (see discussion below). First, the chronological components must be of equivalent length, or some adjustment made when one compares settlements of different and variable periods of time. Second, sites found in badly eroded hillsides cannot be directly compared with protected sites in deep alluvium. In this latter case, we have adjusted our evaluation, based on excavated sites.

Because of significant differences in the political organization of prehispanic communities and societies, when compared to the 20th Century ones, terms like Regional Center (for periods when the data suggest political fragmentation) and Provincial Center (for periods when the data suggest political centralization) were applied to sites resembling present-day towns or more urban communities. Furthermore, those sites found either coterminous with the urban center of Teotihuacan, or detached from it by only a few hundred meters were considered integral parts of the city and are referred to as barrios or wards.

5. THE RECONSTRUCTION OF THE POPULATION OF AZTEC SITES

With respect to estimating the population of the Aztec period we will utilize two methods. First,with a few exceptions, primarily those located on and immediately adjacent to the Lower Valley Alluvial Plain, the rural communities defined in the survey were all dispersed settlements usually located on the lower piedmont, and adapted to the topographic contours of the valley. Residences were integrated into terrace systems, well spaced from each other and often in linear fashion. In a minimum of cases sites had not been severely eroded and the great majority of residential remains were preserved. We will use these cases as models for estimating residential mound density. In general, the density of these sites ranges from 1-3 mounds per hectare, a density very comparable to houselots in 20th Century scattered or compact low density villages. In Chapter 13 we provide an assessment of the condition of each of the dispersed settlements, based on sherd densities, and areas of concentration of building stone, and a rough estimate of the original number of mounds.

The conversion of residence density, however, to population density is a complex problem. First, the well preserved mounds vary in size and this variety - based on ethnographic analogy-almost certainly relates to two factors, size and status of the resident household. Fortunately we now have a substantial sample of excavated mounds to clarify the problem. At the end of the Teotihuacan

Valley Project, our sample of excavated rural houses consisted of Charlton's T.A. 40 excavation, reported here in Chapter 8, and a portion of an Aztec 2 phase house excavated at Cuanalan. Now on the basis of Evans's subsequent excavations at T.A. 81 (Cihuatecpan), summarized in Chapter 10, we have an additional eight rural residences, and they cover the entire range of size seen on survey.

A complication in converting mound sizes to population however, still remains, since even in well preserved sites some mounds have suffered erosion, in some cases reducing their original size, in others expanding it. Fortunately, the number of well preserved mounds is sufficiently large to provide an adequate sample. Our method consists of the application of the well preserved sample with respect to variations in size, to the total estimated number of mounds.

A final problem is that of contemporaneity, i.e. how do we know that all mounds found in the survey with Late Aztec ceramics on them, were occupied simultaneously. In Sanders's 1965 study, he reduced the total mound number by 5-10%, based on his observations that in 20th Century villages that percentage of houses were not inhabited at the year of survey. These are cases of villagers who have migrated, primarily to Mexico City. Considering the much smaller size of the Aztec period city, and significantly fewer economic opportunities to residents of overcrowded rural areas, it now seems to us unlikely that significant rural to urban migration occurred in Late Aztec times. Furthermore, considering the rapid growth rate of population during that period, and the close spatial integration of house site to terrace system it is doubtful that many residences we located were unoccupied in 1519. Nevertheless, households undoubtedly went through cycles of expansion and retraction, as, upon marriage, adult children or siblings moved to other rural localities, because of economic pressure. Thus all households would never peak in population in a single census year.

Fortunately, we have a number of very early 16th century censuses (i.e. prior to the major epidemics of the 1540's) of households, from Morelos and the Basin of Mexico, analyzed by Carrasco and Harvey, and the averages and ranges in household size, we believe, can be applied to our Aztec sites. We have summarized their work in Chapter 13.

In summary then our method of reconstructing the population of dispersed rural communities consists of the following procedures.

1. Establishment of a model of variation in residential mound size from well preserved mounds for each site.
2. Assessment of the relationship of mound size to room sizes, and plans, based on a sample of nine excavated rural houses
3. Estimates of the original number of mounds on a site, based on extrapolation for erosion in the less well preserved sites.
4. A comparison of these densities with 20th Century villages.
5. Application of early 16th century Spanish censuses of households

With these considerations in mind we calculate the population of rural sites based on three independent methods.

1. A correlation of variation in 20th Century settlement density of houses to mound densities on Aztec sites.
2. Direct calculations based on excavated houses and mound size.
3. The application of an average household size generated from 16th century data to mound counts.

For the more compact rural settlements and town sites we are forced to rely on impressions of residential density based on refuse density and the use of ethnographic analogy, specifically a heavy reliance on density figures for the more compact 20th Century communities, since all of these settlements are occupied by these communities today. Our surveys revealed that, in at least four cases, Chiconauhtla, Tepexpan, Acolman and Otumba, all town sites, the site had a densely settled core, very comparable in appearance to the overlying 20th Century community, and an outer periphery of lighter settlement, comparable in density to the more dispersed rural settlements described above. These outer fringes, in the cases of the first three, occurred on the edge of the 20th Century community, in zones of agricultural land, and hence were more easily surveyable. Much of Otumba's more urban densely settled core fortunately lies outside the 20th Century town, and gave us a unique opportunity to study an urban core. Another one-time town site (i.e. based on 16th century documentation), T.A. 90, which lies within 20th Century Cuahutlacingo, a very dispersed settlement, offered an additional opportunity. The modern settlement has resulted in heavy mound destruction but the relatively open nature of the settlement facilitated a study of refuse density.

Twentieth Century Teotihuacan is a special problem since it overlies not only the Aztec town, but an even more massive Teotihuacan Period occupation.

In the case of the towns, because of the cited problems, we have simply applied the densities found in 20th Century compact, high, density villages and towns to the cores of the site, and densities from the 20th Century compact low density villages to the peripheral areas of the sites, to obtain site population. The reader is referred to the descriptions of these sites for the results (i.e. T.A. 9, T.A. 11, T.A. 12, T.A. 155, T.A. 80, T.A. 90) in Chapter 3.

6. THE PROCESS OF REPRODUCTION OF THE ILLUSTRATIONS

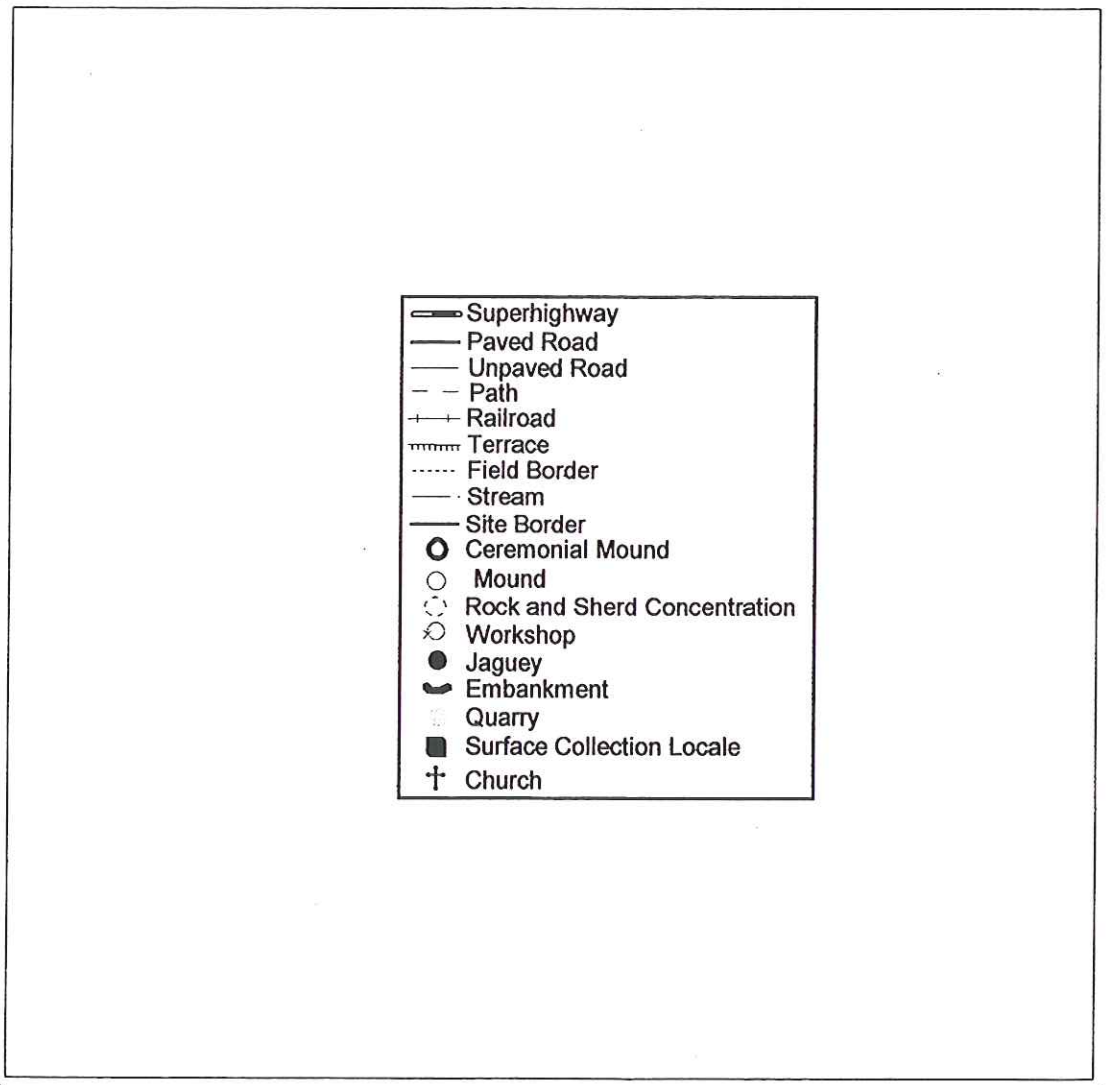
The plates and the great majority of figures for this volume were produced by a variety of scanning and computer techniques described below. A small number of site maps were reproduced directly, some slightly modified, from earlier publications of this series; some were ink drawings others computerized products. These include Figures 1, 3, 4-6, 7, 8, 17, 44, 50, 60, 63, 78, 117, 118, 124, 125, 130, 132-135 in Part 1 and Figures 139, 149 in Part 2.

Plates

SOFTWARE: Adobe PhotoshopLE 3.0
HARDWARE: Macintosh Power PC 8500/120 with 32mb of RAM
Apple ColorOne Scanner 600/27
PRINTER: Hewlett Packard Laserjet 5MP with 3mb of RAM
PROCEDURE: Aerial photos were digitized using an Apple ColorOne Scanner 600/27 set for 256 color depth, and for an optical resolution of 150dpi. Individual photos were adjusted for tone and threshold as needed for image clarity. Digital images were then enhanced for contrast and sharpness in Adobe PhotoshopLE 3.0 and cropped to represent surveyed areas. Lastly, digital images were encoded as jpeg files and printed at 600 dpi using a Hewlett Packard Laserjet 5MP with 3mg of RAM. Digital images recorded and backed-up by compressed file archives on Iomega ZIP cartridges.

Site and Geographic Maps

SOFTWARE: MapInfo Professional 4.1
Windows 3.1.1
HARDWARE: Gateway 200 P5-120 with 32 mb of RAM
SummaSketch IIplus Graphics Tablet
PRINTER: Hewlett Packard Deskjet 693C with 4mb of RAM
PROCEDURE: Field maps were reduced through photoduplication then matched to geographic features on 1:25000 Cetenal topographic quadrangle maps. Latitude/longitude degree coordinates for survey sites were input as digitzer reference points directly from Cetenal source maps to create a virtual geographic surface in the Mexico Workspace of MapInfo Professional 4.1 from which degree coordinates for site boundaries and landmarks could be obtained. Coordinates were transferred to field maps then input as new digitizer reference points to create a virtual geographic surface in the Mexico Workspace of MapInfo Professional 4.1 scaled to match the scale of the original field maps. Site boundaries and features were then digitally plotted in MapInfo Professional 4.1 on a SummaSketch IIplus graphics tablet as vectors to produce multi-layered digital representations of site maps. Layouts of individual sites and of regions were printed in color using a Hewlett Packard Deskjet 693C.


Superhighway
Paved Road
Unpaved Road
Path
Railroad
Terrace
Field Border
Stream
Site Border
Ceremonial Mound
Mound
Rock and Sherd Concentration
Workshop
Jaguey
Embankment
Quarry
Surface Collection Locale
Church

APPENDIX A - Survey Schedule

This appendix consists of a reconstruction of a the Site Survey Form used in the 1963-1964 surveys.

Descriptive Data

Site Number_____ Recorder_____

Aerophoto Mosaic Numer_____ Location Municipio_____

Date_____ Village_____

Checked by_____ Owner_____

1. Natural Setting of Site:

   a. General: Delta Lower Valley Middle Valley Upper Valley

      Patlachique Range North Tributary Valley

   b. Topography: Alluvial Plain

(Main) Small Alluvial Fan or Plain Piedmont

      Gentle slope Steep slope Hill top Ridgetop

   c. Soil (based upon exposed cuts-roads, canals, ravines):

      Depth(cm) Texture: sand loam clay

      Color Amount of erosion

   d. Hydrography Permanent streams

      Springs

      Barrancas-depth, location, width

      Washes

   e. Vegetation Type, abundance

   F. Special sources (clay, lime, obsidian, basalt, granite, tezontle, salt)

Site Number_____

II. Modern Cultural Features

a. Structures (Note number and location with respect to site features)

b. Jagueys

c. Agricultural use

1. Crops, state of growth

2. Erosion control (bancals, terraces)

3. Humidity control (canals, dams, drainage ditches, cadetes)

4. General classification-temporal, humedad, riego

d. General relationship of site to agricultural and other land use today

Site Number_____

III. Prehistoric features

a. General condition of site-Erosion, excavation, pitting

b. Mounds-number size, height, classification (ceremonial, domestic)

(location map) (clustering-plaza like plans)

Site Number_____

c. Specialized features-(Walls, floors, canals, dams, burials, forts, moats, quarries, workshops)

d. Pottery-Quantity, description

	Subjective	Objective
None	Even	Take several 1 x 1 m, counts- on residential mounds, between them, empty areas between mound clusters.
Sparce		
Moderate	Localized & vairable	
Heavy		
Very Heavy		

e. Miscellaneous artifacts-relative abundance

Obsidian

Tools

Blades - Cores

Ground stone

Manos - metates	Figurines
Celts	Spindle whorls
Pestles and mortars	Pottery discs

Site Number_____

f. Depth and nature of archaeological deposits (stratification, stone-shell-midden layers, soil changes, total depth)

IV. Miscellaneous Data

Site Number_____ Date_____

Aerophoto Mosaic Number_____ Recorder_____

Amplification of Aerophoto of Site

Site Number_____ Date_____

Aerophoto Mosaic Number_____ Recorder_____

Map of Site Based on Tracing of Aerophoto

Site Number_____ Date_____

Aerophoto Mosaic Number_____ Recorder_____

Photographs

1. General photos-showing ecological setting

Site Number_____

Photographs

2. Photographs of modern and ancient terracing, irrigation, stream beds

Site Number_____

Photographs

3. Archaeological features (mounds, mound clusters, profiles of walls and floors, etc.)

Site Number_____ Date_____

Aerophoto Mosaic Number_____ Recorder_____

Problems, Summaries, Impressions

These three sheets are designed to permit the recorder to make tentative summary statements about the nature, plan, and function of site, its relationship to environment and land use, problems of dating, relationships to other sites nearby, problems of relating structures to various periods of multi-period sites, desirability and need for further work to define the characteristics of the site, or any other problems or impression he may wish to record.

CHAPTER 3

THE TEOTIHUACAN VALLEY PROJECT: AZTEC PERIOD SITE DESCRIPTIONS

by

Susan Toby Evans, William T. Sanders, and Jeffrey R. Parsons

Figure 7

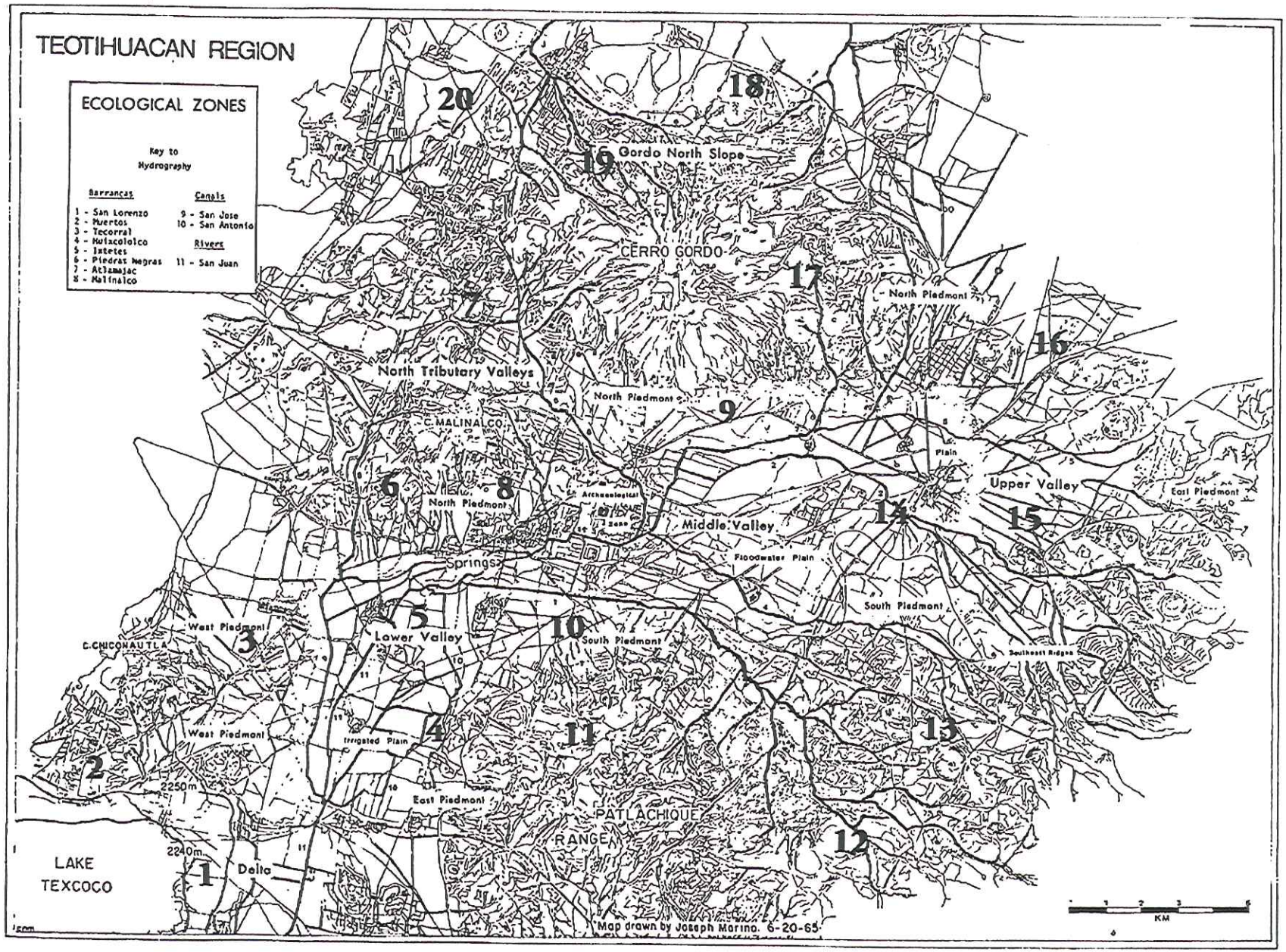
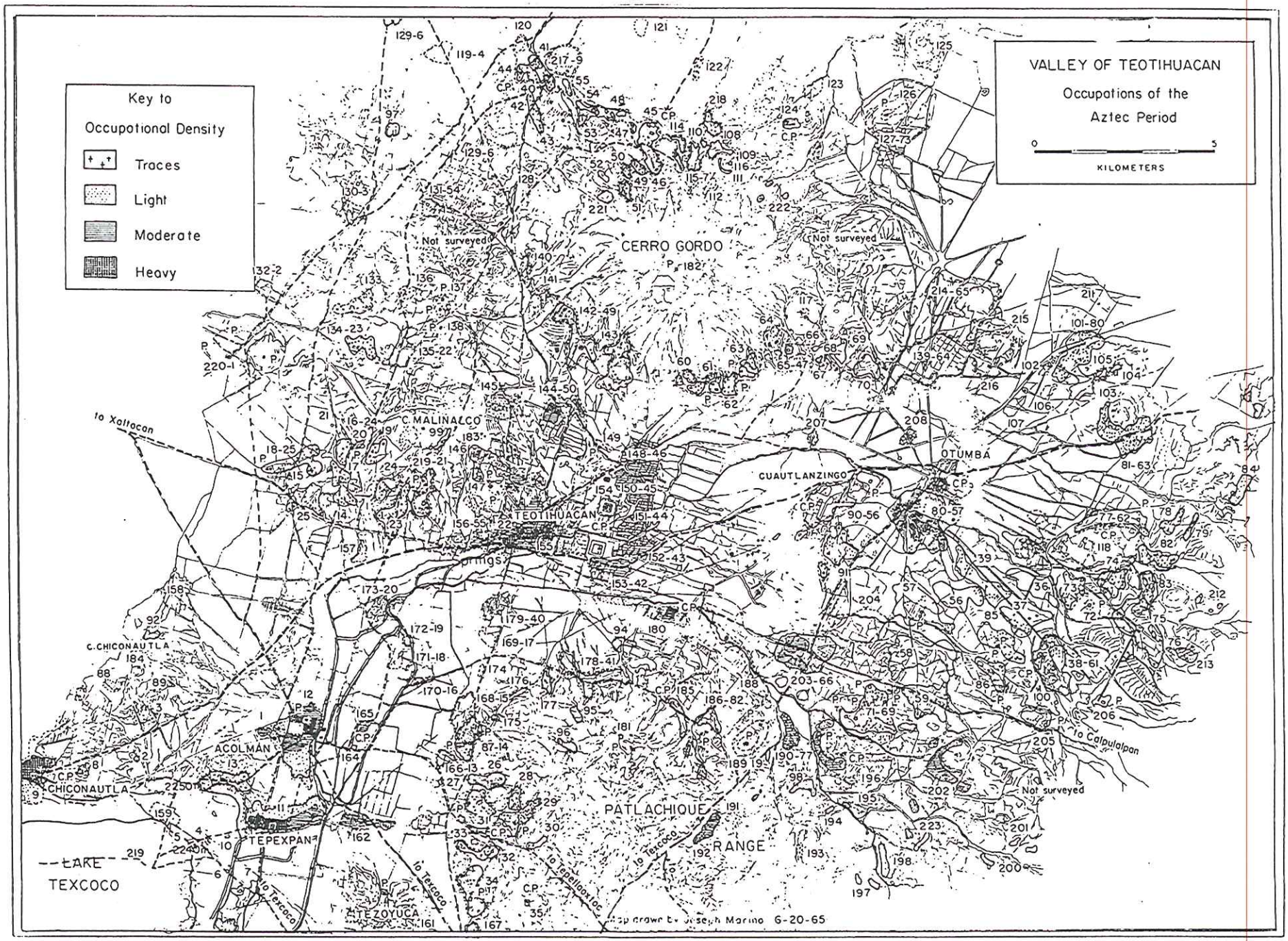

TEOTIHUACAN REGION
ECOLOGICAL ZONES
Key to Hydrography
Barrancas
1 - San Lorenzo
2 - Muertos
3 - Tecorral
4 - Hutacoloico
5 - Intetes
6 - Piedras Negras
7 - Atlamajac
8 - Malinalco
Canals
9 - San Jose
10 - San Antonio
Rivers
11 - San Juan
Gordo North Slope
CERRO GORDO
North Piedmont
North Tributary Valleys
C. MALINALCO
Archaeological
Middle Valley
Springs
Floodwater Plain
Upper Valley
East Piedmont
Plain
South Piedmont
Southeast Ridges
West Piedmont
C. CHICONAUTLA
Lower Valley
Irrigated Plain
2250m
2240m
LAKE TEXCOCO
Delta
PATLACHIQUE RANGE
Map drawn by Joseph Marino. 6-20-65
KM

Figure 8


VALLEY OF TEOTIHUACAN
Occupations of the
Aztec Period
0
5
KILOMETERS
Key to
Occupotional Density
Traces
Light
Moderate
Heavy
CERRO GORDO
Not surveyed
Not surveyed
C. MALINALCO
TEOTIHUACAN
CUAUTLANZINGO
OTUMBA
PATLACHIQUE
RANGE
ACOLMAN
TEPEXPAN
TEZOYUCA
CHICONAUTLA
C. CHICONAUTLA
LAKE
TEXCOCO
to Xaltocan
to Texcoco
to Tepetlaoxtoc
to Calpulalpan
Not surveyed
Springs
C.P.
P.

1. INTRODUCTION

In this section, detailed descriptions are presented of the settlements and isolated ceremonial centers dating to the Aztec-Early Colonial period that were located by the Teotihuacan Valley and Temascalapa Project surveys. The sites are grouped by environmental zones, with a discussion of that natural setting and post-Aztec occupation, at the beginning of each group of site descriptions. Individual site descriptions include a brief discussion of environmental features specific to the site, a discussion of modern land use as observed at the time of the original survey (with more recent landscape modifications, if the information is available), a description of archaeological remains, a summary of documentary references to the site, and a classification as to site type.

Since grouping the sites by environmental zone plays havoc with the orderliness of the site numbering system, a table is included (Table) that lists sites in numerical order, referencing basic site features and indicating the environmental zone under which their descriptions may be found.

Environmental Zones

As we discussed in Chapter 1 the Valley's environmental setting includes lakeshore, alluvial plain, piedmont, and sierra.

Lakeshore: This area includes the northeastern edge of Lake Texcoco and the salinized shoreline adjacent to it. Sites in this region consist of the remains of salt-making mounds (residential and extractive functions) and several larger communities

Alluvial Plain: This comprises several distinct flat areas of deep soil, internally divided by canalized barrancas (seasonal drainage) and rivers (permanent drainage). The delta plain extends from Tepexpan (T.A. 11) down to the lake shore; the lower valley plain extends from Tepexpan, past Acolman (T.A. 12) up to Teotihuacan (T.A. 155); the middle valley plain extends from Teotihuacan up to San Pable Izquitlan (T.A. 207) and Cuautlantzingo (T.A. 90 and 91); the upper valley plain extends from San Pablo Izquitlan to the lower slopes of the surrounding hills (outliers of Cerro Gordo and the Sierra de Malpais).

Piedmont: Surrounding the alluvial plain is a band of gently sloping land of variable width, including the lower slopes of the Patlachique Range and Sierra de Malpais to the south and east of the alluvial plain, and the lower slopes of Cerro Gordo to the north. The lower slopes of Cerro Gordo and its adjacent hills form a continuous annular ring of piedmont, and this was surveyed and mapped as part of the Teotihuacan region, although the north slope of Cerro Gordo drains onto the Temascalapa plain.

Sierra: The upper reaches of Cerro Gordo and the Patlachique-Malpais Range provided important material resources and were significant ideologically (hilltop shrines were common in the Aztec period), but settlement here is sparse.

In recognition of the powerful role that variations in geography played in settlement, in the previous volumes, particularly Volumes 3 and 4, dealing with the Teotihuacan and Toltec periods we organized the site descriptions in groups related to this variability. The divisions used in those volumes was follows: The Delta; the Lower Valley with subdivisions including the Alluvial Plain, the Eastern Piedmont, the Western Piedmont, and the North Piedmont; the Middle Valley with subdivisions, including the Archaeological Zone

(i.e. the Teotihuacan Period city, an area covering approximately 20 km^2), the Floodwater Plain, the South Piedmont, and the North Piedmont; the Upper Valley with its subdivisions, the North Piedmont, the Alluvial Plain and East Piedmont and the South Piedmont; the North Tributary Valleys, an area of complex drainage and topography north of the Teotihuacan Valley, and the Cerro Gordo North Slope, an area outside of the Teotihuacan Valley but included in the Teotihuacan Valley Project.

Because the Aztec rural population was much denser than in any of the earlier periods, more pervasive in terms of its spatial distribution, and because it seemed to be more finely turned to the great variety of agricultural landscapes of the valley we have organized the description of Aztec sites in terms of many more and smaller divisions than those used in the earlier period volumes. The Aztec period, furthermore, is one for which we have considerable historical documentation and have an extensive body of data on the political organization of the surveyed region in contrast to the pre-Aztec periods. We have used the spatial order of these political structures as an additional factor in grouping the site descriptions.

In the introduction to each of the site groupings, we have included a brief discussion of the Early Colonial and 20th century patterns of settlement and land use. One of the reasons for this is the direct historical linkages among the three patterns i.e. that for 1519, the mid and 16th century, and the 1960's.

Our organization is presented in the following table.

Table 6

Zone	1	Delta - Lake Shore Towns, and Salt Making Sites
Zone	2	Delta - Cerro Chiconauhtla and the Adjacent Alluvial Plain
Zone	3	Lower Valley Tepexpan-Acolman Conurbation
Zone	4	Lower Valley East Piedmont - Tezoyuca and the East Piedmont
Zone	5	Lower Valley Alluvial Plain
Zone	6	Lower Valley - North Piedmont
Zone	7	Middle Valley - Cerros Malinalco and Gordo Intermontane Valley (Southern Half of the North Tributary Valleys, defined in Volumes 2-4)
Zone	8	Middle Valley - Teotihuacan Conurbation
Zone	9	Middle Valley - Cerro Gordo South Pidemont
Zone	10	Middle Valley - The South Piedmont
Zone	11	Middle Valley - Patlachique Uplands
Zone	12	Middle Valley - The Upper San Lorenzo Basin
Zone	13	Upper Valley - Southeast Ridges (Oxtotipac, Nonoalco, and Tlaltica Ridges)
Zone	14	Upper Valley Otumba Conurbation
Zone	15	Upper Valley - Ahuatepec Piedmont
Zone	16	Upper Valley - The North Piedmont
Zone	17	Upper Valley - Cerro Gordo East Piedmont
Zone	18	Cerro Buena Vista
Zone	19	Cerro Gordo: North Slope
Zone	20	North Tributary Valleys: The North Sub-Zone

2. THE DELTA - ZONE 1 - LAKE SHORE TOWNS AND SALT MAKING SITES (Figs. 1,7; Plate 2)

The delta of the Rio de San Juan is, today, a flat plain. All of the Rio de San Juan that flows through this delta is artificially canalized, flowing between very high banks or levees in order to ensure drainage to the lake. Normally, however, little water reaches the lake. Much of the part of the area that falls between 2238 and 2240 MASL, i.e. the old lake shore of Lake Texcoco, is salt-indurated.

To the south, the delta of the Teotihuacan river merges with that of the Rio Papalotla which descends from the main range of the Basin of Mexico, south of the Patlachique range. The only elevation in this zone is Cerro Tezoyuca, a small range of hills isolated from the main block of the Patlachique range.

To the north of the zone is the degraded volcanic cone of Chiconautla which reaches a maximum elevation of nearly 2,600 m.

In the 16th century the town of Tequisistlan was located within the Delta Alluvial Plain, along with two additional communities, Santa Isabel Ixtapan and Nexquipayac. Sometime during the Late Aztec period Tequisistlan had a tlatoani (see discussion in Chapter 12, this volume). Its domain must have been extremely small, considering its proximity to Chiconauhtla and Tepexpan to the north, Tezoyuca to the east, Atenco and Chiauhtla to the south. Most of the population of these communities appears to have been nucleated to judge from our limited surveys of the adjacent alluvial plain. Tequisistlan in 1519 had two sujetos. Tezoyuca was a town in the Delta area but actually located on the south flank of a low range of hills that include two peaks, called Cerro Santiago and Cerro Tezoyuca. A wide low pass separates this small range from the Patlachique Range to the east. For reasons to be made apparent below we will not discuss or include Tezoyuca as part of this zone, although much of the land farmed by the residents of the town in the 20th century, and undoubtedly in the 16th century as well, includes large portions of the irrigated delta plain. These communities are all large substantial villages today.

Aside from a relatively cursory survey conducted during the general survey phase of the project, intensive surveys conducted by the Teotihuacan Valley Project in this zone was limited to a series of salt-making stations T.A. 4, T.A. 5, T.A. 6, T.A. 7, and T.A. 10. Although they were not intensively surveyed we assigned site numbers to the villages of Totolcingo (T.A. 159) and Ixtapan (T.A. 170). The designation T.A. 7 technically applies to an extensive zone of salt-works on the edge of Tequisistlan but we are applying that site number to designate the town as well.

The described sites below include the five salt-making stations only.

T.A. 7 (Figs. 10, 11; Plate 11 A-D)

Classification: Small nucleated village. The site may be significantly larger including the occupation beneath modern Tequisistlan. The abundance of Texcoco Fabric Marked pottery, plus the documentary reference to prehispanic salt production, indicate this latter occupation was important here. Traces of Toltec and Teotihuacan pottery suggest a long-term use of this location for salt production, with a maximum expansion of this activity during Aztec times.

Natural Setting: See T.A. 5.

Figure 10

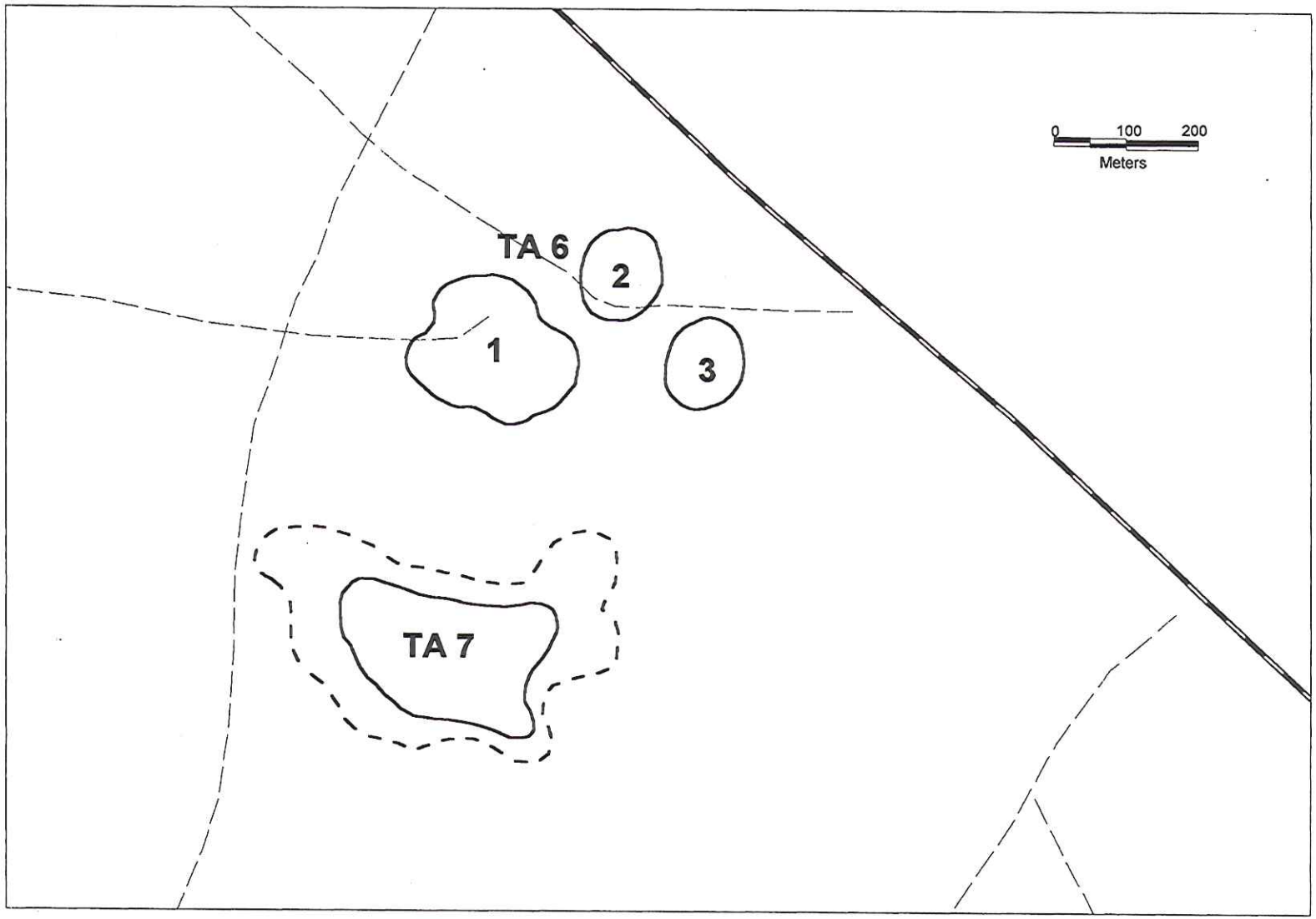


Figure 11

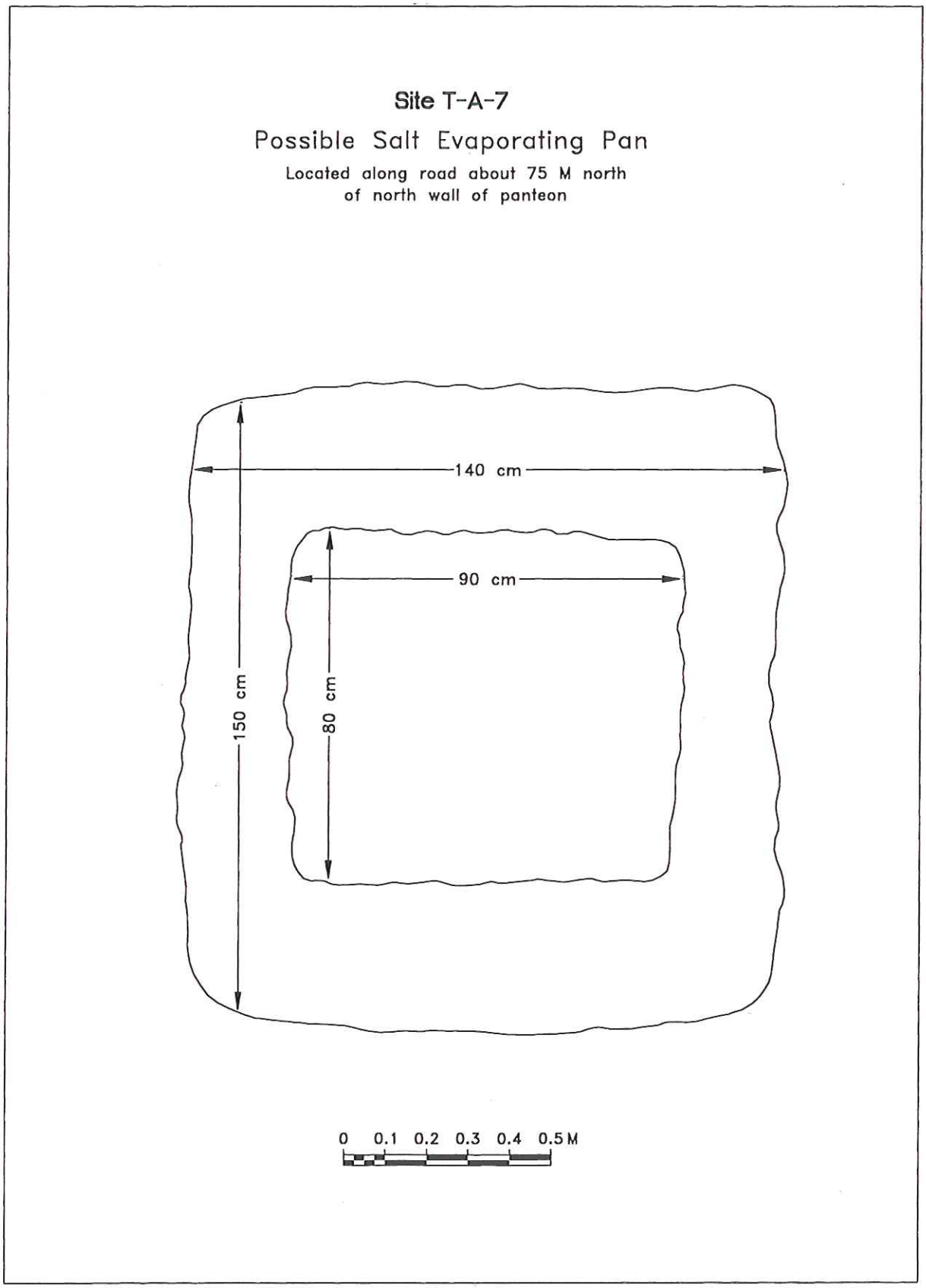
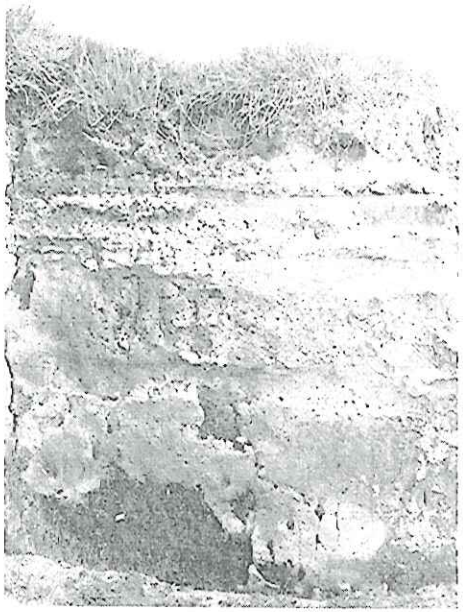

Site T-A-7
Possible Salt Evaporating Pan
Located along road about 75 M north
of north wall of panteon
140 cm
90 cm
150 cm
80 cm
0 0.1 0.2 0.3 0.4 0.5 M

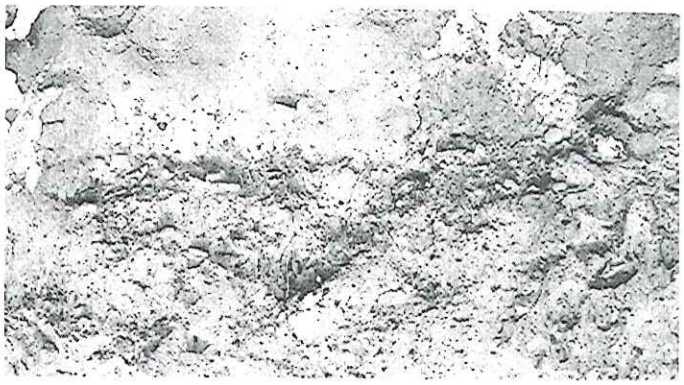
Plate 11

A

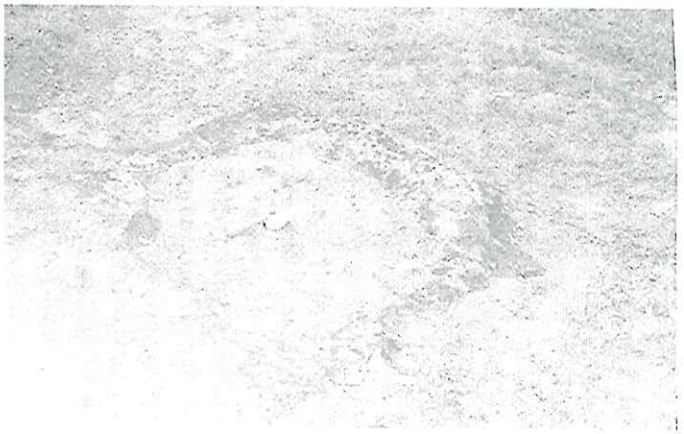
B



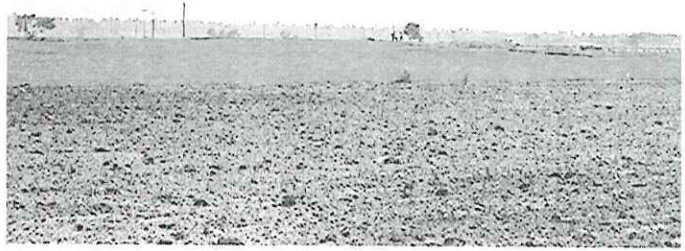
C



D



E



Modern Land Use: As in T.A. 5 (below). The site area abuts onto the west edge of the modern village of Tequisistlan, and some prehispanic occupation extends below this latter community where our survey could not be extended. A large modern cemetery sits in the center of the site area.

Archaeological Remains: The site's dominant feature is a large irregular mound measuring roughly 250 by 180 m in surface area, rising to about 2 m above the general ground level. Numerous deep pits within this area reveal sherds at depths of up to 3 m, and local informants report finding pottery fragments at up to 5 m below ground level. Moderate and light-to-moderate concentrations of surface pottery are found over the mound's surface, with much heavier sherd cover where pitting has thrown up subsurface material. A similar sherd concentration extends over a surrounding broad apron of lower ground extending between 50 and 100 m outward from the based of the mounded area. Total site area measures about 10.6 ha. Occupation is dominantly Late Aztec (Chimalpa phase), and Texcoco Fabric Marked pottery is the single most common type. Traces of Toltec and possibly Teotihuacan pottery were also noted. Traces of Tzacualli were recorded as T.F. 239. Early Colonial pottery is present as well. In the north-central section of the site several basin-like features similar to those at T.A. 6 were noted. Only one was fairly well-preserved: it measured about 140 by 150 cm, with top edges raised a few cms above the present ground level, and about 15 cm deep. As at T.A. 6, this is made of tepetate hardpan, or caliche-like material. Remnants of low tepetate walls next to this well-preserved feature suggest a closely packed series of such basins here. In a royal questionnaire dating to 1580, Tequisistlan is described as situated "near the great lagoon in the midst of canals" (Nuttall 1926:51), within "a level plain open on all sides without any trees" (ibid). This same document (ibid:77-78) describes the local population as agriculturalists, who cultivated agave (maguey), maize, chia, huauhtli, beans, and wheat, although there is also mention of "salt peter" in the soil which posed some problems for agriculture. No salt was been produced in 1580, but "In ancient times they used to make salt in this town with which they provided the City of Mexico. For the past thirty eight years they have given up doing so because the number of inhabitants have decreased and because the water of the lagoon has risen and covered the salt beds from which they extracted the salt." (ibid:79). In 1580 construction lumber for houses in Tequisistlan was obtained from the "woodland of Texcoco distant four leagues." Further afield, "They have the custom of buying cotton brought from the Marques del Valle and of this they spin and weave skirts and mantles with designs, that they sell. The natives of Acaltecoya, subordinate to Tequisistlan, deal in fish and game birds and pay their tribute with these." (ibid:80).

Ethnohistoric Information: In 1580 Tequisistlan was the center of the Corregimiento of Teccizistlan. At one time it was a town with its own tlatoani but it was demoted to the status of a direct sujeto of Texcoco by Nezahualcoyotl in the mid 15th century. It was appointed a cabecera and restored to its original position, but without a tlatoani, by the Spaniards, during the 16th century.

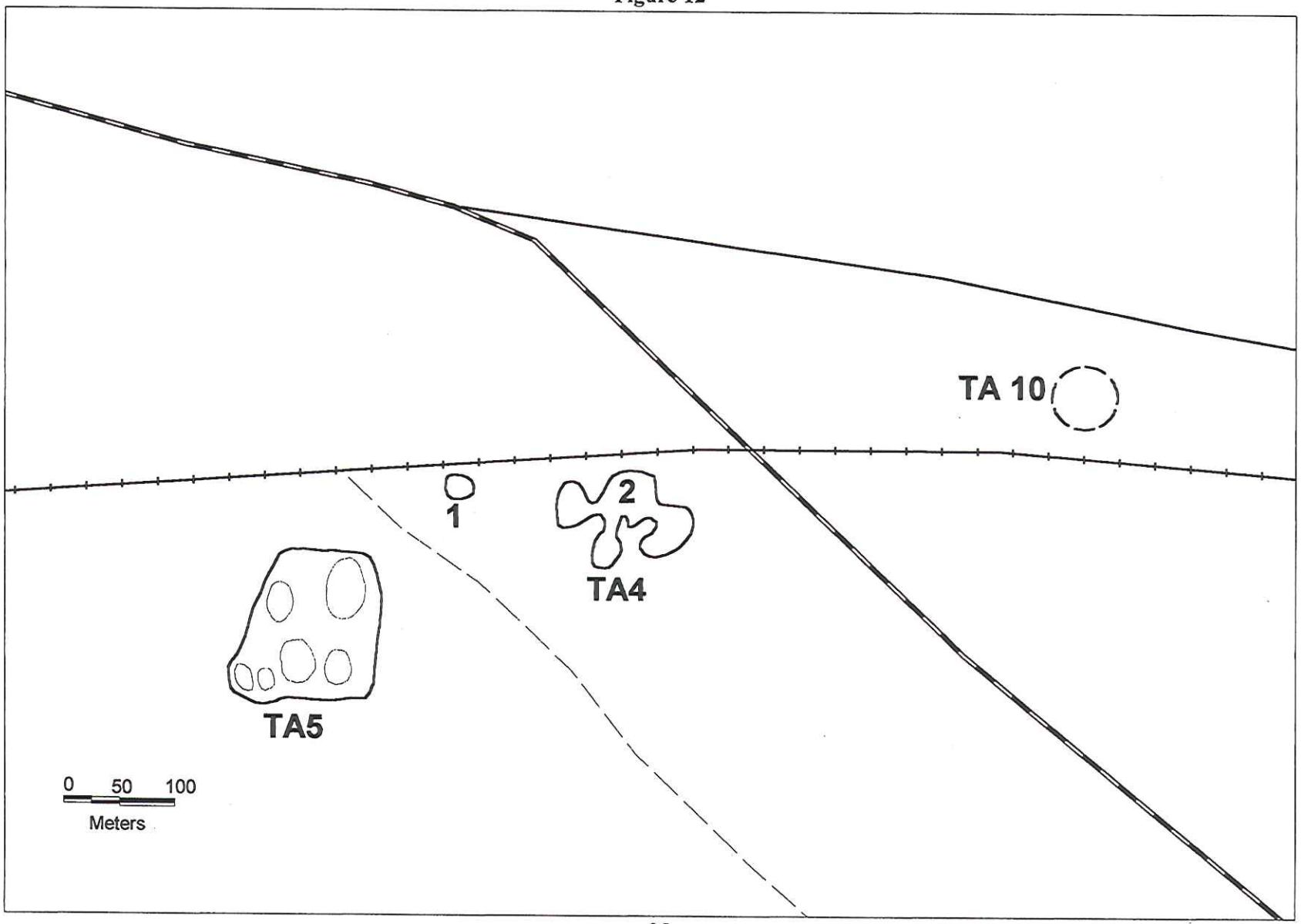
T.A. 159

Classification: PNE. This is the 16th century and 20th century village of Totolcingo. We did not survey this site but it probably was a large, compact high density village in Aztec times.

T.A. 160

Classification: Gibson. This is the 16th and 20th century village of Santa Isabel Ixtapan. It is located on the shore of Lake Texcoco and it was not intensively surveyed during the Teotihuacan Valley Project.

Figure 12



T.A. 4 (Fig. 12; Plate 11 E)

Classification: Hamlet. Judging by the location and the predominance of Texcoco Fabric Marked pottery, this was very probably a locality specializing in salt production.

Natural Setting: Slightly above 2250 m. Situated on level ground where soil depth probably reaches several meters. Modern highway and railroad abut site area immediately to the east and north. Natural vegetation is limited to short tough grass typical of the salinized shores of the lake.

Modern Land Use: The immediate site area is used only as marginal pasture. Residents of a nearby modern village indicate that soil is too salty for agriculture. The fields surrounding the site have recently been reclaimed for cultivation by large-scale drainage and flushing out of salts. In these latter areas temporal maize cultivation is now practiced.

Archaeological Remains: Major feature is a large irregular mound measuring roughly 120 by 20-80 m in surface area. Its maximum elevation is about two meters, although height varies somewhat. A much smaller mound, about 20 m in diameter and 1 m tall, is located some 80 m west of the principal feature. Total site area is about .6 ha. There has been some recent pitting in the main mound. In these areas there are light-to-moderate and moderate concentrations of surface pottery and stone tools. In other areas, where pits are lacking, occupational debris is quite light, except around the eastern edges of the main mound where sherds are washing out of the profile in some quantity. Occupation is very predominantly Late Aztec. Texcoco Fabric Marked is by far the dominant pottery, although most standard Aztec ceramic types are also present. The non-fabric impressed ware would suggest that it was a residential site as well as a salt extraction site.

Ethnohistoric Information: N.D.

T.A. 5 (Fig. 12)

Classification: Hamlet. The five or six small mounded areas atop the main mound may represent separate household units. Salt making was very likely a primary occupation.

Natural Setting: Slightly above 2250 m. Situated on level ground with soil depth of several meters. The site area is thickly covered by short, tough grass.

Modern Land Use: According to local informants the ground here is too salty for effective cultivation. The site area is now used only for pasture, although the eastern section has recently been plowed, apparently for the first time. Surrounding fields are planted in maize (temporal), whose cultivation has been made possible by large-scale drainage and flushing operations.

Archaeological Remains: The site consists of a single large irregular mound, measuring about 100 by 150 m (ca 1.5 ha) in surface area, with a maximum elevation of about 2.5 m. Atop this mounded area there are five or six smaller discrete mounds rising roughly 1 m above the surface of the larger mound. These smaller features measure between 15 and 40 m in diameter. Light and light-to-moderate concentrations of surface pottery are largely restricted to these smaller mounds, with intervening areas showing much less occupational debris. Occupation is wholly or very predominantly Late Aztec (Chimalpa phase) although possible traces of Toltec pottery were noted. Texcoco Fabric Marked pottery is the most common ceramic type, although its proportion seems less than at the adjacent T.A. 4 site.

Ethnohistoric Information: N.D.

T.A. 6 (Fig. 10)

Classification: Hamlet. The very high proportion of Texcoco Fabric Marked pottery suggest a salt-making specialization. The basin-like features may be evaporating pans.

Natural Setting: See T.A. 5

Modern Land Use: See T.A. 5

Archaeological Remains: Site consists of three large roughly circular mounds, each measuring between 85 and 225 m in diameter, with a combined surface area of about 5.6 ha. Maximum elevation is about 2.5 m, although the upper surfaces are somewhat irregular. These features have been pitted in recent times to collect soil for making adobe bricks. This pitting has thrown up substantial quantities of sherd debris, although this material is quite sparse in unpitied areas on the mound's surface. Occupation is predominantly Late Aztec (Chimalpa phase), with traces of Toltec material. Texcoco Fabric Marked pottery is predominant, although other ceramic types of the standard Aztec assemblage are also present. On one mound two basin-like features were noted. These were formed of tepetate hardpan, built directly into the mound surface, with the uppermost rim of the basin about even with the ground level. These features measure about 160 cm in diameter, and are now about 15 cm deep. Similar features were noted at T.A. 7.

Ethnohistoric Information: N.D.

T.A. 10 (Fig. 12)

Classification: Hamlet, probably a single household unit. The quantity of Texcoco Fabric Marked pottery suggests a salt-making specialization at this locality.

Natural Setting: See T.A. 4.

Modern Land Use: See T.A. 4. Site lies in railroad right-of-way.

Archaeological Remains: Limited to a single mound, about 20 m in diameter (0.03 ha), rising to a maximum height of about 1 m. This feature has been extensively pitted, and there are moderate concentrations of surface pottery over much of its area. A high proportion of this pottery is Texcoco Fabric Marked. Occupation appears to be exclusively Late Aztec (Chimalpa phase).

Ethnohistoric Information: N.D.

3. ZONE 2: CERRO CHICONAUHTLA AND THE ADJACENT PLAIN (Figs. 13, 14; Plate 12)

Cerro Chiconauhtla is one of the most prominent geomorphological features in the Teotihuacan Valley. It is a huge symmetrical volcanic cone with a maximum elevation of 2590 m. The lower flank of the hill, the elevation we refer to as the lower piedmont in our surveys of the Basin of Mexico (i.e. area between 2250-2350 m), is an area of relatively gentle slopes. The approximate diameter of the cone at

Figure 13

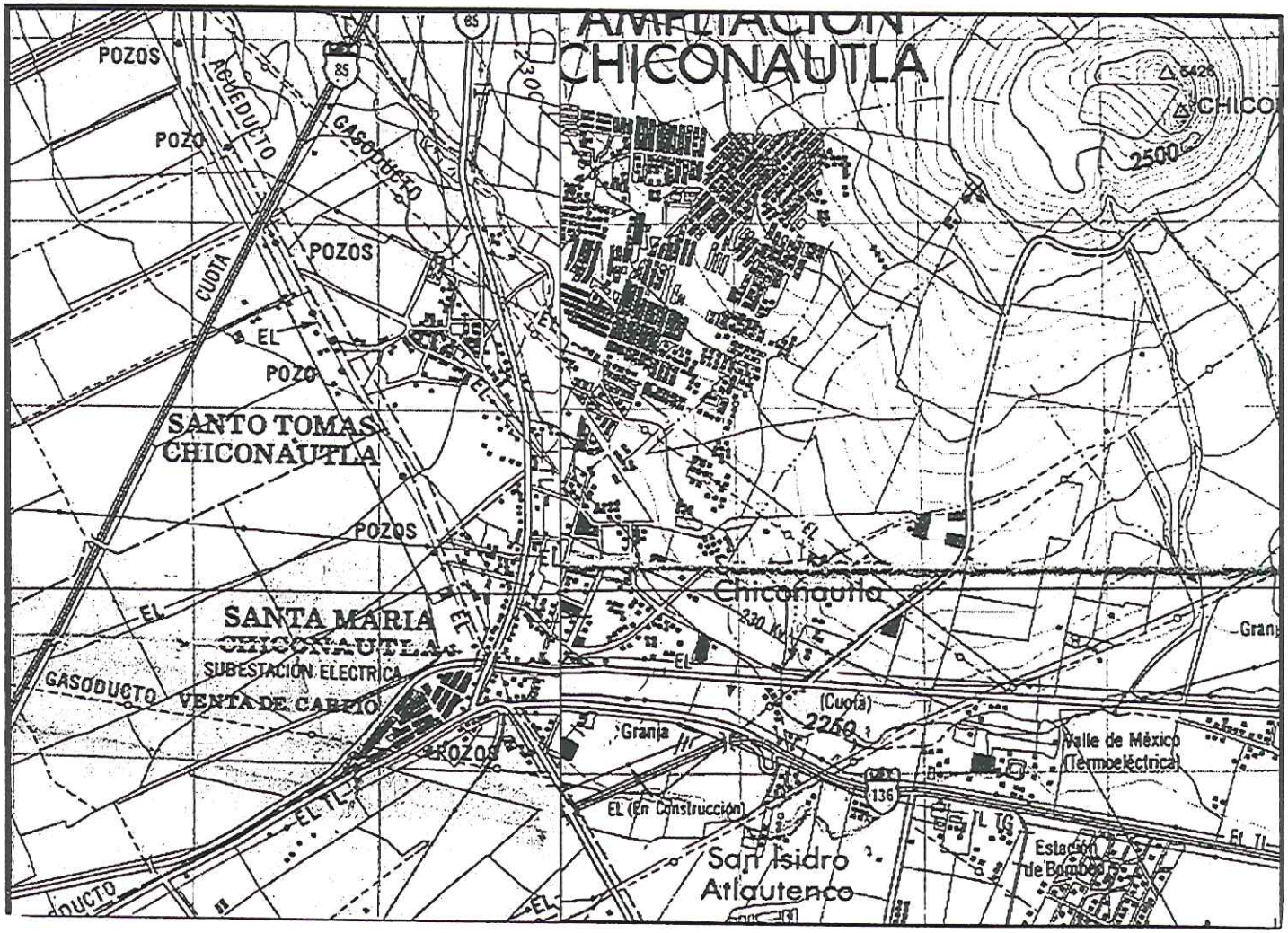

AMPLIACION
CHICONAUTLA
POZOS
ACUEDUCTO
POZO
GASODUCTO
CUOTA
SANTO TOMAS
CHICONAUTLA
SANTA MARIA
CHICONAUTLA
SUBESTACION ELECTRICA
VENTA DE CARPIO
Chiconautla
230 Kv
(Cuota)
2250
Granja
Valle de México
(Termoeléctrica)
EL (En Construcción)
San Isidro
Atlautenco
Estación
de Bombeo
2500
CHICO
2300
136
85

Figure 14

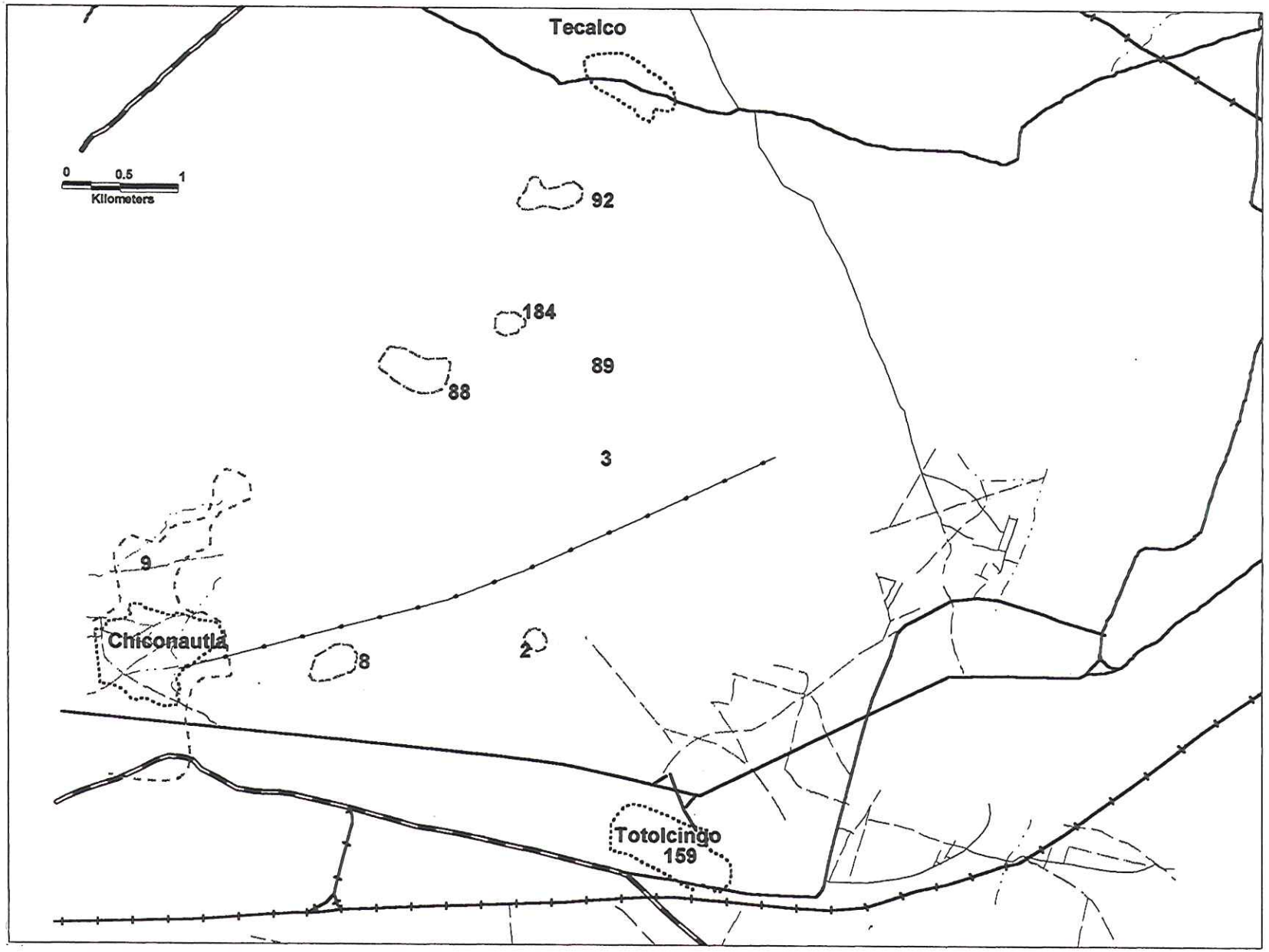

Tecalco
0 0.5 1
Kilometers
92
184
89
88
3
9
Chiconautla
8
2
Totolcingo
159

Plate 12

the base is 5 kilometers.

On the lower west flank of the mountain and adjacent alluvial plain, at the junction of Lakes Xaltocan and Lake Texcoco is the Aztec-Colonial-Modern town of Chiconauhtla. In the 16th century Chiconauhtla was the central town of a small polity with its own tlatoani. In the 1580 Relación of Chiconauhtla it is stated that the town was divided into four barrios (Capulpan Yacanqui, Cihuatecpan, Tulam, and Ticoman). The Relación does not list any sujetos, or detached outlying rural dependent communities. This data, plus the known distribution of the subject settlements of nearby Tepexpan suggests that the probable domain of Chiconauhtla was very small, approximately the area shown in Plate 12 and Figure 13. It definitely included the western and southern slopes of the mountain, and a small area of the adjacent alluvial plain. Within this area are the 20th century communities of Santa Maria Chiconauhtla; Santo Tomas Chiconauhtla, a detached barrio of the town and probably location of one of the 16th century barrios indicated above; and the villages of Atlauhco and Venta de Carpio, within the Teotihuacan Valley delta plain to the south. The village of Totolcingo also lies within the area shown on the map, but according to the Relación of Tequisistlan it was a dependent settlement of that center. The total population of the area in 1950 was approximately 3,000 and it was part of the Municipio of Ecatepec, a town on the west shore of Lake Texcoco. Virtually all of the domain of Chiconauhtla was on the flanks of Cerro Chiconauhtla, which today is an area of highly variable soil depth, the product of the post-Conquest population decline, abandonment of terrace systems and consequent erosion. Remnants of terraces are abundant over the entire slope as is evidence of canalization of streams flowing downslope.

To the north of the volcano on the alluvial plain is the 20th century town and municipal center of Tecamac. Tecamac apparently was created by the Spaniards as a cabecera and made the center of this lakeshore district. It apparently did not have that status in immediate pre-Conquest times. A major question, therefore, is whether the north slope of Cerro Chiconauhtla and the adjacent plain was part of the domain of the town of Chiconauhtla in 1519, or whether the rural communities in the area were subject to Tepexpan and Acolman.

The survey was focused on the town of Chiconauhtla, designated T.A. 9 in our project and we were able to survey much of the ancient town. Outside of the urban center, we located six hamlet-size sites on the flanks of the hill that apparently lie within the domain of the 16th century town, and the site of Venta de Carpio on the lakeshore. We conducted test excavations at the last site in 1963, primarily to define the nature of the Formative and Teotihuacan period occupations there. Prior to the excavation, however, we conducted a surface survey of the site, the results of which are summarized below. We did not assigned a separate site number but considered it an extension of T.A. 9.

We calculate the total Aztec period population of the area as approximately double that found in 1950, a population much larger than the available agricultural land could have supported; Chiconauhtla must have had an additional economic base, perhaps a combination of exploitation of lake products and its function as a transportation break for commerce moving across the lake and up the Teotihuacan Valley. A major land route traversed the Teotihuacan Valley en route to Tlaxcala-Puebla and Vera Cruz, in the Early Colonial period and undoubtedly functioned as such in 1519.

T.A. 3

Classification: Hamlet

Natural Setting: West Piedmont, at about 2350 m. Gently sloping ground on the broad southern flank of

Cerro Chiconautla. Land above the site area is markedly more steeply sloping. Moderate to severe erosion, soil depth is generally shallow, with some patches of bare tepetate exposed. The east and west ends of the site area are cut through by two large barrancas, about six to eight m deep and 20 m wide. Natural vegetation mainly consists of scattered pirul trees.

Modern Land Use: Immediate site area used primarily for temporal cultivation of beans. Further upslope cultivation is absent, and land is used only for pasture. Maize and beans are planted together in deeper soil of lower ground below site. Erosion control limited to a few low earth bancals and small stone-earth check dams hastily thrown up in areas of more severe sheet erosion. A few maguey are scattered throughout the site area.

Archaeological Remains: Variable very light, light, and light-to-moderate concentrations of surface pottery and rock rubble over an area of about 7.4 ha. Six possible mound remnants were identified; these are slightly elevated, vaguely defined areas where rock rubble and surface pottery are relatively most abundant, measuring about 10 to 20 m in diameter. All are probably badly eroded domestic structures. These six mounds are scattered in a roughly linear manner along the length of the site along the general hill contour. Occupation is predominantly Late Aztec (Chimalpa phase) with traces of Early Aztec (Zocango phase) throughout. A substantial Toltec occupation is restricted to the eastern end of the Aztec site (T.T. 146).

Ethnohistoric Information: N.D.

T.A. 9 (Figs. 15, 16; Plates 13-16)

Classification: Regional and Provincial Center. The site may be somewhat larger if the modern Santa Maria Chiconautla community covers any substantial Aztec occupation. It did not appear to the survey team that any of the Aztec urban core underlies the present town. However, the lack of any distinct ceremonial architecture (considering the fact that it was a town we would have expected to see the remains of a relatively high temple base) within our survey area is somewhat surprising, considering the apparent size and significance of T.A. 9. This may indicate that the modern church (located at the east edge of the present town, near the western limit of what we have plotted as the T.A. 9 urban core) has been built atop the principal prehispanic temple platform. Also, the reader should be aware that the western limits of the site as a whole were poorly defined, and may actually lie significantly to the west of our tentative site border on that side. Our population estimates for T.A. 9 could thus be regarded as too conservative.

Natural Setting: Lakeshore plain at north edge of Lake Texcoco, extending up onto the West Piedmont on the lower southwestern flanks of Cerro Chiconautla, and situated on nearly level to gently sloping ground between 2240 and 2270 m. The lower section of the site has deep soil cover, probably several meters thick, and is presently an area where sediment continues to accumulate. Moving up onto the lower hillslopes, soil depth decreases rapidly and erosion becomes increasingly severe. In these higher areas, soil is seldom more than 25 cm deep, and large sections of bare tepetate subsoil are often exposed. The site is located on the east side of the narrow straits separating Lake Texcoco from Lakes Xaltocan-Zumpango.

Modern Land Use: Along its west-central edge the site abuts the modern village of Santa Maria Chiconautla.

Figure 15

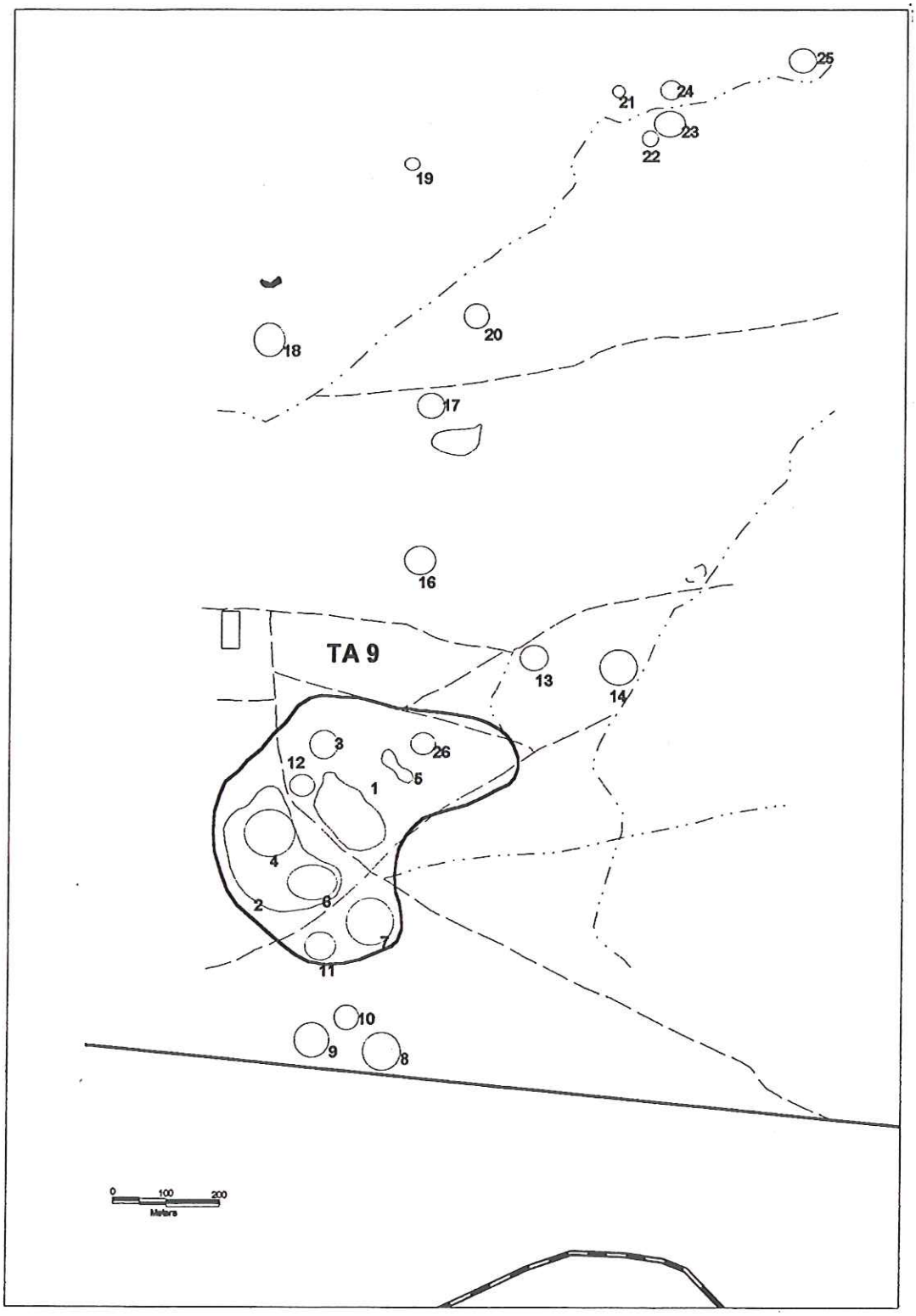

TA 9
25
24
21
23
22
19
20
18
17
16
13
14
3
26
12
5
1
4
2
6
7
11
10
9
8
0
100
200
Meters

Figure 16

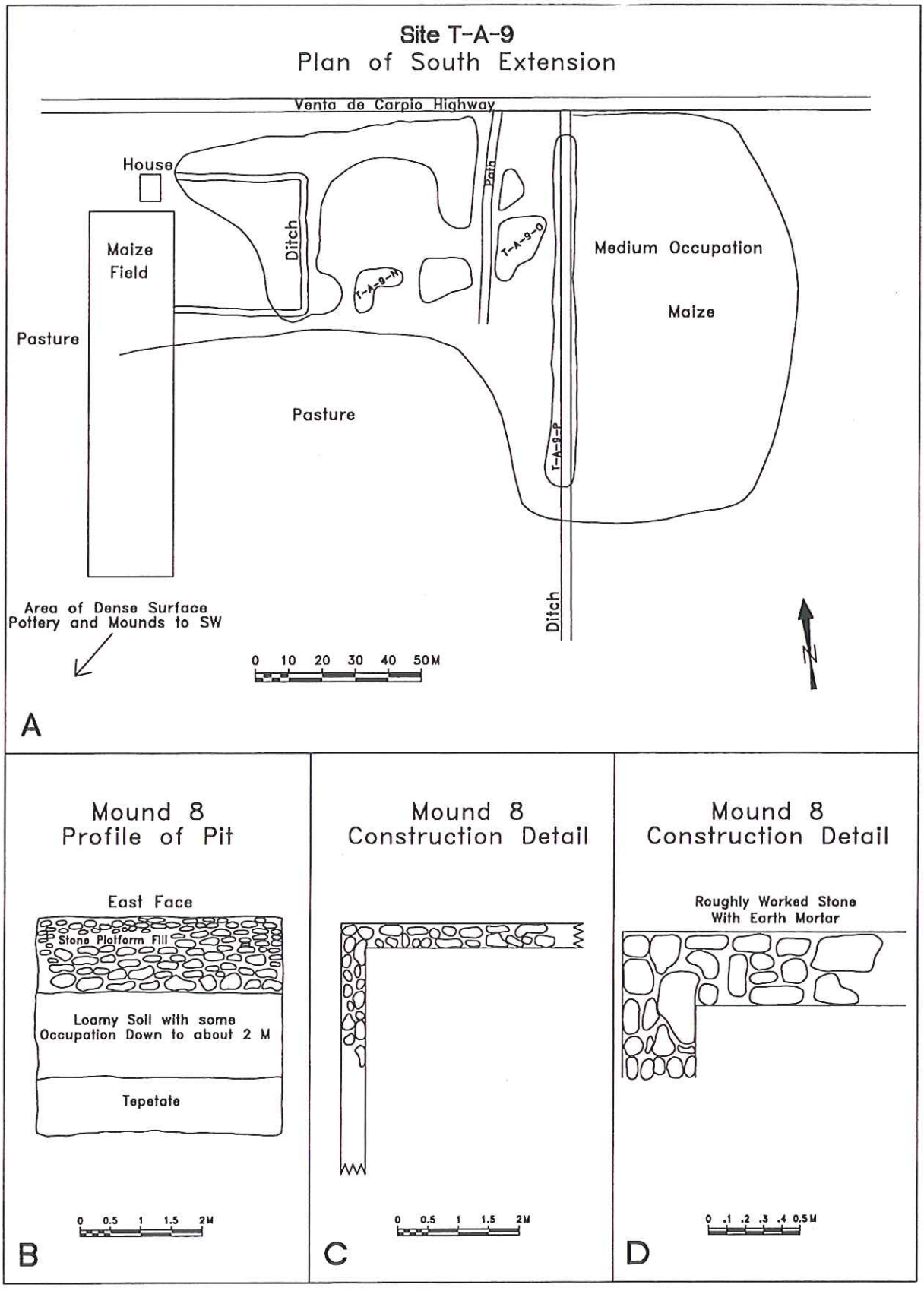
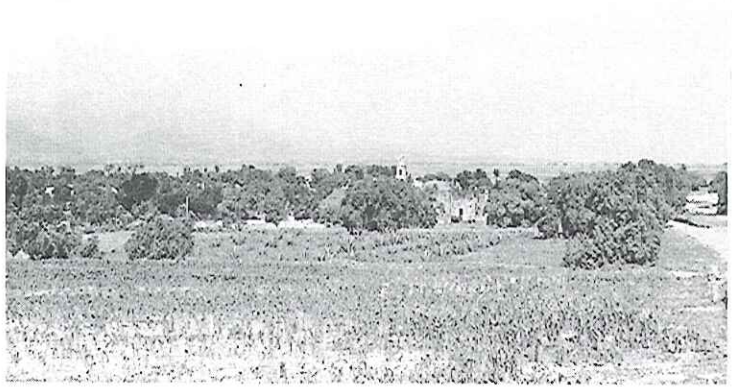

Site T-A-9
Plan of South Extension
Venta de Carpio Highway
House
Maize Field
Ditch
Path
T-A-9-N
T-A-9-O
T-A-9-P
Medium Occupation
Maize
Pasture
Pasture
Ditch
Area of Dense Surface Pottery and Mounds to SW
0 10 20 30 40 50M
N
A
Mound 8
Profile of Pit
East Face
Stone Platform Fill
Loamy Soil with some Occupation Down to about 2 M
Tepetate
0 0.5 1 1.5 2M
B
Mound 8
Construction Detail
0 0.5 1 1.5 2M
C
Mound 8
Construction Detail
Roughly Worked Stone With Earth Mortar
0 .1 .2 .3 .4 0.5M
D

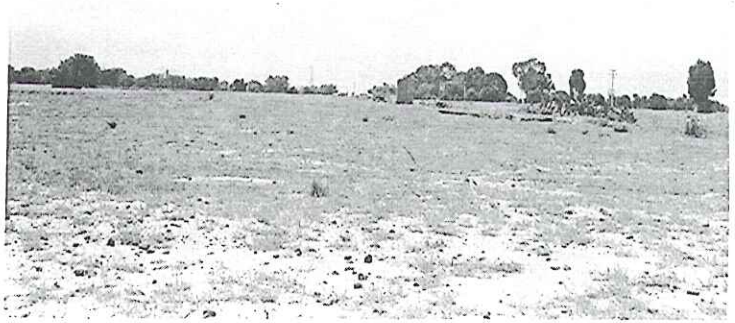
Plate 13



A

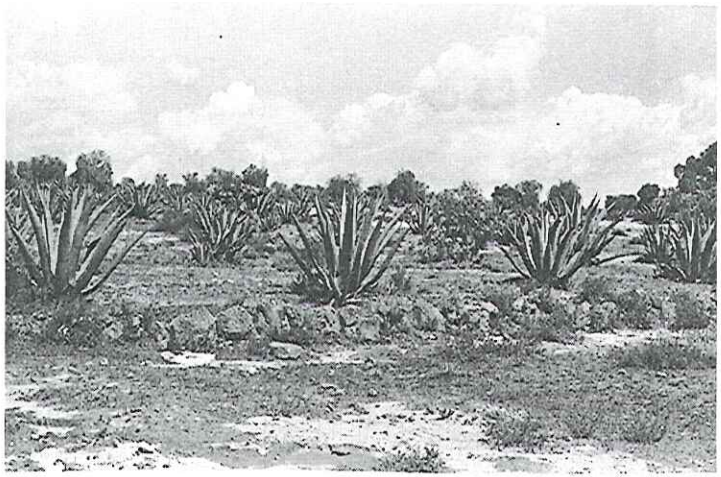
B

C



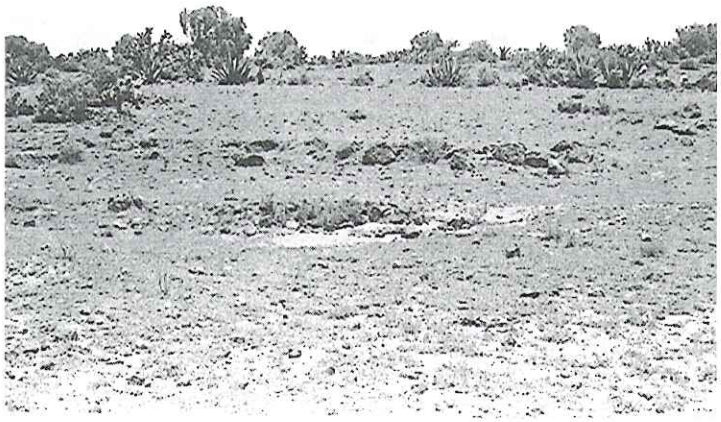
D

Plate 14



A

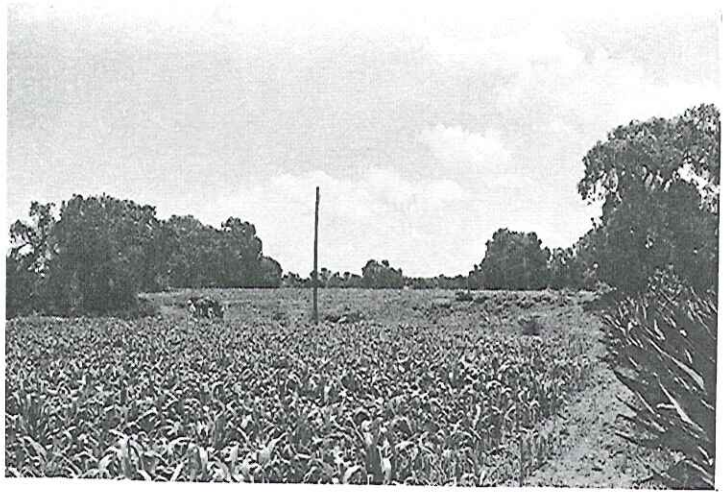
B



C

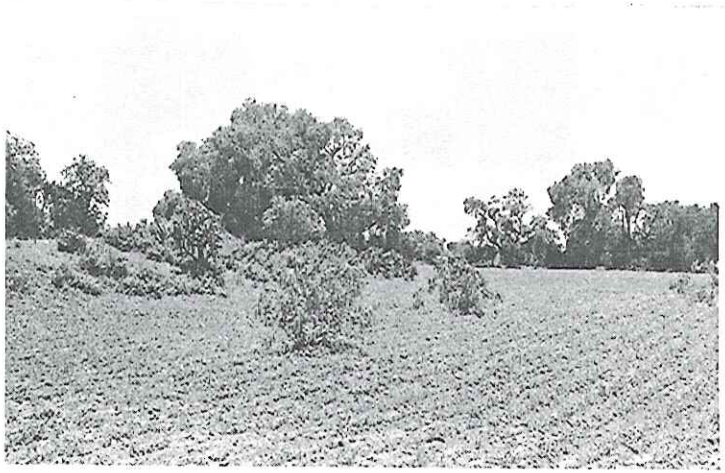
D

Plate 15

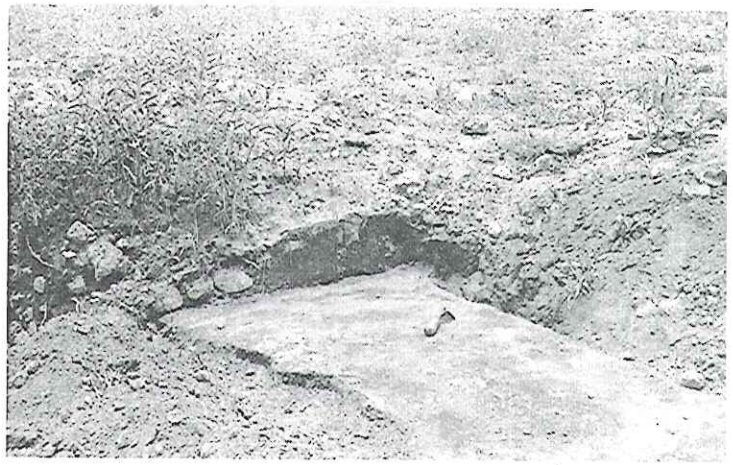


A

B

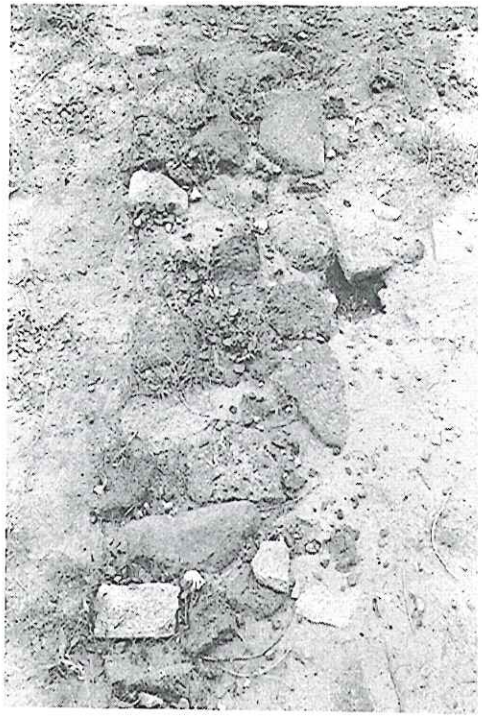


C

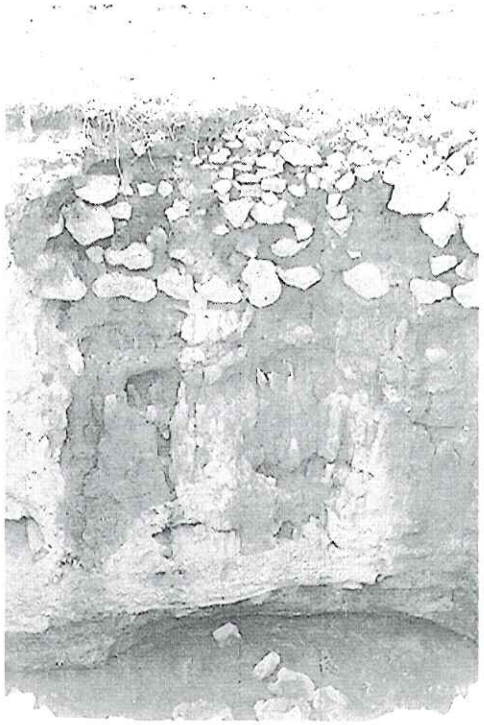


D

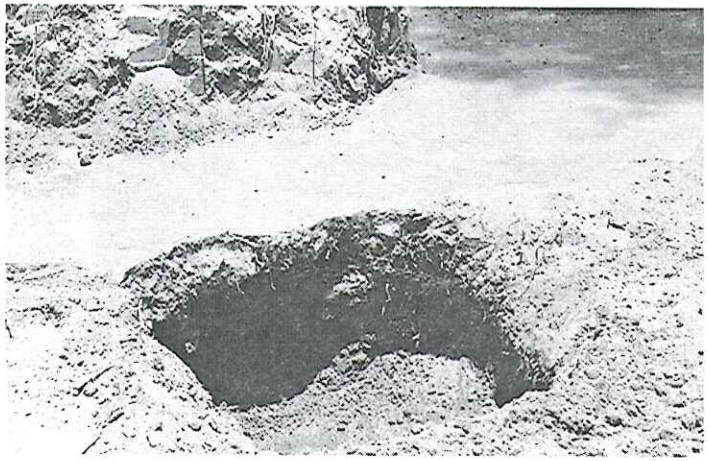
Plate 16



A



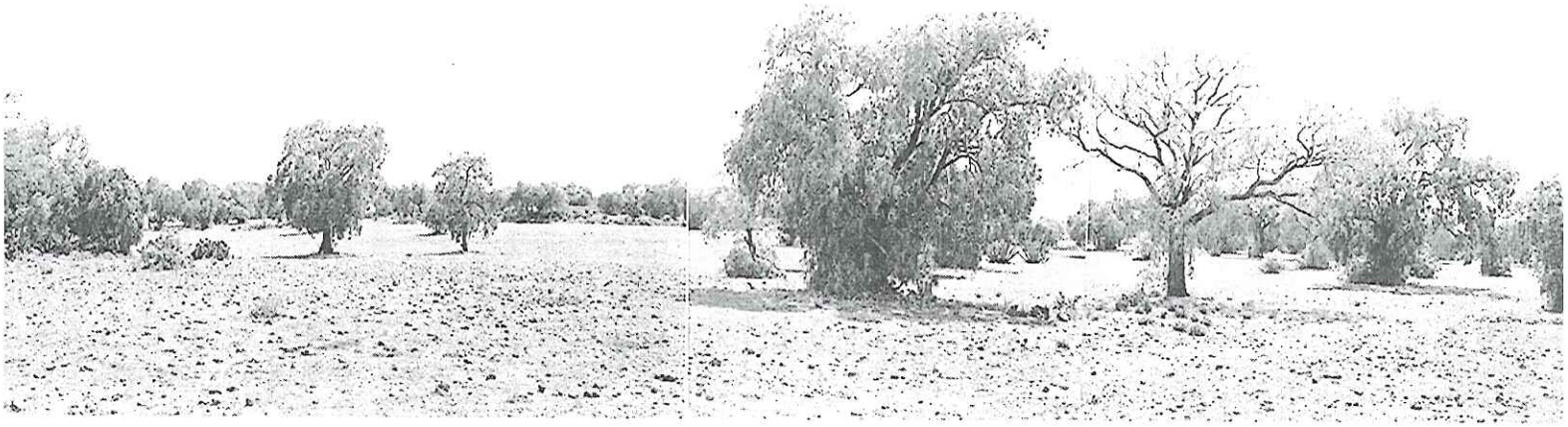
B



C

D

Plate 17



Most of the site area is cultivated: large maize fields on the lower, flatter, deeper-soil fields, smaller fields of maize and beans bordered by maguey bancals higher up on the eroded slope. The higher hillslopes above the site are predominantly devoted to maguey and pasture. Cultivation is very predominantly temporal, with a minor supplement of floodwater irrigation on the piedmont slope. Small check dams of rock rubble and/or maguey have been constructed as erosion checks in some of the more severely eroded areas of the site. The flat plain of the old lakebed west and south of the site have only recently been reclaimed for agriculture by large-scale drainage and flushing.

Archaeological Remains: The site consists of two distinct sections: an urban core covering about 17.8 ha, and a surrounding zone of more dispersed occupation extending over an additional 113.8 ha. Within the urban core there is a nearly continuous distribution of moderate and heavy surface pottery, rock rubble, and the survey noted several plastered floors and stone wall bases. Within the large zone of dispersed occupation there are variable very light, light, and light-to-moderate sherd concentrations, with highest density around and on a series of scattered mounds or small mound clusters. The western limits of the site were not clearly defined, since we did not survey house lots within the village where the site probably extends.

During February through April 1935 George Vaillant carried out a series of major excavations within the north-central portion of the T.A. 9 urban core. We could not locate his excavations precisely, but have been able to approximate their placement using his unpublished preliminary report (Vaillant 1935). His report is reproduced as Chapter 9 in this volume.

Even in Vaillant's time there had been considerable lowering of the site surface through plowing and road cutting. This activity appears to have continued during the succeeding decades prior to our own survey. Vaillant's discussion indicates that he opened an area measuring apparently 40 or 50 m on a side in the heart of the T.A. 9 urban core. (There is no scale or verbal statement of size anywhere in Vaillant's report, but we have approximated room size and excavation area on the basis of his statement that doorways in the structure measured between 1 and 1.5 m wide.) We will here briefly summarize Vaillant's report here, but the reader is referred to Chapter 9 for fuller details.

Vaillant discerned two principal occupational components: a large Toltec midden in the northern section of his excavation, and a complex series of residential structures dating to the Early and Late segments of the Aztec period. Most probably these were located at the locus designated Mound 1 on our site map. These latter features consisted of room clusters grouped around small patios, most of which had complex building histories in which new rooms were added, or older sections leveled and rebuilt through time. As far as can be determined, this central urban zone was filled with closely spaced residential quarters whose basic unit consisted of a house consisting of four or five rooms, one or more of which contained a distinct hearth, associated with a small patio. Rooms probably measured between 3 and 5 m on a side. These structures had walls of small stone or tepetate blocks set in mud mortar, sometimes with upper adobe sections. Floors were prepared from a mixture of lime and sand, occasionally with a plastered surface. In most cases, house structures rested atop solid basal platforms of earth and rock rubble faced with dressed stone slabs. Vaillant exposed one platform which had an original height of about 3 m, but he notes that these were generally about 1.5 m high.

With respect to the urban core of T.A. 9, the main contribution of our survey was to define its limits. To the north, occupational density gradually decreases, becoming increasingly dispersed as one moves up the piedmont slope. To the east and south, however, a much more distinct break between nucleated and dispersed settlement is apparent. This is particularly true along the southern margin where an abrupt rise of about 2 m marks the beginning of dense occupation along a distance of several hundred meters. Large quantities of sherds and rock rubble are eroding from the face of this rise. The practice of building houses

atop substantial platforms probably accounts for much of the height of the T.A. 9 urban core above the general level of the more sparsely-occupied fields to the south.

To the west it appears that the T.A. 9 urban core gradually merges into a more dispersed settlement area along the western edge of modern Santa Maria Chiconautla.

Substantial quantities of Toltec pottery (primarily Mazapan phase - T.T. 147, 148 and with some Xometla - T.T. 10) are found over much of the T.A. 9 urban core area. Within this same zone both Early (Zocango phase) and Late (Chimalpa phase) Aztec ceramics are present, with a general preponderance of Late Aztec. It thus appears that this urban core area was an important habitation zone throughout the Postclassic, with continuous growth to a probable population maximum in Late Aztec times. Early Teotihuacan (T.C. 12) occurs in the Venta de Carpio sector of the site as does Chiconauhtla (T.F. 5), Cuanalan (T.F. 74), Patlachique (T.F. 73), and Tzacualli (T.F. 75).

Outside the urban core, occupation is predominantly Aztec and much more dispersed. Significant Toltec occupation is limited to scattered localities along the eastern margin of the T.A. 9 site area. A total of 16 individual mounds were identified within the dispersed settlement area. These are generally low, circular, badly eroded structures, between 10 and 30 m in diameter, and about 50 to 100 cm above ground level. All are apparently domestic residences. These occur scattered throughout the general site area, with three small clusters of 3 to 5 mounds: one just beyond the southeast edge of the urban core, a second near the northeastern edge of the urban core, and a third in the far northeastern corner of the site.

A deep pit has been cut through the edge of one mound near the southern end of the site. This has exposed a profile section of the solid earth-rock rubble platform which once supported a house structure (section of a stone wall base is preserved on the mound surface). This platform measures about 1.2 m high, and consists of irregular slabs of volcanic rock tightly packed into a matrix of earth.

Ethnohistoric Information: A royal questionnaire from 1580 (Paso y Troncoso 1905:169-177) describes Chiconautla as a community of cabecera status, with 440 "tributarios" (tribute-paying Indians, presumably male heads of household). It was felt that in prehispanic times the population was considerably larger (ibid:172). the Indian population is described as subsisting from their cultivation of maize, beans, and chile, plus some hunting, fishing, and salt making around the edges of the lake (ibid:176).

T.A. 2

Classification: Hamlet, not more than three or four households.

Natural Setting: West Piedmont, just below 2300 meters, a few meters above the main Delta floor. Situated on lower flanks of a broad, gentle slope, with shallow to moderate soil depth and moderately severe erosion. Parts of the site area are cut by several small, shallow barrancas less than two meters deep. Sheet erosion has cut a broad swath along the site's eastern edge, exposing some tepetate subsoil. Natural vegetation consists predominantly of scattered pirul trees and wild nopal.

Modern Land Use: Immediate site area is uncultivated owing to severity of erosion. Surrounding land is intensively cultivated in maize and beans, with abundant maguey bancals. Cultivation is predominantly temporal, with some channeling of floodwater into fields adjacent to wash and barranca.

Archaeological Remains: Variable light and light-to-moderate concentrations of surface pottery and rock rubble over an area of about 0.6 ha. Only one distinct structure can be defined, measuring about 50 cm high and 10 m in diameter, with moderate sherd and rock rubble. Occupation is predominantly Late Aztec (Chimalpa phase) with traces of Early Aztec (Zocango phase) and a few Toltec sherds.

Ethnohistoric Information: N.D.

T.A. 88

Classification: This is a site located on general survey and not resurveyed. It was probably a dispersed hamlet.

T.A. 184

Classification: This is a site located on general survey and not resurveyed. It was probably a dispersed hamlet.

T.A. 8 (Fig. 17; Plates 18-20)

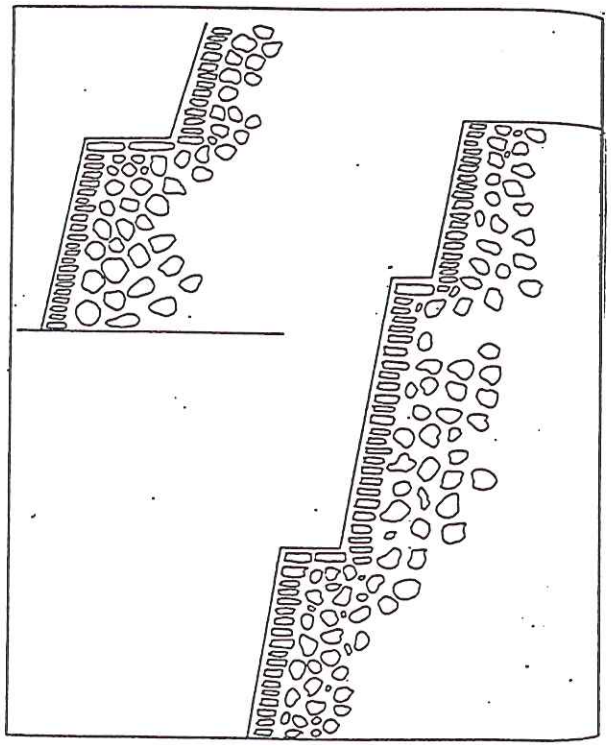
Classification: Probably an isolated temple or ceremonial precinct.

Natural Setting: West piedmont at 2310 m. Situated on gently sloping ground on the lower southwestern flank of Cerro Chiconautla. Soil depth is generally shallow, with some patches of bare tepetate exposed in small wash areas. Erosion has been severe to moderate. Natural vegetation consists mainly of scattered pirul trees and a few wild nopal.

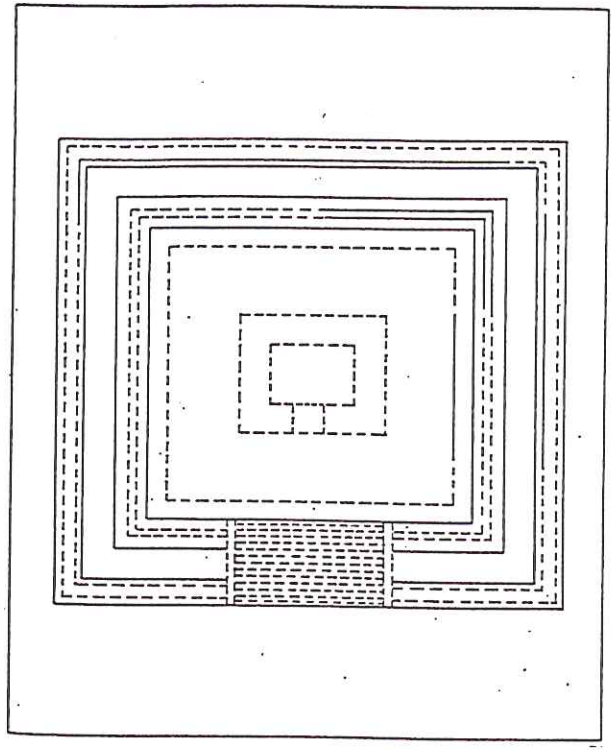
Modern Land Use: Temporal cultivation, with beans and maguey as dominant crops. Maize and barley appear in much smaller quantity. There are large sectors of fallow ground scattered throughout the site area which are presently used for pasture. Low earth-maguey bancals and soil-collecting ditches act as erosion checks over much of the site area.

Archaeological Remains: Variable light, light-to-moderate, and moderate concentrations of surface pottery over an area of about 1 ha. Architectural remnants are absent except for one rather substantial pyramidal structure, which has at least three, and possibly four superimposed terraced platforms comprised of solid earth and rock rubble fill, faced with worked stone and thickly plastered. At its maximum extent this structure now measures about 4.9 m high and roughly 20 m in diameter. Extensive pitting around the mound's edges and within its center has exposed sufficient architectural detail so that a fair reconstruction can be made of the original appearance of the structure's three outermost constructional units. As indicated in the accompanying plan and cross sectional views, the outermost preserved structure (Structure 4) measures about 17 m long by 15.8 m wide, and is of indeterminate height. The next-innermost structure (Structure 3) measures about 13 by 12 m in surface area, and extended to the maximum height of the mound (ca. 4.9 m). The innermost distinct structure (Structure 2) measures about 5 m long by 4 m wide, and is of indeterminate height. Each of these three structures has a distinct outer facing consisting of a single tier of small tabular slabs of volcanic rock, measuring between a maximum of 25 by 17 by 10 cm and a minimum size of about 12 by 8 by 5 cm. These tabular slabs are cemented with mud mortar, and capped with a layer of white stucco about 20 cm thick. Each inner structure is overlain by a fill comprised of round field stones and earth. In attempting to locate the innermost structure we noted that the fill in the central core of the mound consists primarily of

Figure 17

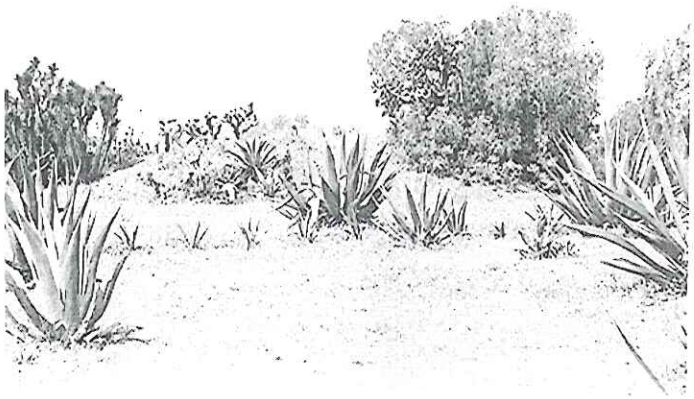


A



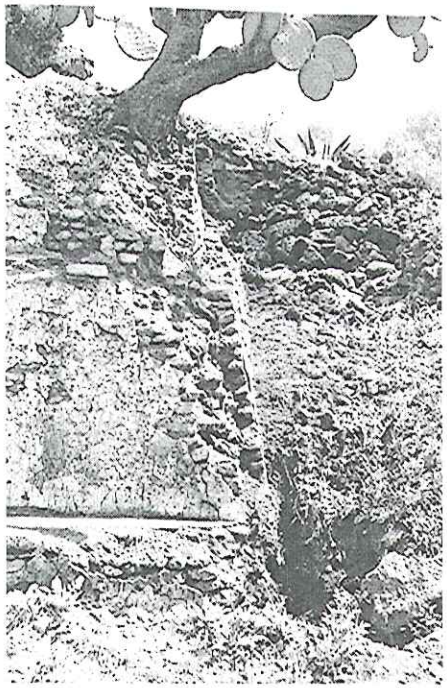
B

Plate 18



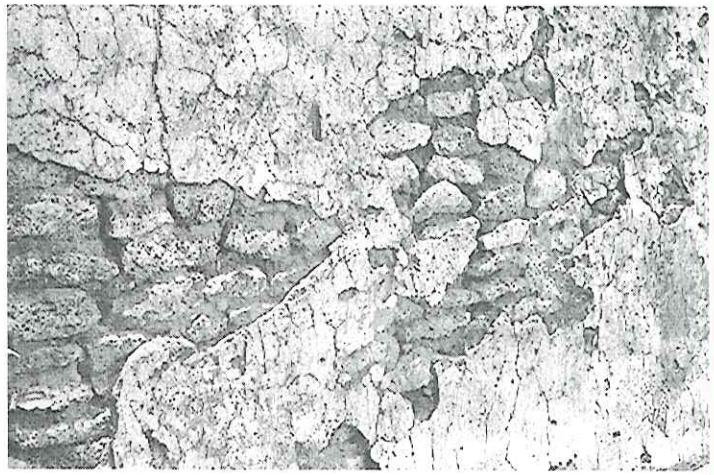
A

B



C

D



E

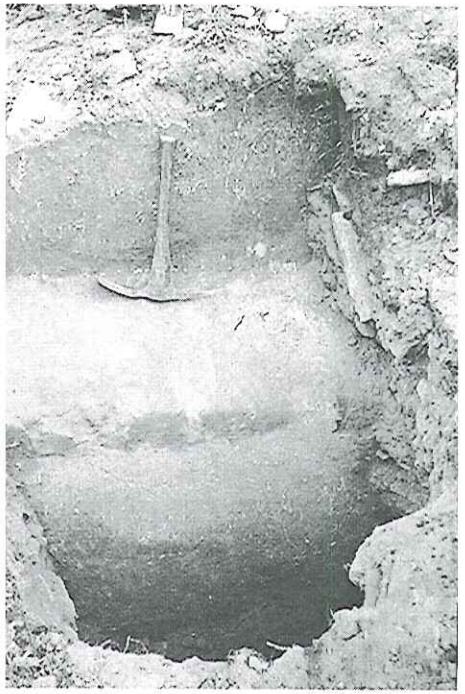
A

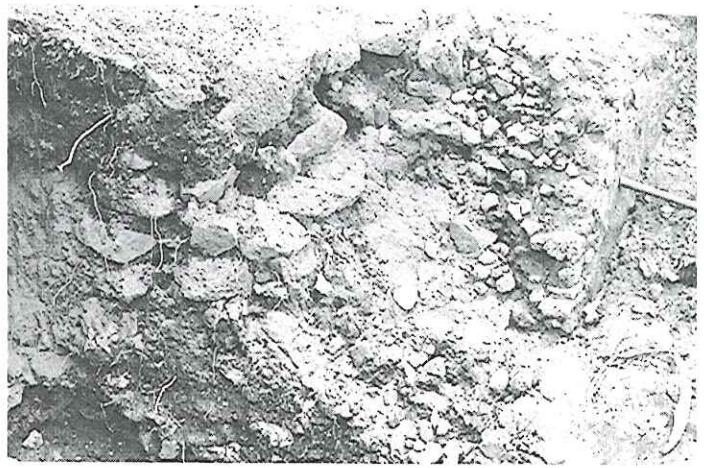
B

Plate 20

A

B





C

earth, with a much lower proportion of rock rubble than found in the fill overlying Structures 2 and 3. The south face of Structure 3 has three well-preserved terraces, and this seems to be the original full complement.

Solid ceramic cones, of roughly the size and form of large ice cream cones, were noted to be particularly abundant in the immediate vicinity of the pyramidal mound. These presumably were once employed as decorative features, inserted narrow end inward into the roof of a small temple building formerly resting atop the basal platform. This construction is presumably a ceremonial structure, probably a temple platform. It is the largest Aztec-period structure we located anywhere in the Teotihuacan Valley outside an urban community. Also present on the site is Toltec occupation (T.T. 5 Xometla, T.T. 119 Mazapan). One or several of the earlier phases of the temple platform may date to the Mazapan phase.

Ethnohistoric Information: N.D.

T.A. 89

Classification: Located during general survey, and not resurveyed. It is a ceremonial precinct on the summit of Cerro Chiconauhtla. Some Mazapan occupation was recorded as well (T.T. 110).

4. ZONE 3: THE TEPEXPAN-ACOLMAN CONURBATION
(THE WEST PIEDMONT OF THE LOWER VALLEY) (Figs. 18, 19; Plate 21)

Northeast of Cerro Chiconautla the Lower Teotihuacan Valley lacks significant elevations for a distance of five kilometers. The plain here is defined by very gently sloping terrain until the overall angle of the valley shifts to an east-west direction immediately north of the town of Atlatongo.

The sites in the West Piedmont survey of the Lower Valley formed an almost continuous band of urban-rural settlement that we are referring to as Tepexpan-Acolman conurbation. In 1519 two towns, Tepexpan (T.A. 11) and Acolman (T.A. 12) were located on the west edge of the alluvial plain. Their centers were separated by a space of only three kilometers, their urban areas were extensive, and furthermore, both have extensive outlying rural settlement areas. From the air the entire region would have appeared as a single conurbation of variable density covering a large section of the piedmont in the Lower Valley. The nearby compact village of Cuanalan (T.A. 162), within the plain, and east of the Rio de San Juan, was separated from Texpexpan's urban area by only 400 meters and would have appeared as an extension of this zone. East of T.A. 12, and also within the plain, is the Convento de Acolman, built by the Augustinians and one of the great colonial monuments of Mexico. A short distance to the north located within the plain as well but on an elevated area is the 20th century municipal center, Calvario Acolman. Both locations have evidence of Aztec occupation and have been designated T.A. 164 and T.A. 165 respectively. The two also would have appeared as extensions of the above described communities. In fact in 1519 (see discussion below) there may have been connecting zones of settlement, now buried under alluvial deposits.

Because of the spatial relationships briefly described above we decided to define a separate zone of the Teotihuacan Valley survey for discussion, and call it the Tepexpan-Acolman Conurbation. The district measures five kilometers by four or approximately 20 km^2.

Figure 18

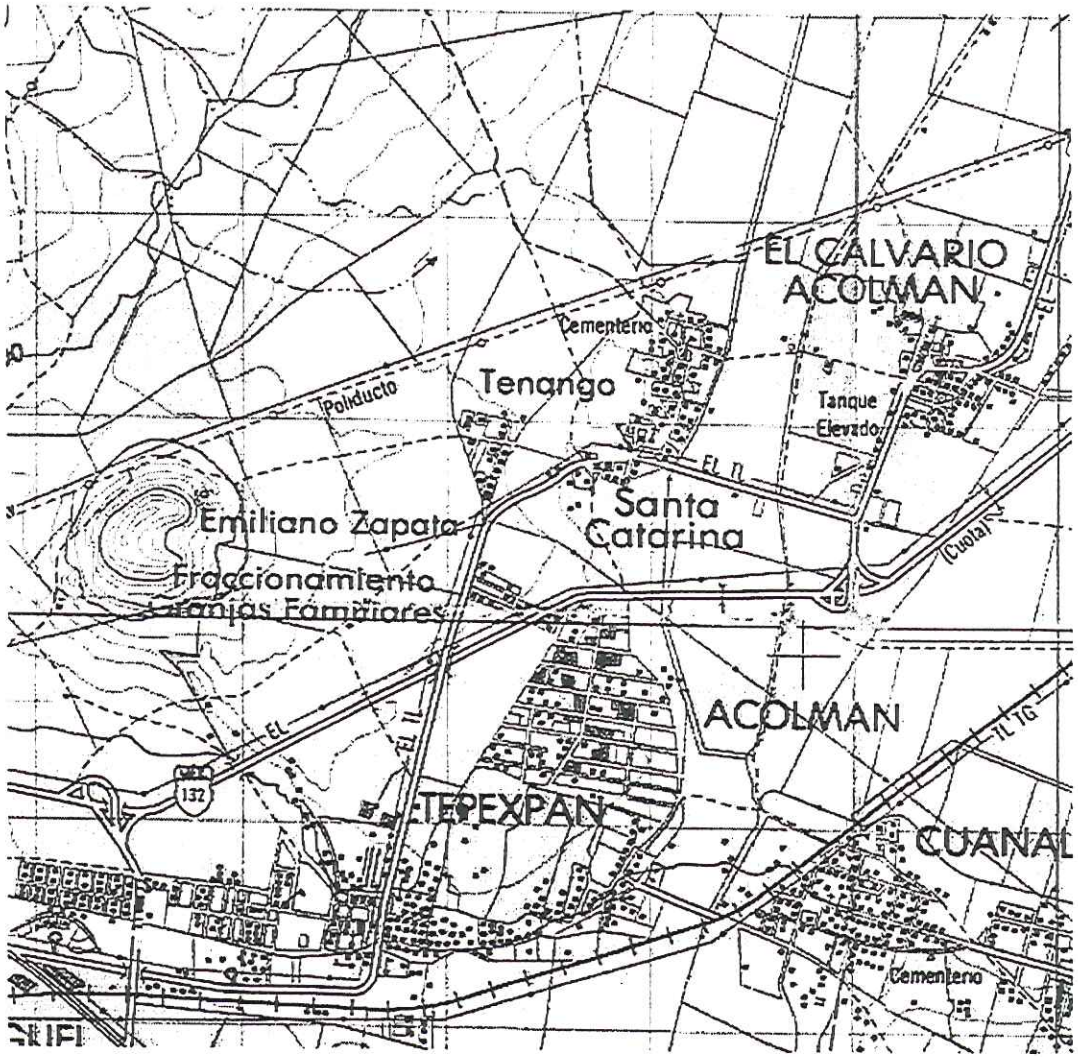

EL CALVARIO
ACOLMAN
Cementerio
Tenango
Poliducto
Tanque
Elevado
Santa
Catarina
Emiliano Zapata
Fraccionamiento
Cuota
ACOLMAN
TEPEXPAN
CUANAL
Cementerio

Figure 19

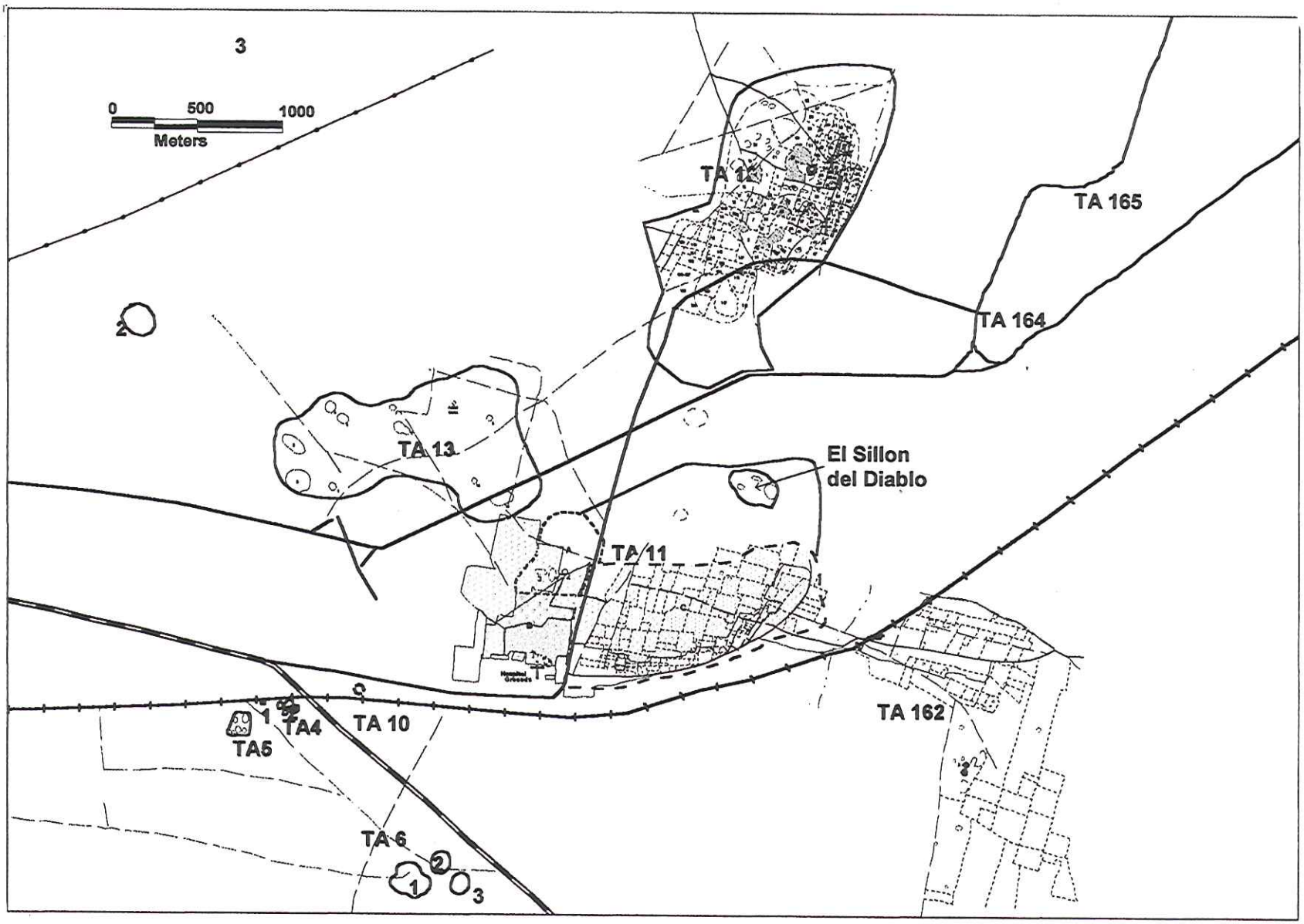
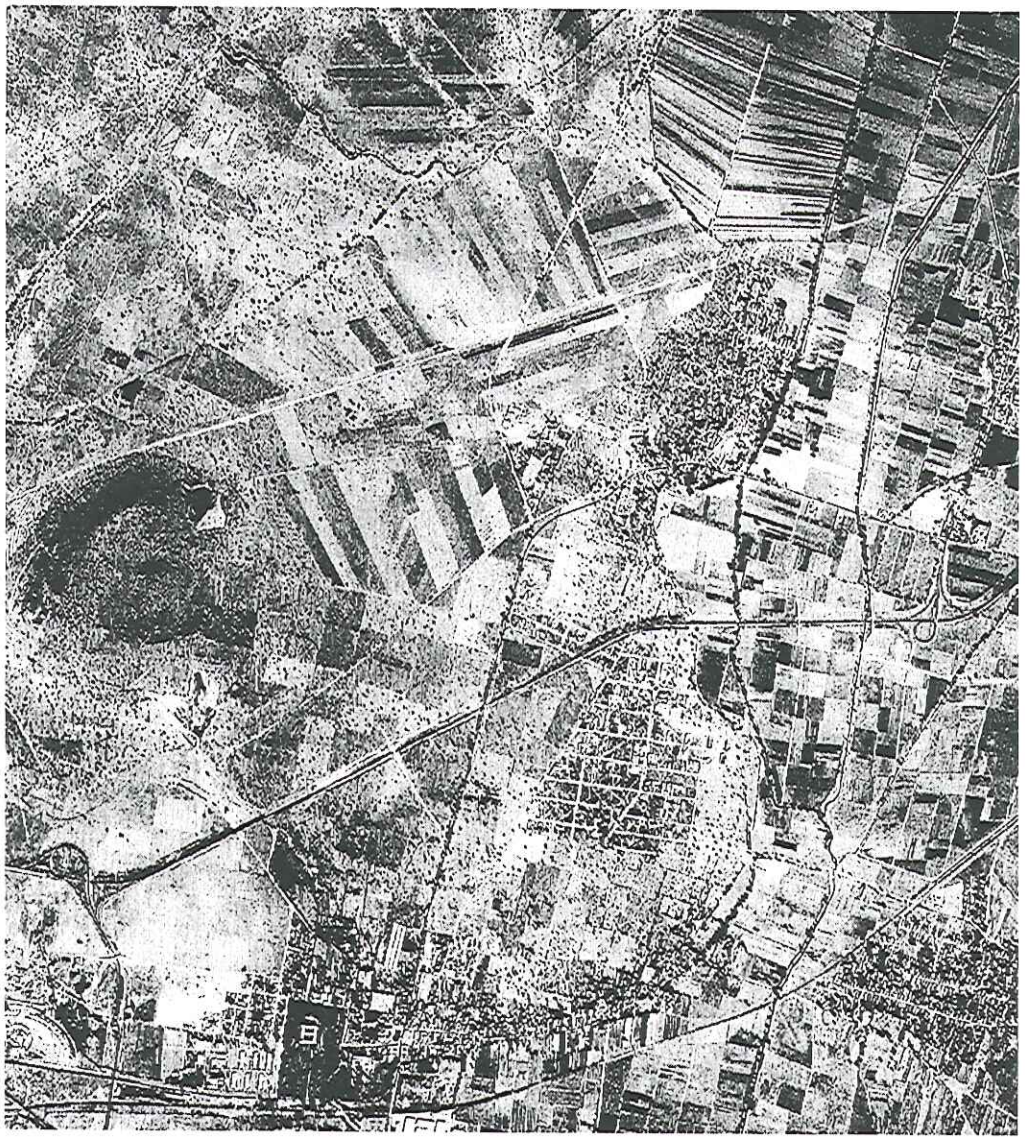

3
0
500
1000
Meters
TA 1
TA 165
TA 164
2
TA 13
El Sillon
del Diablo
TA 11
TA 162
TA 10
TA4
TA5
TA 6
1
2
3

Plate 21



Within the area today is the town of Tepexpan and its attached barrio of Chimalpa, the village of Santa Catarina Acolman with its attached barrio of Tenango, the village of Cuanalan, the Convento and the Municipal Center of Calvario. Between the barrio of Chimalpa and Santa Catarina is a planned gentrified community built for residents of Mexico City to enjoy country life, called the Granjas de Acolman. This residential project had all of the streets built in the 1960's but was only partially occupied by houses.

On the 1580 map the town of Acolman is located on the piedmont and adjacent plain where the modern village of Santa Catarina-Tenango are located, and the site designation T.A. 12 was applied to what we believe is the Aztec town. On the 1580 map, the market place for the town is located on the alluvial plain just below the piedmont. The Mexican Institute of Anthropology excavations have unearthed the remains of a very extensive Aztec period temple-platform at the location of the Convent. Either the town of Acolman had a detached ceremonial precinct, or, as we pointed out before, there was extensive connecting urban settlement, buried by alluvial sediments between the two localities.

The 1519 and 1580 town of Tepexpan was undoubtedly located within the modern town of Tepexpan, where are abundant evidences of an extensive prehispanic community. Cuanalan, in the Early Colonial period was called Coanala (Gibson 1964). It is not listed as a subject of either Acolman or Tepexpan in the 1580 Relación and we are tentatively identifying it as a dependency of Tezoyuca (see discussion below). We will describe the community in this section, primarily because of its close proximity to Tepexpan; conceivably it was a barrio of Tepexpan in the 16th century. Both Tepexpan and Acolman had extensive tributary domains in the 16th century. In 1580 most of Tepexpan's domain was north of the Teotihuacan Valley, with a few villages within the North Tributary Valley sub-region; Acolman had dependent settlements in these areas but also had dependent settlements on the East Piedmont of the Lower Valley.

The West Piedmont of the Lower Valley, which makes up most of the area (see Figure 18 and Plate 21) is generally an area of thin soils, very gentle slopes, and is today of marginal agricultural productivity. The only break in the topography is a detached cone of Cerro Chiconauhtla, called Cerro Colorado, northwest of Texpexpan.

Both the Aztec town sites were intensively surveyed as was all of the piedmont between, west and north of them. The survey revealed an almost continuous zone of Aztec period occupation extending five kilometers north-south by five hundred to seven hundred meters east-west. This is one of the two most intensively settled zones of this size in the Teotihuacan Valley, the other one being T.A. 155 and its environs, the town and attached communities of Teotihuacan. Within the area we defined three sites; T.A. 11, T.A. 12 the two town sites and T.A. 13 a detached, large, dispersed village on the south flank of Cerro Colorado. The area also includes T.A. 162, the village of Cuanalan, surveyed by both the Formative and Toltec Period Survey Teams but not the Aztec Team. They did, however, make observations on the Aztec occupation in their reports and these are the bases of our T.A. 162 report included here. The municipal center of Calvario and the Convent were both surveyed by the Toltec Survey Teams, who also noted Aztec occupation and these descriptions are reprinted here from Volume 4.

T.A. 12 (Figs. 20, 21; Plates 22-26)

Classification: Provincial and regional center.

Natural Setting: 2260 to 2280 m, on the flanks and top of a low, isolated hillock formed of volcanic gravel. Situated on gently sloping ground, with moderate to severe erosion. Soil depth generally averages about 50 to 60 cm, with some patches of bare tepetate exposed. The site area is surrounded by lower ground with deep

Figure 20

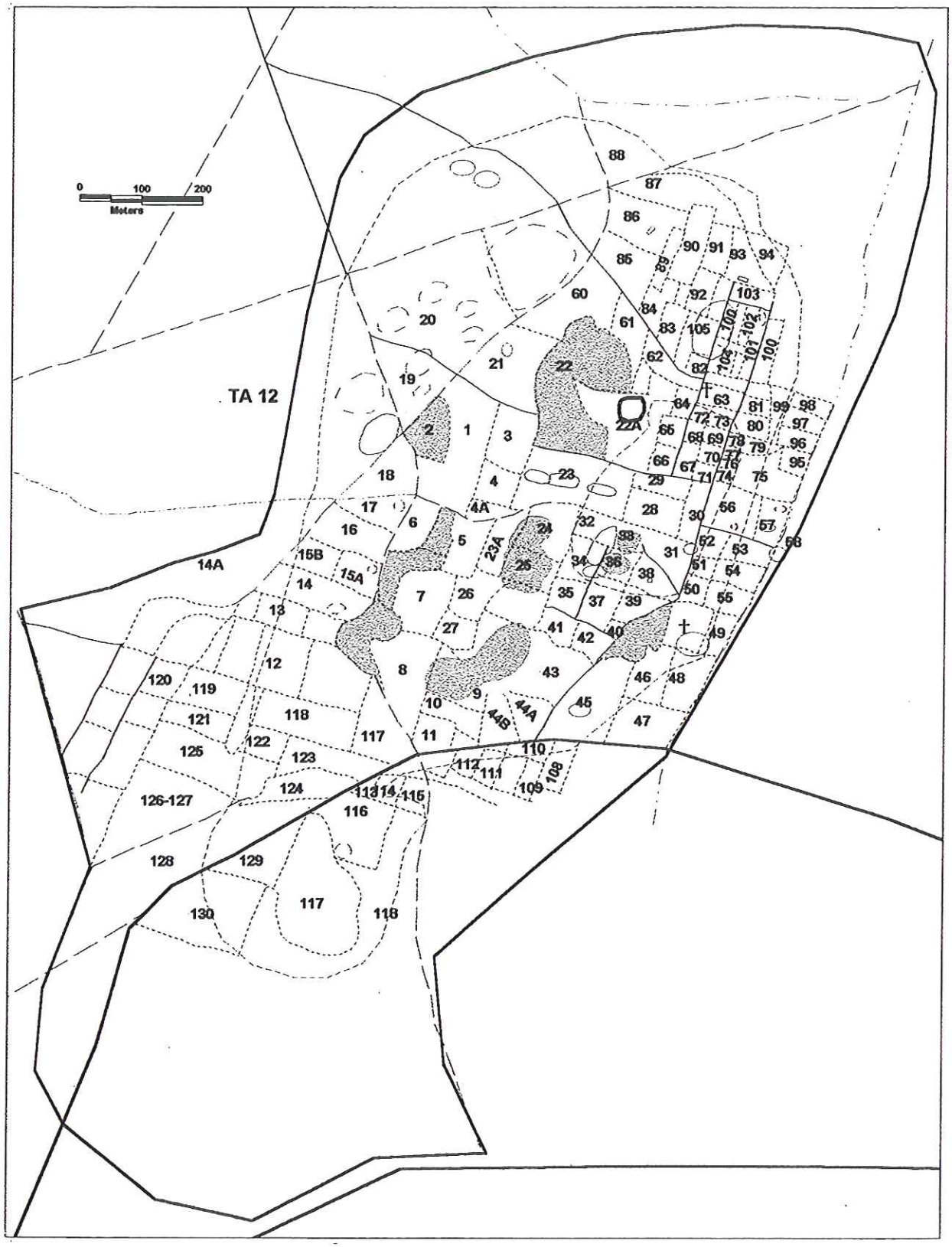

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Figure 21
A

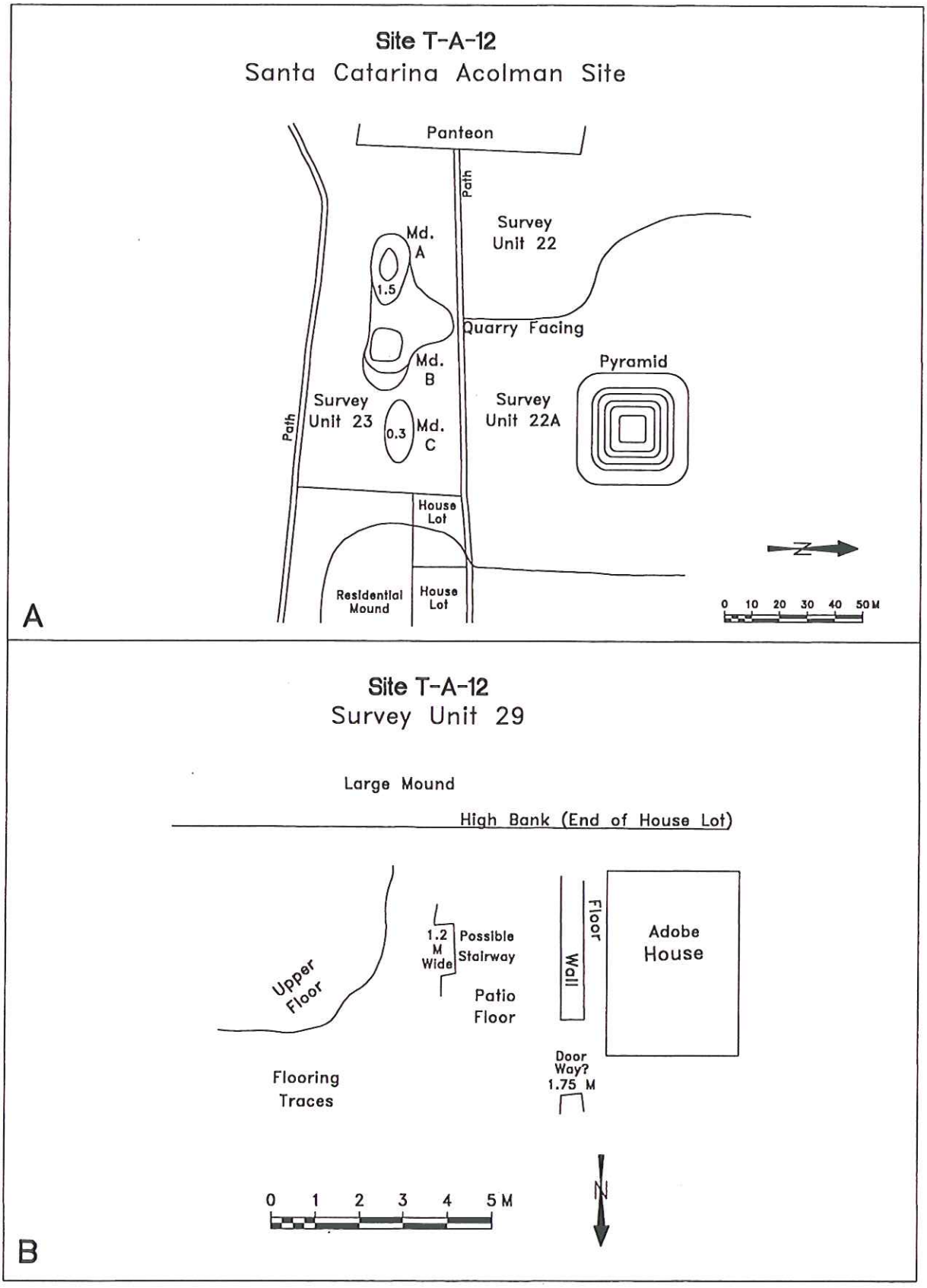
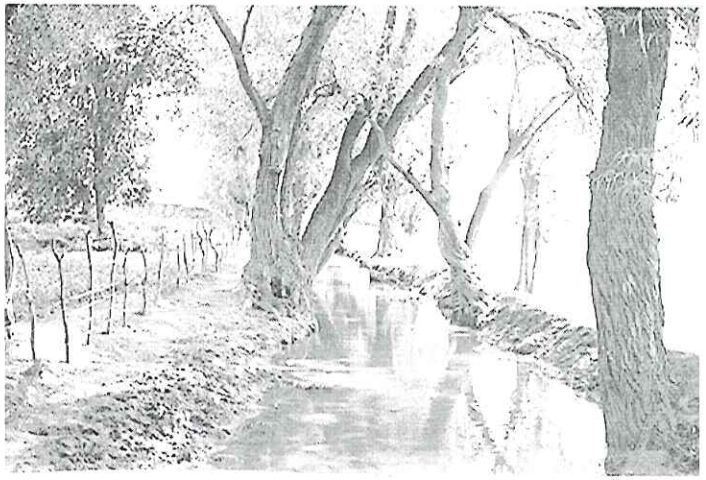

Site T-A-12
Santa Catarina Acolman Site
Panteon
Path
Survey Unit 22
Md. A
1.5
Quarry Facing
Md. B
Pyramid
Survey Unit 23
Survey Unit 22A
0.3
Md. C
Path
House Lot
Residential Mound
House Lot
N
0 10 20 30 40 50 M
A
Site T-A-12
Survey Unit 29
Large Mound
High Bank (End of House Lot)
Upper Floor
1.2 M Wide
Possible Stairway
Patio Floor
Floor
Wall
Adobe House
Door Way? 1.75 M
Flooring Traces
0 1 2 3 4 5 M
N
B

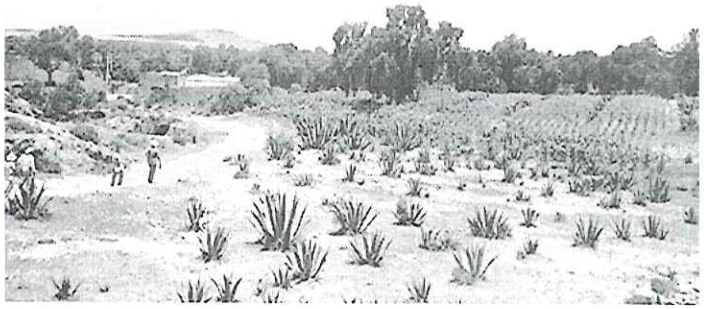
Plate 22

A



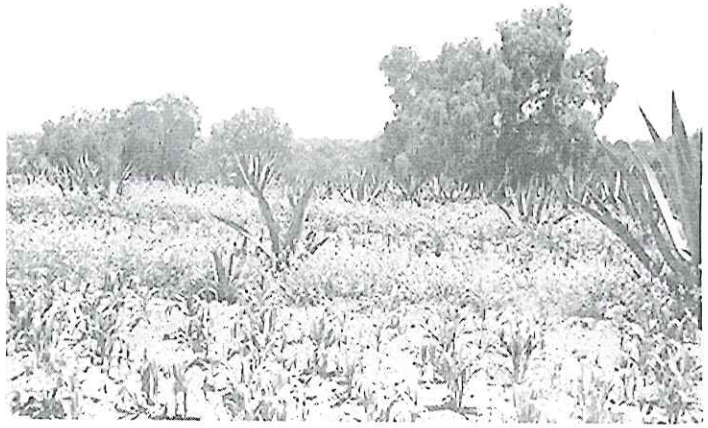
B

C

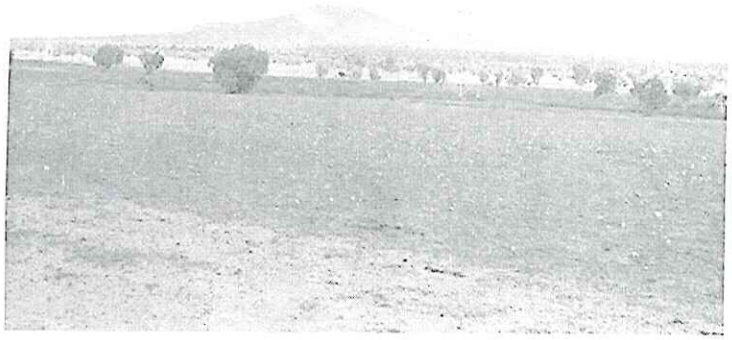


D

Plate 23



A



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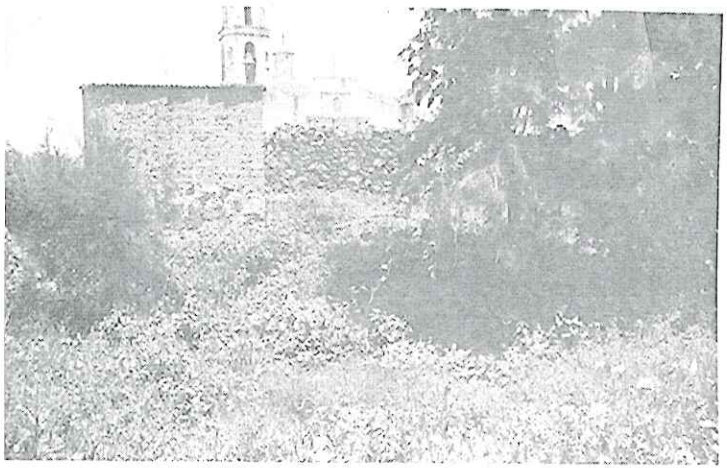


C

D

Plate 24

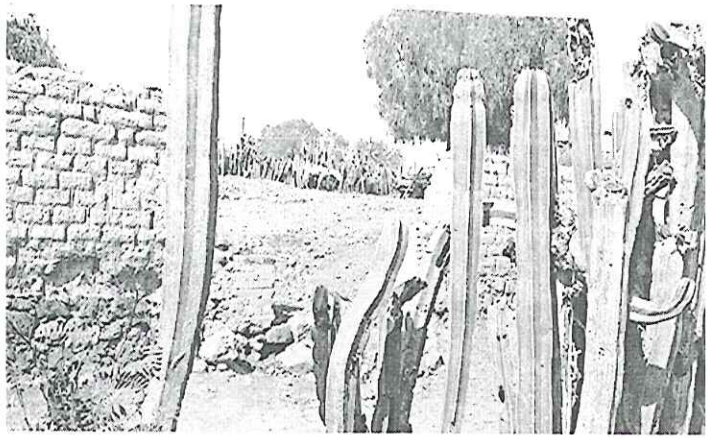
A

B

C

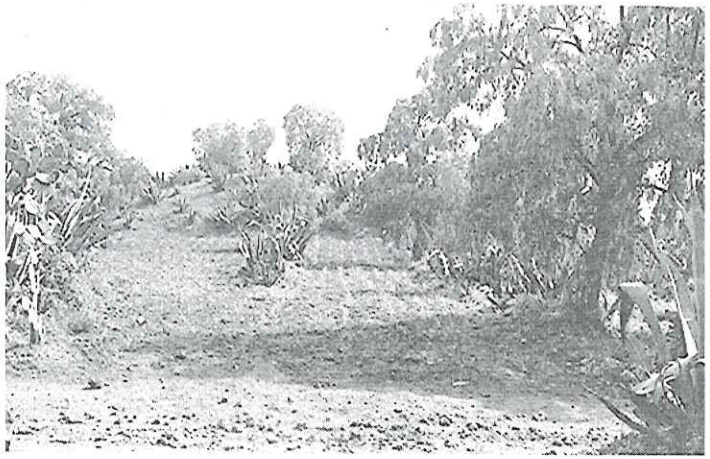
D

Plate 25

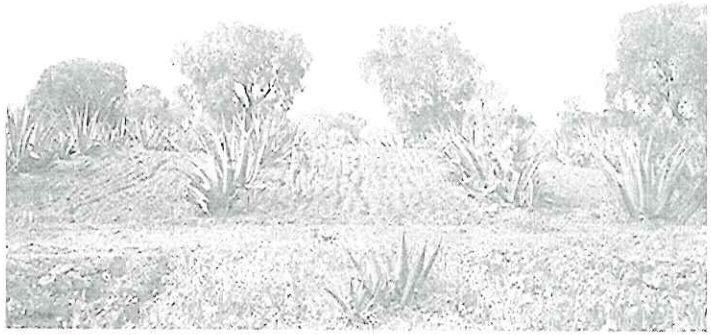


A

B



C



D

Plate 26

A

B

C

soil cover on all sides; to the west and south lies the West Piedmont, to the east is the irrigated plain of the Lower Valley, and on the north is the gently sloping North Piedmont. Natural vegetation consists mainly of scattered pirul trees.

Modern Land Use: The modern nucleated village of Santa Catarina Acolman-Tenango covers much of the eastern third of the site area. The eastern and southern borders of the present community are essentially coterminous with those of T.A. 12, with an abrupt termination of settlement at the edge of the alluvial plain. Within the modern village there are numerous small house lot fields in which maguey and nopal predominate. The land over the rest of the site area is mainly devoted to intensive rainfall cultivation of maize, beans, squash, and maguey. Maguey bancals serve as erosion checks throughout. The irrigated plain to the east is largely devoted to maize and alfalfa cultivation. The land along the western edge of the modern village is honeycombed with five large quarries from which volcanic gravel has been removed for construction purposes. One of these quarries is presently being worked, while the others appear to have been abandoned for a considerable time.

Archaeological Remains: T.A. 12 consists of three main sectors: 1) A densely occupied urban core with a principal civic-ceremonial complex situated at the NW corner, covering about 6.3 ha, in the east-central site area; 2) An area of nucleated occupation, with a somewhat lighter cover of surface pottery and rock rubble relative to the urban core, and no apparent civic-ceremonial architecture. This zone surrounds the urban core on all sides, and extends over an area of about 62.6 ha; 3) A zone of dispersed occupation forming the southwestern section of the site area, covering an additional area of about 33 ha.

Early (Zocango phase) and Late (Chimalpa phase) surface pottery are found in roughly equal proportions throughout the site area. This site is clearly a locus of long-term occupation extending back at least as far as the Teotihuacan period. Small quantities of Teotihuacan surface pottery were noted along the northern fringes of T.A. 12 (T.C. 4), and in the area of the main Aztec civic-ceremonial complex in the urban core. Substantial Late Toltec (Mazapan phase) occupation was noted in the area of the major civic-ceremonial complex in the Aztec urban core (T.T. 152), and at the southern edge of the nucleated Aztec site atop a low rocky knoll just south of the modern highway. A substantial Early Toltec (Xometla phase) community, T.T. 10 covers the northern half of the nucleated Aztec site. Small amounts of sherds from the Formative period were recorded as well (Altica T.F. 187, Chiconauhtla T.F. 210, Cuanalan T.F. 189, Patlachique T.F. 186, and Tzacualli T.F. 135).

The reader should keep in mind that much of the most densely occupied portion of the Aztec settlement here is largely covered by modern residential structures. An effort was made to examine most house lots within the modern village, but it was not always possible to draw precise borders around specific categories of occupational intensity. Thus, our delineation of the T.A. 12 urban core should be regarded as no more than a reasonable approximation, and it may be considerably larger. The limits of the other two sectors of T.A. 12 are somewhat more precisely defined.

The remaining portion of this section will consist of a detailed description of the three main occupational sectors

1) The urban core: roughly 6.3 ha, probable population of about 300 to 600. The site's main ceremonial complex lies at the northwest corner of this zone. This comprises a pyramidal mound measuring about 6.5 m high and 40 m square, with an orientation of about N 5-10 degrees W. This structure fronts onto the north side of a level area which measures roughly 60 to 70 m north-south by about 100 m east-west, which would appear to be a plaza. At its western end this plaza has been encroached upon by a gravel quarry, so that its former westward extent can no longer be ascertained. A pit into the large mound has

exposed three distinct floors, the lowermost of which rests on a prepared base of tezontle gravel placed over the bedrock. The main body of the pyramidal mound is formed by a solid fill of earth and coarse tezontle gravel.

The south edge of the plaza is defined by a line of two or three linear mounds. These are between 10 and 15 m wide, and extend over a total distance of about 80 m. The smaller structure measures about 22 m long and stands about 30 cm high. The larger feature (which may actually be two individual structures) is about 55 m long and up to 1.5 m high.

The remaining portion of the urban core consists of a continuously buildup habitation area with numerous remnants of plastered floors (some of which have been incorporated into modern residences), and heavy occupational debris in the form of surface pottery, rock rubble, and stone tools. Within many empty house lots distinctly elevated areas rising up to four m above the present street level are still preserved, probably representing buried structures. It is fairly clear that the entire urban core formerly appeared as a continuous mounded area, which has subsequently been largely levelled by posthispanic construction.

2) Zone of nucleated occupation outside the urban core: 62.6 ha, 1550 to 3100 people. Much of the western half of this area has been considerably disturbed by quarrying activity, while a large portion of the eastern zone is now overlain by modern residential structures. Occupational debris appears to be fairly continuous, with variable light-to-moderate, moderate, and heavy concentrations of surface pottery, rock rubble, and stone tools. This area seems to lack the continuously buildup appearance, however, of the urban core, and individual mounds can be delineated at several points. A large mound in the SE corner of the site underlies the modern church, and may have formerly been an important civic-ceremonial structure. The largest concentration of distinguishable mounds lies at the northwest corner of the site. Here there are nine or ten structures scattered at intervals of 30 to 60 m, which presumably represent the badly destroyed remnants of Aztec residential buildings.

3) Zone of dispersed occupation: 33 ha, with a population of about 400 to 800. This forms the SW corner and the elongated southern extension of the T.A. 12 site area. Occupational debris occurs in variable very light, light, and light-to- moderate concentrations. There are no preserved architectural remnants. It extends as a long, narrow band along the lower edge of the West Piedmont to a point a few hundred ms north of the outermost fringes of T.A. 11. This extension lies within the new settlement called Granjas de Acolman.

Ethnohistoric Information: In the royal questionnaire of 1580 (Nuttall 1926) Acolman is listed a community of cabecera status, with a population of 1900 tribute paying natives. The 1580 town "is situated in a plain at the foot of a mound" (ibid. 53). "A river called 'de San Juan' runs by said town and is divided into three canals with which they irrigate a great piece of land nearly a league long and half a league wide" (ibid:53)> Maguey and nopal were said to be major staples for the Indian population (ibid:78), while maize, beans, chia, amaranth, and wheat were also raised. In 1580 salt was being acquired from Mexico City, Ecatepec, and Tequisistlan (ibid:79). In prehispanic times, Acolman was required to furnish the Texcocan ruler with "fighting men in war time" (ibid:64). To their own local overlords, the prehispanic inhabitants of Acolman paid the following tribute at unspecified intervals: "...a load of coarse agave-fibre cloths, twenty in a load and another load of this agave fibre cloths; a load of women's shoulder capes of thin agave fibre; a load of skirts of the same and some fowl (they did not know how many). Each day they contributed a load of dried agave leaves to be used for fuel, and another load of the wood of the wild cherry tree. Their lord had, in his house, Indians who guarded and served him" (ibid:64)

Table 7: T.A. 12 Field Site Information

Field No.	Modern Use	Architecture	Ceramics
1	ag. field - maguey bancal - beans, maize	none - much rock debris	scanty to heavy
2	ag. field - maguey bancal - beans	none - much rock debris possibly ancient quarry	scanty to medium
3	village panteon	none	scanty
4-4a	ag. field - maguey bancal - beans, maize	none - much rock debris	scanty to heavy
5	ag. field - maguey bancal - maize	none - much rock debris	medium to heavy
6	ag. field - maguey bancal - maize, beans	none - ancient quarry, much rock debris	scanty to heavy
7	ag. field - maguey bancal - beans, maize	none - ancient quarry	scanty to heavy
8	modern quarry - nopal, trees - much debris	none	scanty
9-10	nopal - pirul jungle	ancient quarry	heavy where ground exposed
11	house lot - high wall	not examined	not examined
11A	weeds, grass - empty lot	ancient quarry	heavily vegetated
12	ag. field - maguey bancal - maize, beans	none	lower 2/3 scanty to medium upper 1/3 scanty
13	ag. field - maguey bancal - maize, beans	none	scanty in upper 2/3 lower 2/3 scanty to medium
14	ag. field - maguey bancal	possible mound	scanty to heavy
14A	ag. field - maize (?)	none	absent to scanty
15	ag. field - maguey bancal	possible mound - abundant rock debris	scanty to heavy
15A	ag. field - maguey bancal - maize	none	freshly cultivated - medium on maguey bancals
16	ag. field - maguey bancal - maize	none	near road medium to heavy above scanty to medium
17	ag. field - maguey bancal	possible mound	near road medium to heavy above scanty to medium
18	ag. field - maguey bancal - beans	none	near road medium to heavy above scanty to medium
19-20	pasture	8 closely spaced mounds prob. Teo. period	medium to heavy - very heavy on some mounds
21	ag. field - maguey bancals - beans	none - small ancient quarry	scanty to heavy

Field No.	Modern Use	Architectural	Ceramics
22	ag. field - maguey, maize	part of field ancient quarry, possible mounds or quarry debris	scanty to heavy
23	ag. field - maguey bancal - maize	3 mounds in a line, possibly limiting the south side of the plaza - 2 may be parts of one mound	scanty to heavy
23A	ag. field - maguey bancal - maize	none	medium to heavy
24	ag. field - maguey bancal - maize	big silted in ancient quarry	scanty - edges of quarry
25	ag. field - maguey bancal - maize	big silted in ancient quarry	medium - edge of quarry
26-27	ag. field - maguey bancal - haba, maize	part of a ancient silted in quarry	medium to heavy
28	ag. field - maguey bancal - maize	most of the field occupied by a large residential mound 30 cm to 1.5 m high, much rock debris	medium to heavy
29A	house lot - open	plaster floors in and around house once a big mound occupied the lot, possibly the same one as 28	swept clean,
29B	house lot - open	plaster floors in and around house once a big mound occupied the lot, possibly the same as 28-29A	swept clean
29C	house lot	much of lot occupied by one large mound	not entered
30	several house lots	the same large mound found in 28 and 29	not entered
31	several house lots	no mounds visible but traces of plaster floors in alley south of it	not entered
32	flat area between 2 ancient quarries - maguey bancals - maize	none - large ancient quarries nearby	recently cultivated - where observable medium - large low mound Visible
33	nopal, trees, shrubs - reused as a house lot	ancient quarry	not entered - same mound visible as in 32
34A	house lot - nopal, much shrubbery	none	not entered - same mound visible as in 32 and 33
34B	house lot - nopal	large mound covers 2/3 of lot - crosses streets and enters lot on other side	swept

Field No.	Modern Use	Architecture	Ceramics
35	house lot - maguey	none	swept and gravel cover around house - scanty in field
36	house lot	large mound - same mound as in 34B	not entered - swept clean
37	house lot	none	swept clean - not entered
38	house lot		not entered
39	house lot		not entered
40	house lot		not entered
41	house lot	none	not entered
42	house lot	none	not entered
43	house lot	possible mound at lower end - rest bare tepetate	not entered
44A	house lot	bare tepetate	not entered
44B	house lot - ruined structures	possible mound under modern house ruin	heavily vegetated
45	house lot - modern quarry	possible mound under house	scanty
46	ag. field - maize	none	recently cultivated - soil wet - scanty
47	series of house lots	none	scanty in streets
48	series of house lots	none	swept clean
49	house lot near canal	back of church and possibly under the church a single mound	heavy vegetation
50	walled house lot	not observable	not entered
51	house lot	mound in one corner	not entered
52	walled house lot	possible mound	not entered
53-55	house lots along edge of a canal	none	heavily vegetated
56	house lot - edge of canal	one possible mound	heavily vegetated
57	house lot - edge of canal	one possible mound	heavily vegetated
58	trilling floor on large elevation	possible large mound	scanty to medium - heavily vegetated
59			
60	ag. field - maguey bancal - maize	none	medium generally
61	ag. field - maguey	much rock debris	medium generally - localized heavy

Field No.	Modern Use	Architecture	Ceramics
62	series of house lots	none	swept clean - medium in the streets
63	Tenango church	none	swept clean
64	series of house lots	none	swept clean - medium in the adjacent streets
65	nopal jungle	none	heavily vegetated
66	house lot	large mound occupies the lot nearly joins a pyramid - probably joins the md in 29	scanty when swept to heavy - much rock debris
67	house lot	most of lot occupied by large mound	not entered
68	empty lot	none	medium
69	high walled lot	possible mound - enters street	medium
70	house lot	none	not entered
71	house lot	none	bare tepetate
72	high walled house lot	not observable	not entered
73	house lot	none	not entered
74	house lot	possible mound	not entered
75	ag. field - alluvial plain - maize	none	none
76	high walled house lot	not observable	not entered
77	abandoned house lot	none	scanty
78	house lot	none	swept clean
79	house lot	none	swept clean
80	house lot - swept clean	none	street just below - medium
81	school yard and school	none	leveled and paved
82	house with open lot	possible mound	medium
83	house lot - swept	possible mound	heavy Aztec in street
84	open field - beans	one possible mound	heavy
85	large maguey field - squash, maize	same mound in 84 extends into 85	medium
86	maguey bancal - maize, overgrown with weeds	plaster floor	heavy
87	maguey bancals - maize	abundant rock debris	medium to heavy
88	maguey bancals - maize in the alluvial plain	none	none

Field No.	Modern Use	Architecture	Ceramics
89	bean field - recently cultivated	none	scanty
90	bean field, recently cultivated, maguey bancals	none	scanty in field - heavy to medium under bancals
91	maize field - recently cultivated	none	scanty in field - very heavy to medium on the edges of field
92	house lot - weed overgrown	possible mound	exposed spots very heavy
93	maize field - recently cultivated	informant reports plaster floors	medium in field - heavy along edges
94	irrigated alluvial plain	none	none
95	alluvial plain - heavily vegetated	none observed	not observable
96	strip of house lots in alluvial plain - heavily vegetated - maize, squash	none	scanty
97-98	strip of house lots in alluvial plain - heavily vegetated - maize, squash	none	scanty
99	strip of house lots at base of hill slope	none - not entered	street just above medium to heavy
100	strip of house lots at edge of alluvial plain	none - not entered	street above heavy, medium, and scanty Aztec
101	modern use - house lots - on lower hill side	possible mound	in streets medium
102	house lot		not entered
103	house lots	spot marked "X", a plaster floor	medium in lot and street -
104	house lot		not entered
105-107	house lots	one large mound within all of these lots, crossing into street	not entered
105	house Lot	reported plaster floor by informant	not entered
106	very large house lot with a house ruin	possible mound extends out into street, under House	medium to heavy
107	house lot		not entered
108-109	alluvial plain	none	none
110-112	modern house lots in alluvial plain	none	scanty
113	sloping terrace	none	scanty

Field No.	Modern Use	Architecture	Ceramics
114	alluvial plain field - maize	none	scanty
115	hillside field	none	scanty to medium
116	maize field - maguey bancals	1 mound 15 m diam., 4-5 m high - top used as threshing floor	scanty to medium in field, medium to heavy on bancals
117	bare tepetate - large modern stone ruin		
118	gentle sloping field - thin soil - maguey, beans	none	scanty to medium
119	gentle sloping field - thin soil - maguey, beans	none	scanty to medium
120	nopal on rocky knoll		
121	maguey bancals - maize	none	heavy even where recently cultivated
122	thin soil - much natural rock debris	none	light to medium
123	modern adobe ruin		
124	exposed tepetate area		
125	maguey bancals - maize	none	on side facing 126 medium to heavy, in field light to medium
126	maguey bancals - recently cultivated	none	medium where not recently cultivated
127	maguey bancals - maize	none	scanty - even in uncultivated areas
128-129	thin soil - much loose debris	none - rock debris	medium
130	large open field - granjas de Acolman street markers - grass	none	at granja end and the Santa Catalina end medium in middle, scanty
131	scattered maguey	none	medium to heavy
132	scattered maguey	none	medium to heavy

T.A. 1

Classification: Small nucleated village or detached barrio during the Toltec and Aztec periods, with some indicators of pre- and Proto-Classic occupation. The major occupation of the site seems to be Late Toltec; the Aztec occupation, while coextensive with that of the Toltec, appears to have been much less intensive. Major concentration of Aztec occupation seems to be in the immediate area of the only definite mound on the site. If this mound is a ceremonial structure, it was probably constructed during the Toltec period and continued in use in the Aztec period. T.A. 1 was probably a slightly detached segment of urbanized Acolman (T.A. 12, which underlies Santa Catarina Acolman), the main urban community lying a few hundred meters

to the east.
See also: T.T. 1 (same location), T.A. 12, adjacent to the east.

Natural Setting: Slightly below 2300 meters, just above the main Lower Valley plain. Situated in a gently sloping area with moderately deep soil cover and only limited erosion. The only significant natural vegetation in the site area consists of scattered pirul trees. Cascajo mine on Cerro Colorado. Modern municipio of Acolman, village of Santa Catarina.

Modern Land Use: As of July 1963, temporal maize cultivation, with numerous low maguey bancals at intervals of six to eight meters. With its deep soil, this area is one of the Teotihuacan Valley's better agricultural areas.

Archaeological Remains: Survey undertaken in July 1963 noted variable moderate and light-to-moderate concentrations of Aztec surface pottery and considerable rock rubble extending over an area of about 6.3 ha. Toltec Mazapan occupation appears to cover approximately the same area, and is clearly the dominant occupational component (T.T. 1). A few small stone manos were noted. Only one possible structure was detected: a low mounded feature rising about 50 cm above the general field surface in the east-central site area, measuring about 19 by 35 m in area. Rock rubble is especially abundant on and around the mound. As this is the only definite mounded structure on the site it may be a ceremonial structure. Dwelling structures were not detected on the surface, due to alluviation of this area. About 50 m west of the mound there is a sizable area of relatively heavy Toltec and minor Aztec occupation. This feature may be the remains of a large room-complex or cluster of house mounds. Aztec occupation is very dominantly Aztec 3 (Chimalpa phase), with smaller quantities of Aztec 2 (Zocango phase).

Ethnohistoric Information: Suburban extension of T.A. 12 (see T.A. 12 description)

T.A. 164

Classification: Ceremonial Center? Based on the suppositions expressed in the description of T.A. 165 a ceremonial complex extends over some 3 ha. The complex could be a detached ceremonial center of the ancient town of Acolman located on the adjacent piedmont (T.A. 12) or be center of a large town site partially buried by sediment which would include T.A. 12, and T.A. 164.

Natural Setting: The site is located at 2249.5 m, some 2.5 m beneath the present level of the alluvial plain surrounding the temple-monastery precinct of the Augustinian Convent of Acolman, which is the most remarkable colonial monument in the Valley of Teotihuacan. The postulated site area is within the deep-soil irrigated plain, devoted here entirely to maize and squash. Part of the site is below the Convent of Acolman in an area extensively silted over during the past four centuries. At least 2.5 m of silt overlies the site.

Modern Land Use: A Toltec site is overlain by the huge constructions of the later Aztec and post-Conquest periods of the sixteenth and seventeenth centuries. Over it lies the foundations and temple precinct of the great temple of Huitzilopochtli of Acolman, and over that, and partly built from the rubble of that temple, the massive Fortress-Church-Monastery built in the somber grim style of the early post-Conquest period. This precinct, inundated by the creation of the flood control dams of the late seventeenth century, was freed from its bed of silts of nearly 2 m only in the late 1920s, and today is a popular attraction for tourists and students of early Hispanic Colonial architecture. The precinct is government-owned and under the administration of the Department of Colonial Monuments, within the National Institute of Anthropology and History (INAH).

Archaeological Remains: During the winter months of 1962, the INAH office of Colonial Monuments enlarged a moat-like drain or ditch, created in the earlier period of restorations, on the outer perimeter of the Convento and its Atrium wall, on the north and east faces of that perimeter, exposing to view the lower section of the outer foundations of the formidable pile of ecclesiastical masonry represented in the monument itself. The profile of this excavation, which opened a space some 2 m wide at the muddy bottom of the trench and extended over 5 m wide from the foundation wall to the top of the back-fill of the trench which formed a levee or dike facing the irrigated plain beyond, was examined along its entire length. The excavation cleared the top 4.2 m of the foundation, which continued down into the mud and water of the trench at the level (estimated at 2246.5 m) at which the deepening of the trench was discontinued. The freed upper portions of this massive foundation along these western and northern faces revealed a sharply-inclined wall which looks not unlike the pyramid faces of the temple platforms seen at Tlatelolco and Tenayuca. Whether this foundation represents a structure erected by the Spanish architects of the Fortress-Convent or, as may be readily suspected, is actually a portion of the lower body of the Acolman Temple of Huitzilopochtli, itself utilized as foundation for the Franciscan monument, only excavation by an archaeologist interested in examining the problem of the relation of the Convento to prehispanic remains could tell.

Examination of the profiles of the outer banks of the enlarged ditch revealed Aztec sherds mixed with some Late Toltec at about 2.5 m beneath the present level of the irrigated plain. Heavy Mazapan (T.T. 168) remains, with some Aztec and Xometla (T.T. 144) phase materials, were noted in a stratum some 20 cm thick located from 2.9 to 3.2 m beneath the level of the irrigated plain at the bottom of the trench coming from the muddy bank. The INAH work crew could not proceed deeper with the trench because water seepage increased, during the three-week period during which the present investigator visited the site, so that the trench became filled with water. This level is evidently under the water table. Eventually the trench area silted in from collapse of the outer banks along its length. Subsequently, the lower section of the trench was flooded and by the summer of 1963 was beginning to silt in.

No constructions were visible in the outer profile. The area of sherd deposit was spotty and variable from very light frequencies, one or two sherds every meter of length, to heavy, almost midden-like concentrations. A few Late Teotihuacan sherds were also recovered, including several sherds of Thin Orange, or the Thick variety used in ceremonial vessels (T.C. 152).

This site was revisited in August of 1973. In the period intervening between 1963 and 1973, INAH has poured a cap of concrete over the bottom of the trench area, and added a concrete banquette to the stone platform-foundation, apparently to prevent cave-in.

The other data from the Convento site that strongly suggest a Toltec ceremonial focus at this location as well are represented by the large (1.4 x 0.75 m basal measurement, 1.1 m elevation) twin pair of Chac Mool sculptures found in the foundation of the Convento excavations of the late 1920s. It is possible, however, that the Chac Mool is Aztec in date, based on recent excavations conducted by Matos at the Templo Mayor in Mexico City.

These two monumental sculptures are done in the same style as those seen at Tula itself. They were still stored in the Instituto laboratory off the small garden patio of the Convento in 1963, together with several smaller fragments of stone sculpture, which also appeared to have been pieces of Chac Mools. These sculptures are one of the most characteristic and diagnostic expressions of Toltec ceremonial.

It is hypothesized here that the convento rests over at least one and possibly two or three earlier prehispanic structures dating to the Toltec and Aztec periods. Only further excavations can reveal the true picture of these possible Prehispanic structures.

T.A. 165

Classification: Provisionally, on the basis of the Toltec survey, an Aztec site is located at the present village of Calvario Acolman. We believe its status was that of a town during the Early Toltec, declining to a small, low density compact village in Late Toltec and Aztec times. This site may, however, have had an extension, beneath the silts of the plain to the south towards the convent, encompassing an area approximately three times that of the present-day limits, in which case the settlement in question could have been part of the large Aztec town site at Santa Catarina Acolman (T.T. 12).

Natural Setting: At 2255 m, on a small, elevation completely surrounded by the flat alluvial plain of the Lower Valley, Calvario Acolman is like a small island sitting in a large lake. During the latter part of the sixteenth century it was such an island. This piece of high ground rises above the irrigated plain between the Canal de San Antonio to the east and the central canal or Rio Grande de San Juan to the west. The natural state of this elevation has been altered by the small contemporary adobe town which completely covers it. The plaza is on bare tepetate with a scattering of small cobbles as paving. A few of the house lot fields show soil deposits of up to a meter in depth. The soil is light brown and loamy in texture. It is possibly partly of livestock and human origin.

Modern Land Use: Town site. House, small fields, plazas, and streets.

Archaeological Remains: The Aztec and Toltec occupation is overlain by the modern village, but is evidenced copiously by outwashes along the side of the small streets winding between adobe walls and organ cactus fences up and down this hilly location, and may be seen in back lots. Erosion of some streets has also exposed sections of old floors associated with Aztec and Toltec occupation. The Toltec component is heavier than is the later Aztec. The distribution of the sherds varies from sparse to moderate, and in one test area outside of the plaza was found at a frequency of 47 per m^2. Obsidian blades and scrapers are relatively abundant. Without excavation, the depth of the archaeological deposit cannot be determined, but it is estimated to reach over a meter in some areas, if not twice that. A stratigraphic trench excavated somewhere on the sides of this hill might reveal that at least part of this "hill" is artificial. It would seem to be a natural habitation site for the entire period of human occupancy of the valley, and there may be earlier occupation not noted in the surface samples. In fact, in general survey we noted scattered Teotihuacan period sherds to the north of the edge of the modern village.

The adobes, of which most of the town's structures are built, were a focus of observation. While those in the southeast section of Calvario are almost completely free of archaeological materials, those in the section northeast of the church are filled with midden materials. Among these thousands of sherds protruding from the walls here, the Early Toltec is particularly prominent. Although on at least one occasion a collection taken from adobe walls has been recorded as a site (Tolstoy 1958), the provenance of these at Acolman cannot be determined with any accuracy, as adobe-making goes on all through the region of the irrigated plain today, and undoubtedly has for centuries. The people of Acolman could have purchased their adobe from many locations in the valley, as they have relationships with compeers in villages east, west, north, and south; although it would seem that an economy of parsimony would tend towards the purchase of adobe from the nearer sources.

The problem of provenance presented by the ceramic-laden adobes of the present village might be simply explained as deriving from an extensive area of excavation for adobe making materials in the fields on the irrigated plain directly south of the present village, and adjacent to it. Here the adobe-makers, or ladrilleros of Calvario (of which there are several families), have an extensive area, stretching towards the Convento, from which they excavated the soil used for their bricks. These fields, encompassing some 17 ha have sandy to clay-like soils which apparently are not productive agriculturally. They may be a result of the silting which occurred in this area behind the first viceregal dam, which was completed in May, 1630.

> *Con motivo de las inundaciones que sufria la cuidad de Mexico, una junta general, efectuada el 26 de diciembre de 1629, determino construir una presa para contener y desviar el caudal de los rios de la region que engrosaban el lago de Texcoco. Fue concluida en los cinco primeros meses de 1630 con un costo de veintitres mil quinientos pesos. Se cree sin embargo que fue una reconstruccion, pues se le senala fechas muy anteriores para su origen. Mas tarde se le hizo una rotura de cien varas al lado de la compuerta. . . En los autos de 1748 se ordena la reconstruccion de esa parte rota. . . Efectivamente: en los planos viejos del Valle de Mexico, inclusivo el aparece como una laguna, dividida en dos, por la presa y en el centro, como isla, aunque comunicado por ambos lados esta obra fue funesto par el monasterio, pues quedo hundido en case dos metros (INAH: Acolman Guia Official 1958:8-9).*

Furthermore, in 1977, Sanders in a revisit to this area noted large pits for adobe extraction immediately north of Calvario. He also noted in his visit that post-Conquest glazed pottery extended to the base of the pits, indicating several meters of alluviation since the time of the Spanish Conquest.
The convent-monastery is south of the present day Calvario, and Calvario may be a historical descendant of the Franciscan monastery school. Since the description has this earlier settlement joined to the land by causeways over the top of the dam, extending east and west, however, one must conclude that either another dam was placed athwart the valley at possibly the location of that later built or reconstructed during the administration of the Viceroy Revillagigedo, or that between the convento and Cuanalan, Lake Texcoco itself invaded this portion of the valley during the period of inundations.

The dam, or dams, might explain the origin of the clayey deposits between the Convento and Calvario. A hypothesis which excavation here might test, is that at 2 to 3 m beneath the present level of the plain, between the knob of present-day Calvario and the colonial convento, the remains of a portion of prehispanic Acolman dating from at least Early Toltec times may be buried, including a large section of the Aztec settlement, T.A.-165-164. It is also possible that much of the ceramic material found in these clay fields has come from wash from earlier adobe structures, presenting a picture of continuous re-cycling of the building materials and deposits contained therein.

Late Toltec pottery washes out of the sites of house lots, and is seen in cuts eroded in the packed earth and partially cobbled street of the town. It even washes from the adobe walls. There is admixture with Early Toltec as well as Aztec materials throughout. The Aztec remains are not as heavy as the underlying Toltec, an unusual occurrence. Other occupations represented here are those from the Formative period (T.F. 297, Cuanalan; T.F. 298, Patlachique; and Tzacualli, T.F. 299; the Toltec period occupation is designated T.T. 20 (Xometla phase) and T.T. 158 (Mazapan).

Site area: 34 to 37 ha.

T.A. 11 (Figs. 22, 23; Plates 27-30B)

Classification: Provincial and regional Center. The principal civic-ceremonial architecture may be buried under the present plaza and church at the western end of the site area.

Natural Setting: West Piedmont, at edge of Lower Valley floor, between 2260 and 2270 m. West edge of site approaches the former shoreline of Lake Texcoco. Situated on gently sloping ground, with moderately deep soil cover (ca 1 to 1.5 m deep) at edges of alluvial plain along the site's southern margin. Soil thins progressively upslope, and along the north edge of the site soil depth averages between 20 and 50 cm, with some patches of bare tepetate. Principal natural vegetation consists of scattered pirul trees.

Modern Land Use: The modern town of Tepexpan is coterminous with the southern half of the Aztec center. Nucleated modern habitation thus covers most of the southwest corner of the site, while slightly more dispersed modern settlement in the eastern Chimalpa barrio covers the remaining southern half of T.A. 11. The Lower Valley floor along the site's southern and eastern margins is intensively cultivated in maize and alfalfa, all this being irrigated land, tied in with the principal canals leading off the Rio San Juan. The gently sloping piedmont within the northern part of the site is also cultivated, mainly in maize and maguey, together with smaller amounts of beans, barley, and squash. There are many fallow fields and some pasture land in this higher area. All agriculture in the piedmont is rainfall cultivation.

Archaeological Remains: Complete survey of the T.A. 11 site area was precluded by the presence of nucleated modern settlement over a large section, especially at the far western end and along the southern margin of the Aztec center. However, only for the far western section was it absolutely impossible to recover traces of prehispanic occupation. Within the less-nucleated Chimalpa barrio to the east we were able to walk through a number of open house lots, and much of the northern half of the T.A. 11 site area consisted of relatively open ground. To the north of Chimalpa agricultural fields make up the majority of the area. The church of Tepexpan appears to be placed on the summit of a large, partially levelled prehispanic mound, possibly the lower portion of the main temple platform of Tepexpan. Furthermore, in two house lots behind the church i.e. to the north, we located three small mounds in 1960 and initially identified as residential structures. Excavations conducted by Charles Fletcher in 1961, however, indicated that these were not typical Aztec residential structures but small platforms. Possibly they are part of a ceremonial precinct that included a plaza and the main building under the church at Tepexpan.

Occupational debris, in the form of surface pottery and rock rubble, occurs in variable heavy, moderate, and light-to-medium concentrations within and around the edges of the modern town and its attached barrio of Chimalpa. Moving north from the edge of the modern town occupational intensity gradually decreases. To the south and west occupation of any kind terminates abruptly at the edge of the Lower Valley floor and lakeshore plain. Thus it appears that the T.A. 11 urban core is roughly coterminous with modern Tepexpan and Chimalpa. Total site area is about 145 ha, of which roughly a third can be considered to have relatively nucleated occupation. Occupation is very predominantly Late Aztec (Chimalpa phase), although smaller quantities of Early Aztec (Zocango phase) are consistently present. A few scattered Toltec sherds were also noted as well as Cuanalan (T.F. 4) and Tzacualli (T.F. 142). An identifiable architectural complex is located in Chimalpa at the south edge of the site, about 280 m east of the main highway. This comprises a pyramidal mound standing above two large plazas on the gentle slope rising from the main valley floor. The whole complex measures about 120 m by 60 m, and is oriented approximately north-south. The mound stands about 2.5 m high, is comprised of solid rock rubble and earth, and measures about 45 m long by 30 m wide. This mound fronts onto a large plaza, now measuring about 75 by 60 m (although it may formerly have extended further in an east-west direction prior to the dense buildup of

Figure 22

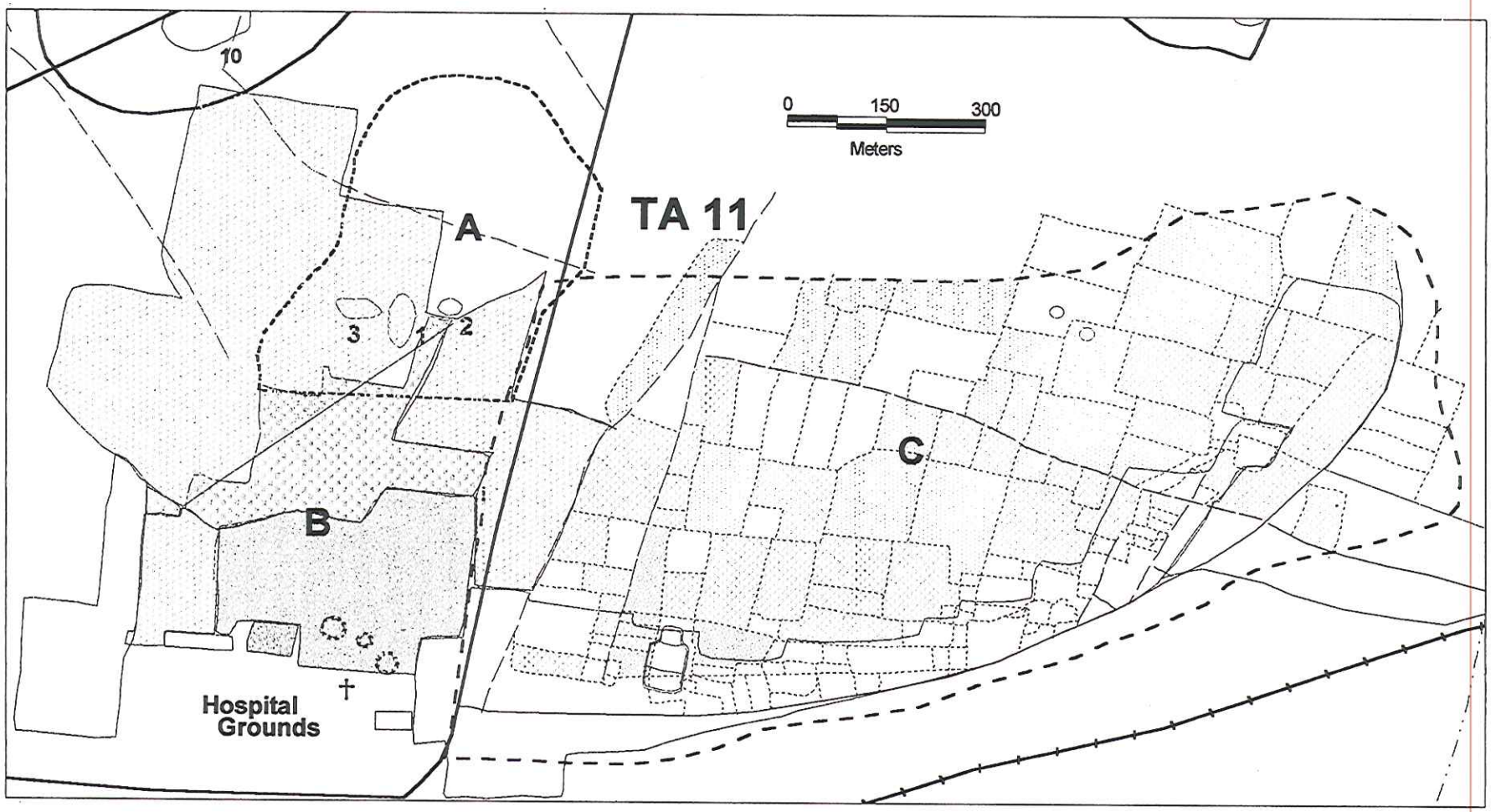


Figure 23

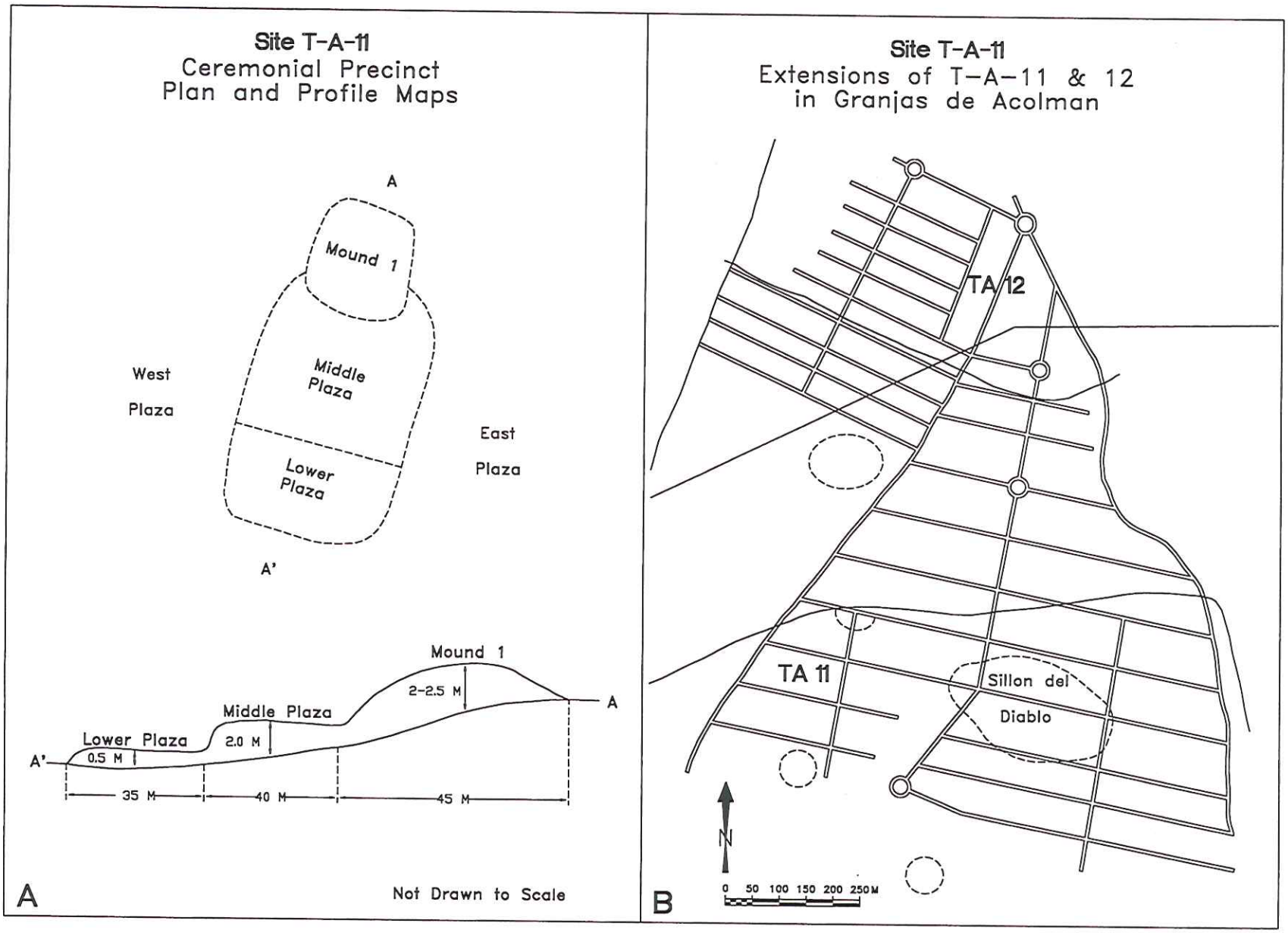
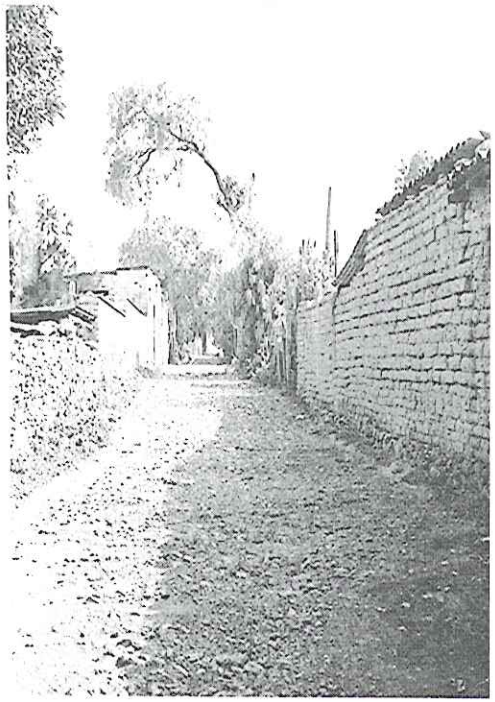

Site T-A-11
Ceremonial Precinct
Plan and Profile Maps
A
Mound 1
West
Plaza
Middle
Plaza
East
Plaza
Lower
Plaza
A'
Mound 1
2-2.5 M
A
Middle Plaza
2.0 M
Lower Plaza
0.5 M
A'
35 M
40 M
45 M
A
Not Drawn to Scale
Site T-A-11
Extensions of T-A-11 & 12
in Granjas de Acolman
TA 12
TA 11
Sillon del
Diablo
N
0 50 100 150 200 250M
B

Plate 27

A

B

C

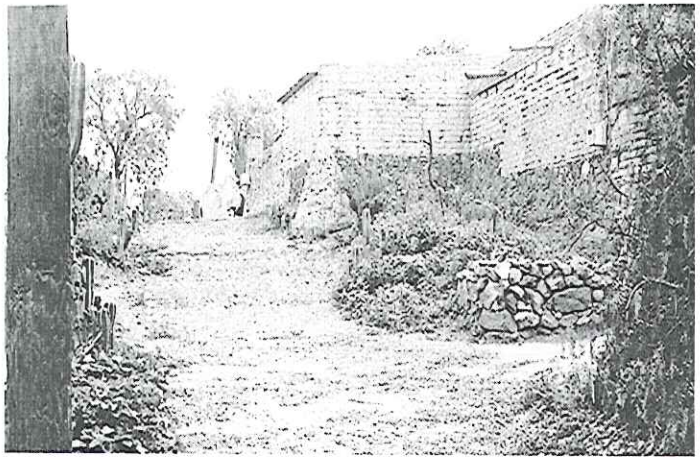


D

Plate 28

A

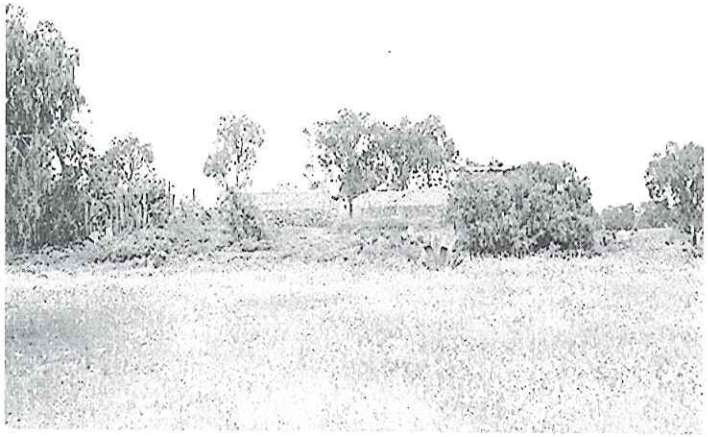
B



C

D

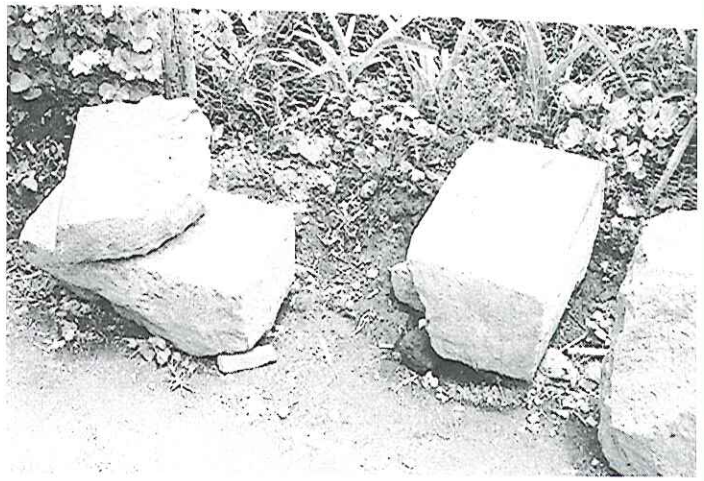
Plate 29



A

B

C

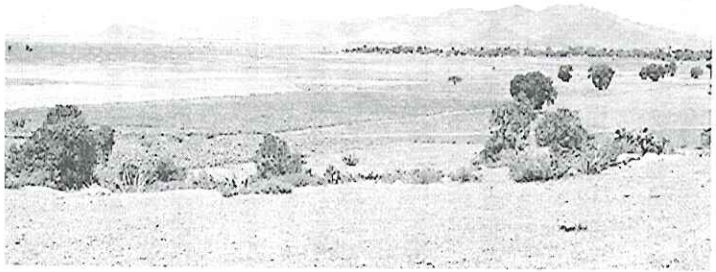


D

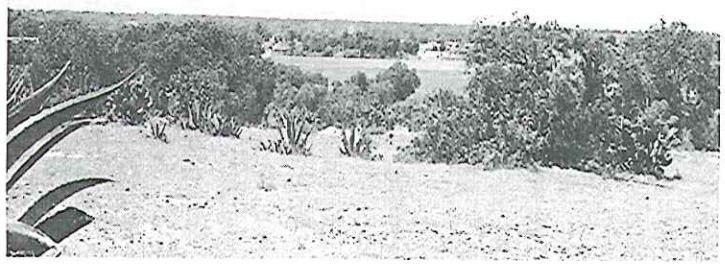
Plate 30

A

B



C



D

modern residences in this area), whose floor appears to have been raised with rock rubble fill to a height of about two meters above the natural ground surface. The south face of this plaza is formed by a massive retaining mass of irregular rock fragments. Stucco fragments around the edges of this upper plaza indicate that its surface was originally plastered. A second plaza, of similar size, forms the lowest step of this complex. A floor of this latter feature has been built up roughly 50 cm above the natural ground surface. There are moderate to heavy concentrations of sherd debris on and around this mound-plaza complex. In the fields to the north of the modern church where the occupation is generally lighter, two small residential structures were located.

Ethnohistoric Information: A royal questionnaire dating to 1580 (Nuttall 1926) discusses some relevant aspects of the Tepexpan settlement in the early Colonial period. At that time Tepexpan and its subject villages had 950 tribute-paying Indians, although it was believed that the pre-conquest population had been considerably greater (ibid:55). The Colonial town was "situated in a plain on the southern half of a small hill" (ibid:59). The native population cultivated maize, beans, squashes, peppers, chia, and huauhtli, together with several introduced crops (ibid:78). There is a fairly detailed description of the periodic tribute which the population of Tepexpan delivered to its principal overlord: at intervals of 80 days were delivered "four loads of coarse agave-fibre cloths, each load containing twenty cloths and eighty sandals; also four loads of the finer cloths made of agave fibre..." For a somewhat later period the eighty-day tribute is said to have consisted of "fifty cotton cloths four legs wide and eight arm lengths long; and also thirty other cotton cloths four arm lengths long and four legs wide; also forty other cloths for wearing worked with rabbits' wool and twenty loads of cocoa from Soconozco, each load containing twenty-four thousand cocoa beans; also forty skirts and as many shoulder capes (for women); twenty loads of chili peppers and as many of seeds" (ibid:63).

In 1580 there was no salt produced in Tepexpan. This commodity was obtained from Mexico City or the smaller lakeshore towns of San Cristobal Ecatepec and Exquipayaque (probably Nexquipaya) (ibid:79).

T.A. 13 (Fig. 24, Plate 30 C, D)

Classification: Small dispersed village. This could be considered a slightly detached suburb or barrio of the Regional Center of T.A. 11 (Tepexpan).

Natural Setting: West Piedmont, 2280-2320 m, just above the edge of the main lakeshore plain. Situated on gently sloping ground at the base of a steep hill (Cerro Colorado), with an average soil depth between 30 and 60 cm in lower areas, becoming progressively shallower upslope. Moderate to severe erosion, with patches of bare tepetate exposed at higher elevations. the southeastern end of the site lies on a low ridge extending off the SE flank of Cerro Colorado. Natural vegetation consists mainly of scattered pirul trees, with some wild nopal in higher, steeper sections of the site area.

Modern Land Use: Intensive rainfall cultivation of maize, beans, and barley, with some fallowed fields. Agriculture is less intensive in the higher part of the site, and there is considerable pasture land in this latter area. A few maguey and nopal are scattered over the general area. There is a large tezontle gravel quarry now operating in the central section of the site.

Archaeological Remains: Variable light, light-to-moderate, and moderate concentrations of surface pottery. Occupational debris is most abundant on and around 11 low mounded areas which are scattered through most of the site area. These features vary considerably in size, from as large as 150 by 120 m (which probably

Figure 24

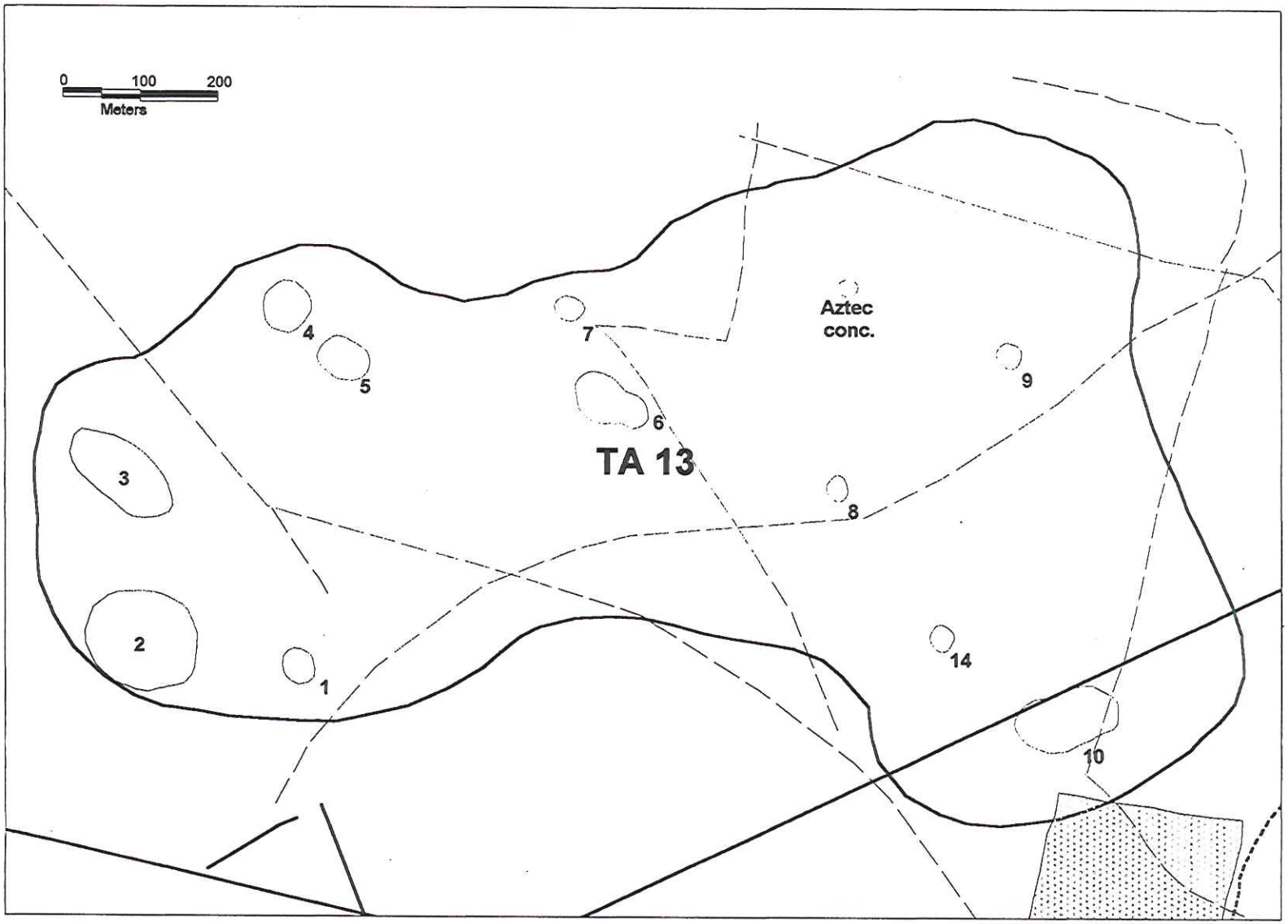
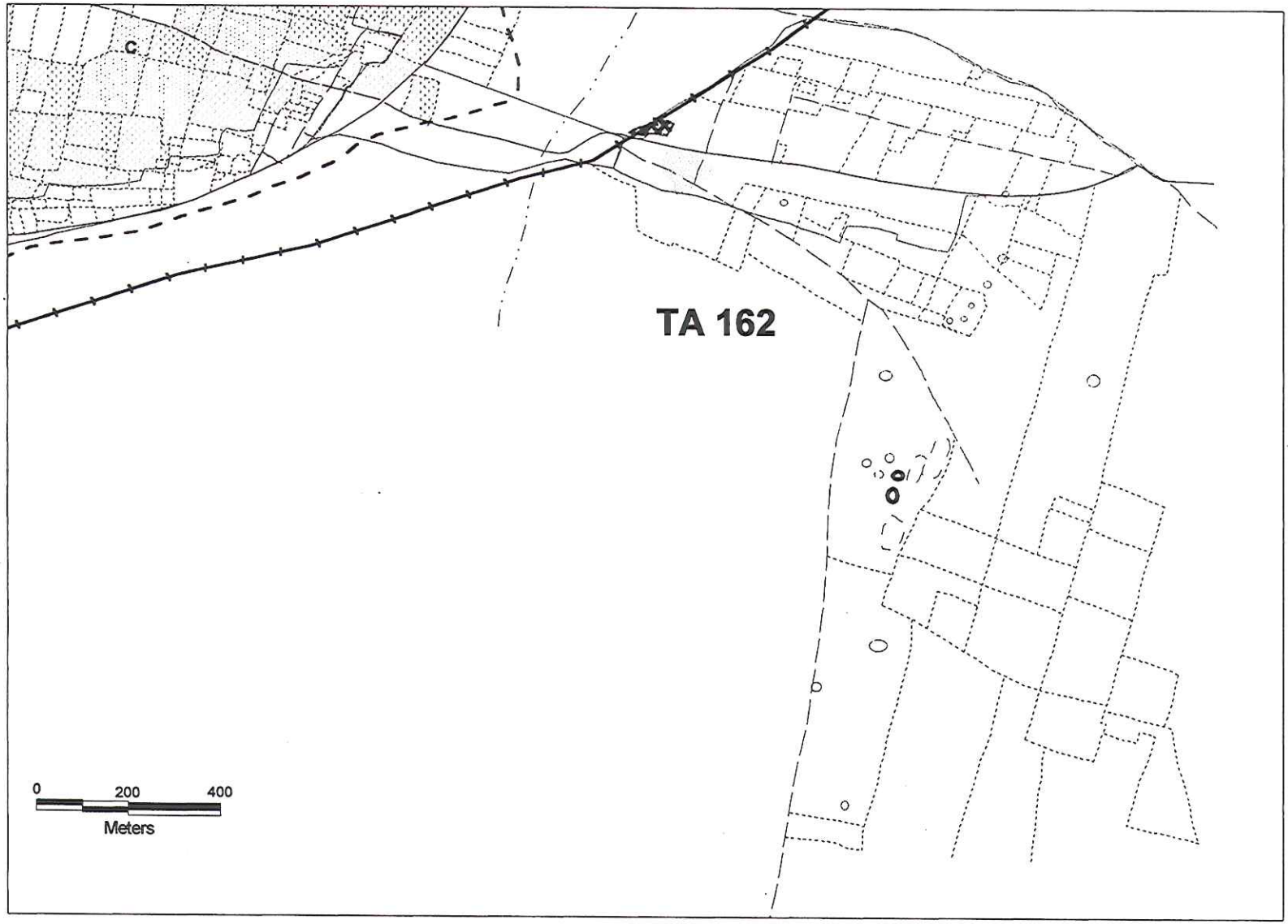


Figure 25



represents the eroded remnants of a large number of closely spaced residential structures), to fairly small mounds less than 20 m in diameter (which probably represent residential quarters of a single household group). In general terms, the larger mounds are situated at the southwestern, northwestern, and southeastern corners of the site. The mounds were numbered consecutively from 1-10 but the survey accidentally entered an unsurveyed northwestern portion of T.A. 11, the Tepexpan town site and three mounds were located in this area, Mounds 11-13. Mound 14, however, lies within our defined boundary of T.A. 13. Total site area measures about 90 ha.

Aztec occupation is predominantly Late (Chimalpa phase), but early Aztec (Zocango phase) material also occurs in lighter quantities over much of the site area. There are two zones of nucleated Mazapan occupation (T.T. 11) in the southwestern and southeastern corners of the Aztec site area and some Xometla phase occupation (T.T. 18). A few Tzacualli sherds were coded as T.T. 156.

Ethnohistoric Information: N.D. Possibly a suburb of T.A. 11 - see T.A. 11 description.

T.A. 162 (Fig. 25)

Classification: At Cuanalan the lower valley plain constricts to a narrow neck one kilometer wide before it fans out into the lake shore and delta region. A part of the contemporary village is located on the edge of the North Piedmont of the Tezoyuca Range and the balance extends into the plain. The San Juan river, which is the main drainage stream of the valley, runs through the center of the plain along the west edge of the village. The setting is one of deep-soil canal-irrigated plain, today intensively cultivated and dedicated to the production of basic grains. Cuanalan is virtually unique in the Teotihuacan Valley with the great time depth of its occupation. It was continuously occupied from the beginning of the Cuanalan phase until the present day. The village generally has abundant evidence of prehispanic occupation, with Aztec and Toltec occurring over the entire village area, Teotihuacan (T.C. 15-16) at the east end, and Late Formative occupation (T.F. 38) concentrated at the west end. This was a small, high density compact village in Late Formative times, a large, high density compact village in Early Toltec times (T.T. 28); low density-compact village in Late Toltec phase (T.T. 166). The Aztec occupation is somewhat problematical but it was almost certainly a large village, probably of at least the low density compact type, possibly a high density compact village by the Late Aztec phase.

Natural Setting: The site is situated at 2260 m, at the point where the irrigation canals of the Teotihuacan Valley joined the San Juan River and at the head of the delta of the Rio San Juan, just north of the areas formerly covered by the waters of Prehispanic Lake Texcoco. The site area is nearly completely covered by the modern compact adobe village of Cuanalan which overlaps the earlier Aztec, Toltec, Classic, and Formative occupations. The terrain is flat and topographically featureless, except for the pitting produced by quarrying in the southeastern quadrant of the site area and the relief given by the high man-made, levee-like banks of the Canal de San Antonio to the north of the site and those of the Rio San Juan to the west of the site. These high (2.0 to 2.5 m) banks are created by the accumulation of the sediments thrown up on the banks during centuries of canal clearing by cooperative work teams of the campesinos who till the adjacent irrigated lands.

To the north of the site and the present village, about 275 m distant, are the remains of the last of the great colonial dams built as part of a new flood control program under the viceroy Revillagigedo. To the south of the site, some 800 m, begins the rise of Cerro Santiago.

Figure 26

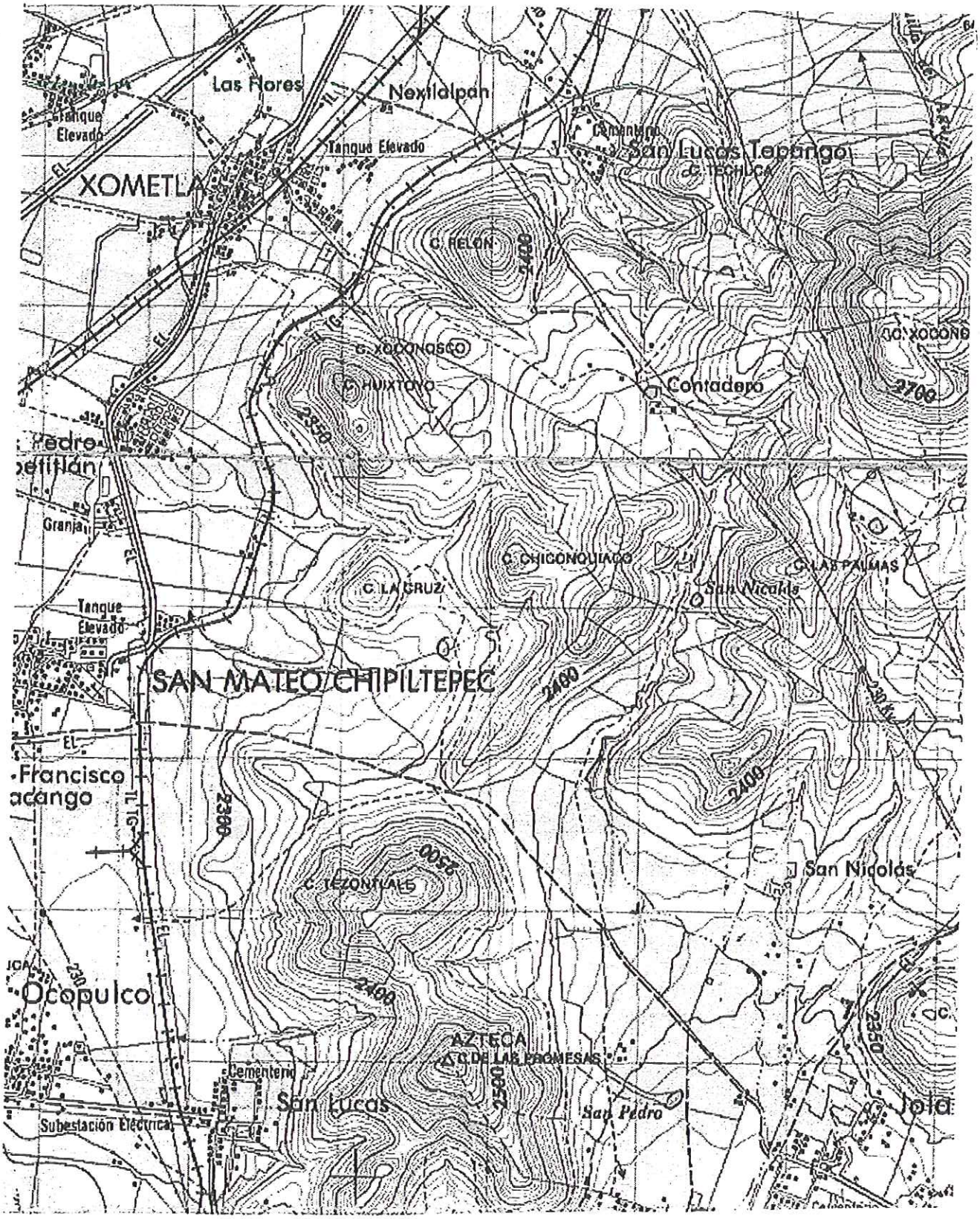

Las Flores
Nextialpan
Tanque Elevado
XOMETLA
San Lucas Tepango
C. TECHUCA
C. HELÓN
C. XOCONOSCO
C. HUIXTOYO
Contadero
Granja
C. CHICONQUIACO
C. LAS PALMAS
C. LA CRUZ
San Nicolás
SAN MATEO CHIPILTEPEC
Francisco
acango
C. TEZONTLALI
San Nicolás
Ocopulco
AZTECA
C. DE LAS PROMESAS
Cementerio
San Lucas
Subestación Eléctrica
San Pedro
2400
2350
2300
2450
2500
2700

Figure 27

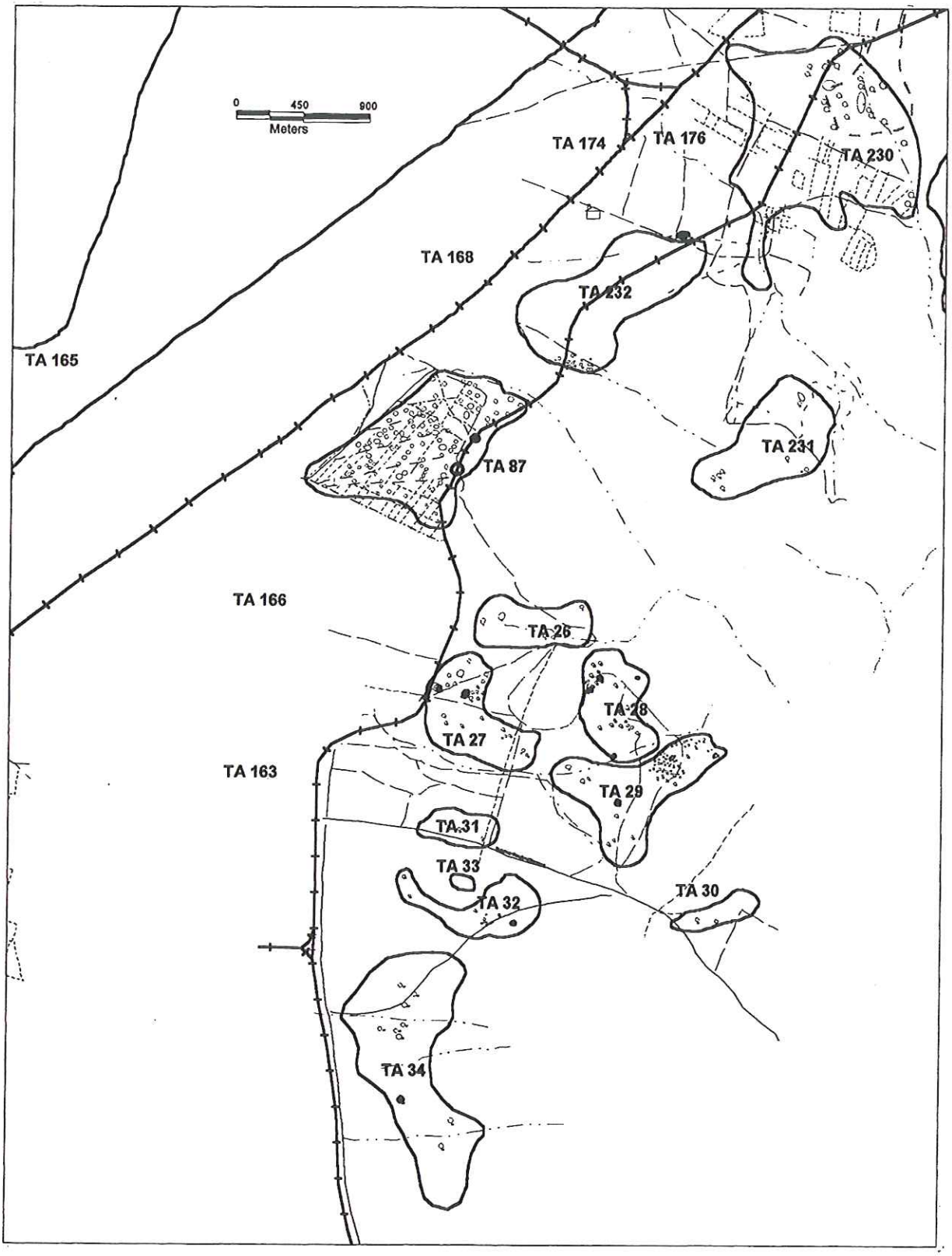
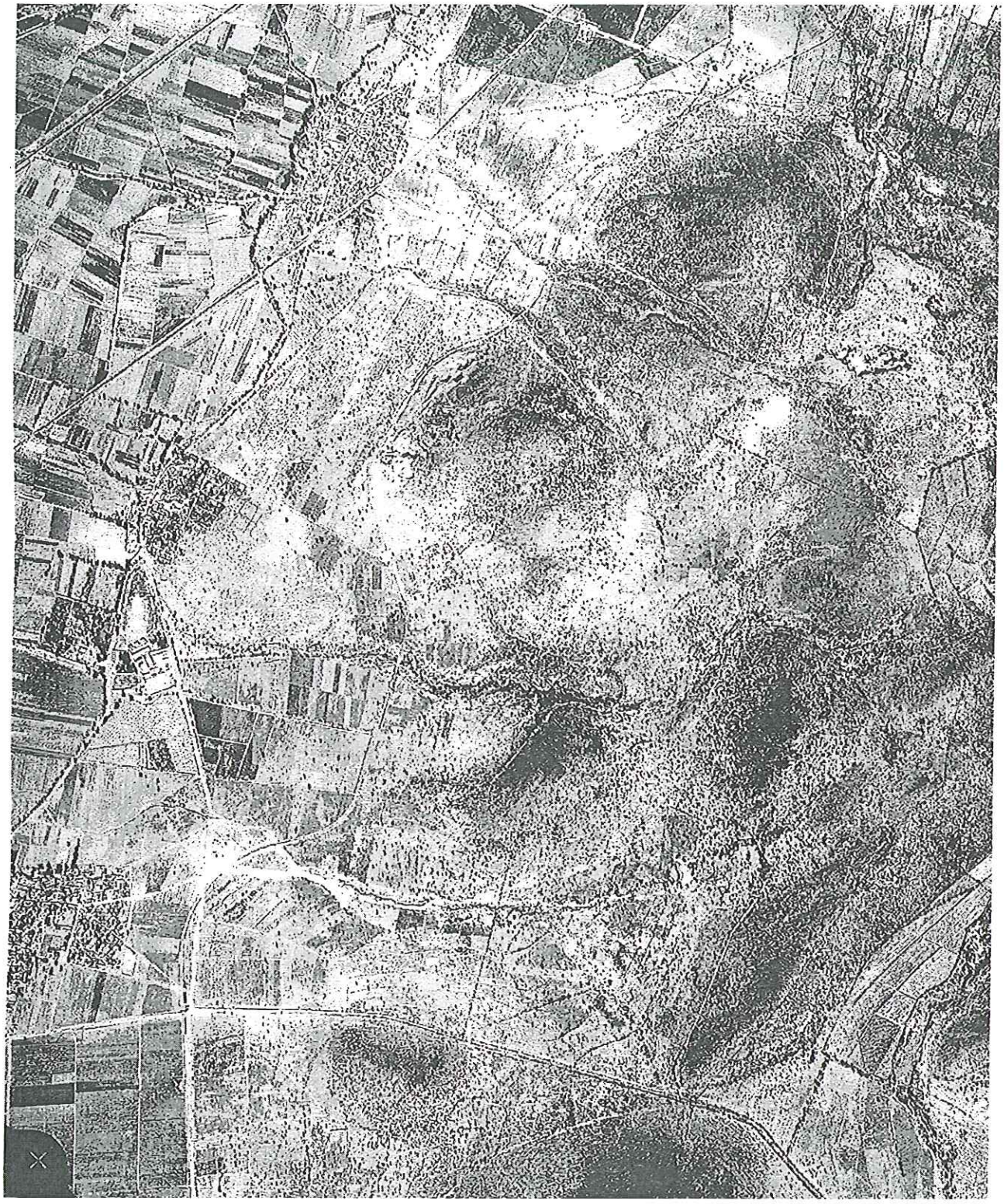

0
450
900
Meters
TA 174
TA 176
TA 230
TA 168
TA 232
TA 165
TA 87
TA 231
TA 166
TA 25
TA 28
TA 27
TA 163
TA 29
TA 31
TA 33
TA 30
TA 32
TA 34

Plate 31



All along the southern perimeter a heavy deposit of sand partially overlies as well as underlies the site. Approximately 2.5 km to the west and south rise the foot hills of the Patlachique Range. This area has been on the receiving end of the erosion cycles which have periodically stripped soils from the piedmont of the valley's margins and so the ground surface here has steadily risen since at least Late Formative times.

Modern Land Use: The modern adobe buildings and adjacent patios of the contemporary village of Cuanalan cover most of the site area. Parts of both the eastern and western extension of the site are planted in maize. Sand quarrying is also taking place in both the southwestern and southeastern sections of the site.

Archaeological Remains: The indications of Aztec and Toltec occupation are evident throughout the area covered by modern Cuanalan and extend beyond the modern limits on both the eastern and western edges (an area of 800 x 500 m). The Teotihuacan and Late Formative occupations are much more restricted and localized. The early Toltec occupation through this area is heavier and greater in area of extension by nearly 10 hectares over that of the late Toltec site area.

The Early Toltec occupation through this area is heavier and greater in areal extension by nearly 10 ha over that of the Late Toltec site area. The Late Toltec settlement contracts towards the eastern half of the site area. Furthermore, in the area in which both Early and Late Toltec occupations are coincident, the late occupation is somewhat lighter than the earlier occupation. Earlier occupations here include the type site of the Late Formative, T.F. 38: and the Teotihuacan site, T.C. 16. Scattered evidence of Aztec occupation occurs throughout the densely settled part of the 20th century village and, mixed with Toltec, occurs in the agricultural fields to the south, southeast, and east, of the eastern edge of the 20th century village.

Ethnohistoric: See discussion page 156.

5. ZONE 4 TEZOYUCA AND THE EAST PIEDMONT OF THE LOWER VALLEY (Figs. 26, 27; Plate 31)

This very narrow strip, only 1 to 2 km wide, stretches north- south between the alluvial plain and the western foothills of the Sierra de Patlachique. Most of the villagers here cultivate the lower piedmont, using bancal terracing, and hold ejido and pequeña propiedad lands within the nearby irrigated plain. Floodwater control from these very steep slopes is difficult and has been hardly attempted. No presently utilized terraces are found above 2310 m, though an occasional abandoned terrace has been recorded higher in the range. The higher piedmont is utilized primarily for grazing and wood cutting.

The East Piedmont of the Lower Teotihuacan Valley, from San Lucas Huizinhuacan in the south, to the Rancho of Nextlapan to the north, was one of the most densely settled rural areas of the Teotihuacan Valley, all of which was intensively surveyed. All of the rural settlements are typical dispersed line villages whose borders almost merge. What we have defined as separate sites was often an arbitrary decision. A wide natural pass connects the Teotihuacan Valley here with the Texcoco Plain. It consists of low undulating terrain that separates the Patlachique Range here into a smaller, southern segment, and a larger northern one. The southern segment is dominated by two peaks, Cerro Azteca and Cerro Tezontle. The northern area consist of a series of peaks and interconnected adjacent slopes including Cerro Chiconquiaco, Cerro la Cruz, Cerro Huistongo, Cerro Xoconosco, and Cerro Metecate. The piedmont is very narrow, and more steeply sloping than on the west side, and today is intensively terraced. Most of the area is cultivated by the residents of compact nucleated villages, including Tezoyuca, Chipiltepec, San Pedro Tepetitlan, and Xometla. With

the exception of Tezoyuca these nucleated villages are almost certainly the product of the Early Colonial Congregación and the Aztec settlements utilizing the same area were probably all of the dispersed type. Presumably the residents in these communities cultivated the terraced slopes of the piedmont adjacent to their residences, and parcels of land in the nearby irrigated Lower Valley alluvial plain.

An interesting question of 16th century political geography is the definition of the domain of Tezoyuca. Neither Chipiltepec nor Cuanalan appears as subject settlements to Tepexpan or Acolman, and only three dependent villages of Acolman are located on the 1580 map on the east piedmont. These include San Pedro Tepetitlan, San Antonio Huistonco, and San Miguel Tumetla (Xometla), the first and last exist today as nucleated settlements; San Antonio Huistonco, located between the two, was undoubtedly our survey site T.A. 87, the site which we referred to in the Toltec volume as Xometla, because the land belongs to the residents of that village today. Unfortunately we have not found a Relación Geográfica for Tezoyuca. The only published document we have which says anything about the town is the Codice Franciscano which identifies Tezoyuca in the mid 16th century a dependent settlement of Texcoco, but of cabecera status and which had two sujetos of its own. Unfortunately the document does not name the subject settlements (see Chapter 12 in this volume for discussion of Texcoco's political machinations in the overall region). For spatial reasons, and because at least part of the area was certainly not under Acolman, we have included the rural settlement on the lower flanks of Cerros Azteca and Tezontle, with Tezoyuca into a Tezoyuca sub-zone, assuming tributary status of this area to Tezoyuca. Sites in this sub-zone include the Tezoyuca type site T. A. 161 and T.A. 32-34. Also within this zone would be the villages of Chipiltepec (T.A. 163), if in fact Chipiltepec is prehispanic and not the product of the congregación as suggested previously and Cuanalan (T.A. 162). We are assuming here that the rural settlement north of this postulated Tezoyuca district was tributary to Acolman (this would include our sites T.A. 26-31). This division is of course arbitrary, and based on spatial relationship. Perhaps future studies of 16th century landholding will resolve the question as to the boundaries between the two territories.

Because virtually all the intensive surveyed sites lie on the east piedmont of the Lower Valley (the exception being T.A. 162, Cuanalan, which because of its neamess to Tepexpan we have included in Zone 4), we will include all of the sites of the East Piedmont of the Lower Valley irregardless of the political affiliation in the 16th century; Fig. 27 and Plate 31 show their geographic relationships and setting. Besides the surveyed sites noted above we have tentatively assigned site numbers to San Pedro Tepetitlan (T.A. 166), and Xometla (T.A. 168). T.A. 166 and T.A. 168 are indicated on the map as general locations of unknown nature since we did not intensively survey them and in fact they may not be prehispanic Aztec settlements, but Congregraciónes, as we pointed out before.

T.A. 161

Classification: Codice Franciscano and Gibson. In 1519 Tezoyuca was a town and center of a political domain. It was not surveyed by the Teotihuacan Valley Project, even in general survey. We have little historical and no archaeological data on this site.

T.A. 35 (Figs. 28, 29; Plate 32 A, B)

Classification: T.A. 35 is a small isolated prehispanic ceremonial center, used during the Proto-Classic, Toltec (T.T. 108), and Aztec periods, with ceremonial use extending into the present, in the form of a small chapel situated at the eastern end of the top of Cerro Azteca. No evidence of use during the Teotihuacan

Figure 28

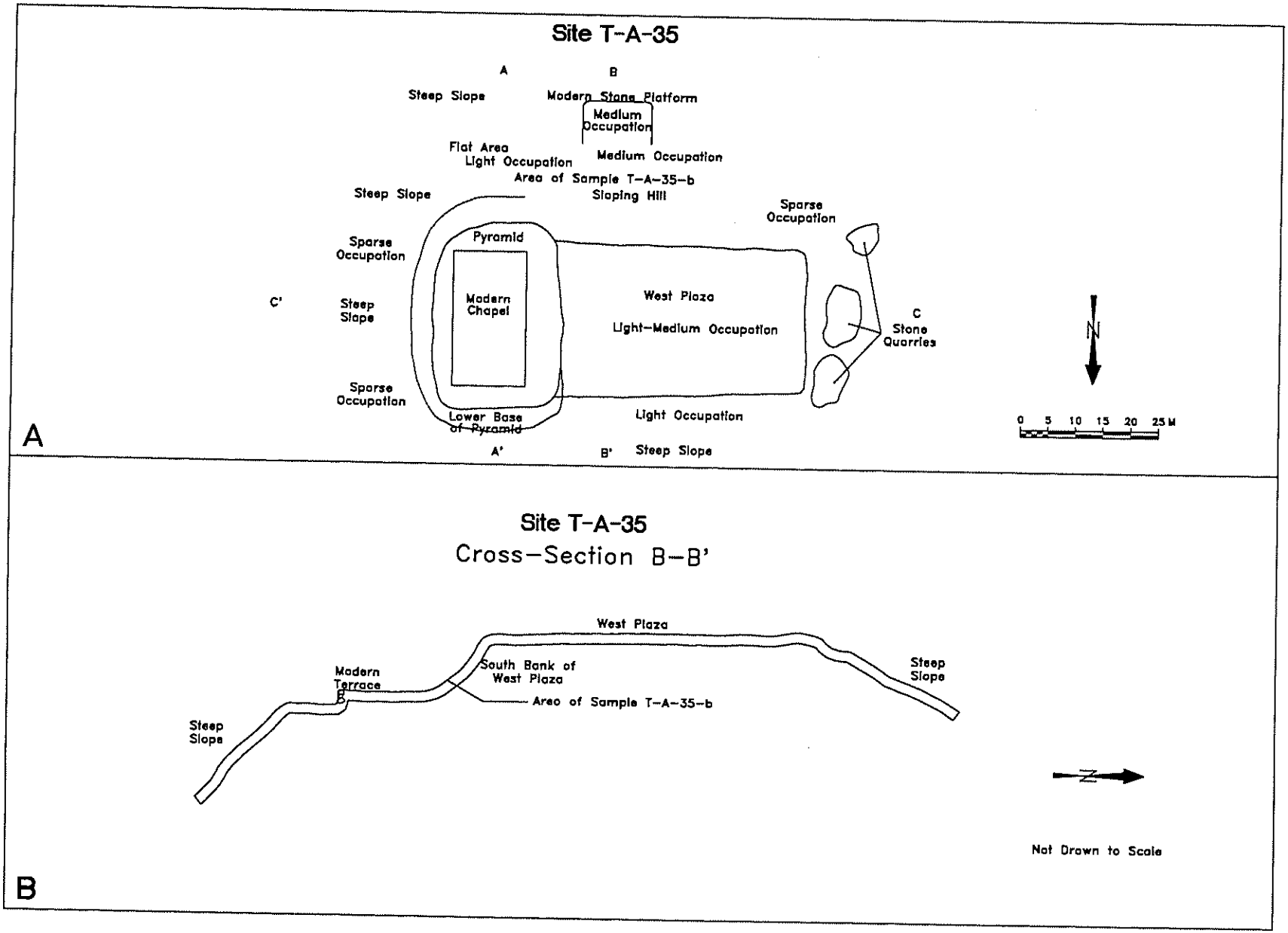
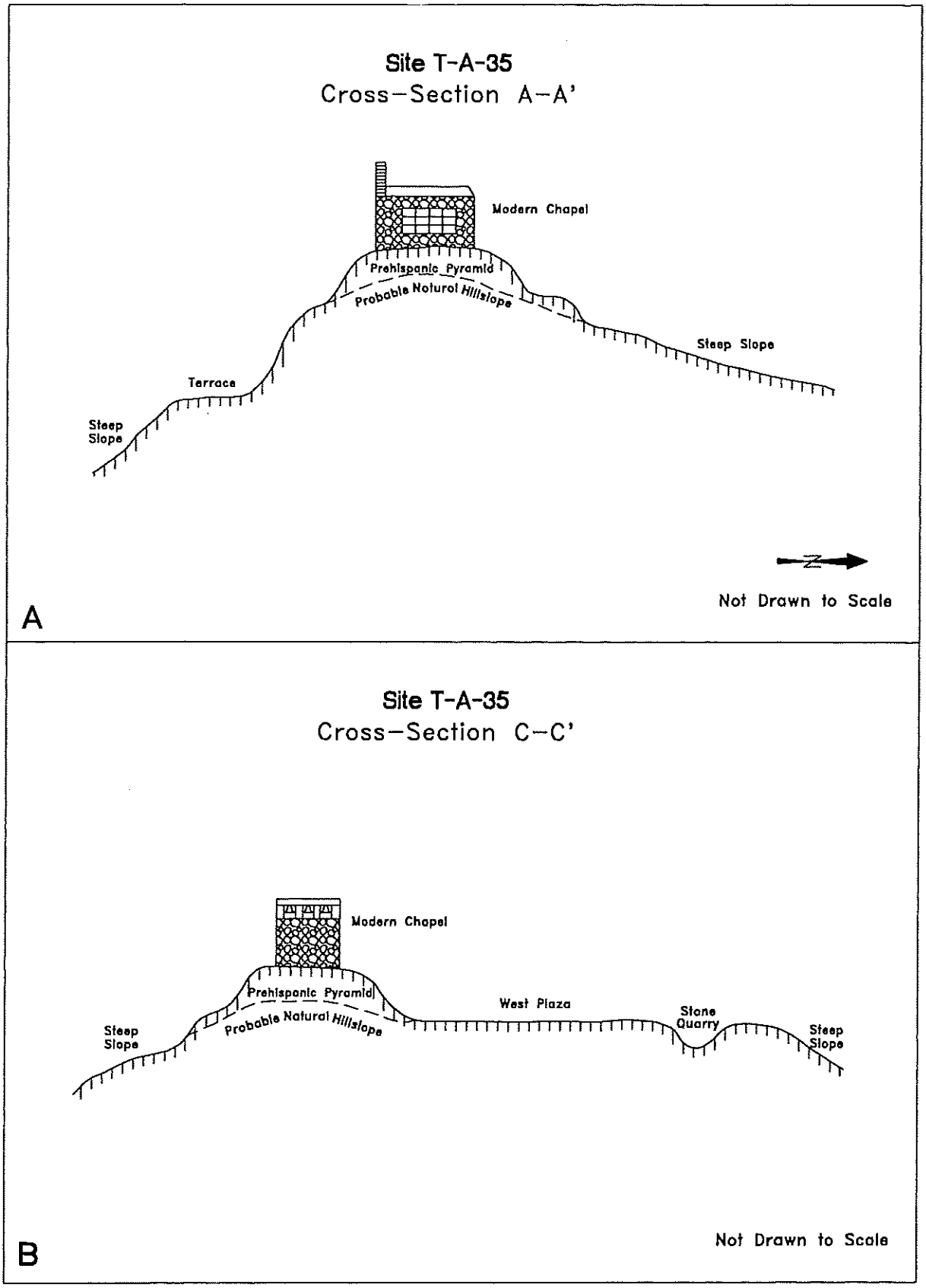

Site T-A-35
A
B
Steep Slope
Modern Stone Platform
Medium Occupation
Flat Area
Light Occupation
Medium Occupation
Area of Sample T-A-35-b
Steep Slope
Sloping Hill
Sparse Occupation
Sparse Occupation
Pyramid
C'
Steep Slope
Modern Chapel
West Plaza
Light-Medium Occupation
C
Stone Quarries
Sparse Occupation
Lower Base of Pyramid
Light Occupation
A'
B'
Steep Slope
N
0 5 10 15 20 25 M
A
Site T-A-35
Cross-Section B-B'
West Plaza
Modern Terrace
South Bank of West Plaza
Steep Slope
Steep Slope
Area of Sample T-A-35-b
N
Not Drawn to Scale
B

Figure 29


Site T-A-35
Cross-Section A-A'
Modern Chapel
Prehispanic Pyramid
Probable Natural Hillslope
Steep Slope
Terrace
Steep Slope
N
Not Drawn to Scale
A
Site T-A-35
Cross-Section C-C'
Modern Chapel
Prehispanic Pyramid
Probable Natural Hillslope
West Plaza
Stone Quarry
Steep Slope
Steep Slope
Not Drawn to Scale
B

period was found. The ceramics of this site are particularly interesting, in that, while many of the normal pottery types found in residential sites are present, a considerable quantity of very distinctive ceremonial ware seldom present at residential sites was found, substantiating the site's function as indicated by architecture and location. There was a concentration of such ware at the base of the small slope just south of the plaza, perhaps accumulated there after having been swept off the plaza after ceremonies. It is possible that the domestic pottery was for the use of resident caretakers or priests, who may have lived on the large terrace just below the pyramid. While recent pitting of the pyramid indicated two major construction episodes, the long range of use indicated by associated ceramics may signal inner structures dating from the Proto-Teotihuacan and Toltec periods. Early and Late Aztec occupations occur, with Late dominating slightly.

Natural Setting: Hilltop - at 2600 m. Most of the hilltop is covered with rock outcrops, with soil (gray-brown loam) accumulated in localized pockets to a depth from a few cm to 50 cm. Flat area west of pyramid covered with a thin soil cover about 10 cm thick. Flat area on terrace to south of chapel has soil cover from 20 - 50 cm deep. No hydrological resources occur. Vegetation consists of grass cover with pirul trees, wild nopal, thornbush, some maguey.

Modern Land Use: grazing, quarrying, ceremonial. The site is entirely devoted to pasture, probably some use of the scattered maguey and the fruit of the wild nopal. Quarrying of the abundant outcrops of volcanic rock which occur all over the general area, probably for construction of the chapel structure (in the early 1960s), and possibly also for construction of the prehispanic pyramid underneath the modern chapel. Located in the modern municipio of Tezoyuca, village of San Lucas Huitziluacan, owner 1963: communal land of San Lucas.

Archaeological Remains: Reported as Tx-A-20 in the Texcoco Region report (Parsons 1971). The survey included the upper slopes of Cerro Tezontlalli, the intervening saddle area between Cerro Tezontlalli and Cerro Azteca, and the northern flank of Cerro Azteca. Throughout this area there was virtually no sign of prehispanic occupation until the very top of Cerro Azteca. It consists of a prehispanic mound, a temple platform 25 x 35 m in surface area and 2 - 3 m high, constructed of rock rubble and earth on a natural rock promontory. The platform is now topped by a chapel. The pyramid was constructed in two parts: 1) a low basal platform measuring about 30 x 40 m in surface area, and ca. 50 - 75 m high; 2) the major pyramid structure. Just west of the pyramid is a flat area ca. 30 x 50 m, probably a plaza. Just south of this plaza and further down the slope is another flat area ca. 20 m wide and 50 m long, an earth and stone terrace which may also be prehispanic and related to the ceremonial complex. Sparse surface pottery occurs over the whole site, with heaviest concentrations on the area around the pyramid and on the south terrace. There were some figurines, a few obsidian tools, no ground stone tools, spindle whorls, or pottery disks.

Ethnohistoric Information: See page 156.

T.A. 167

Classification: This site was located in general survey and was not resurveyed. Classification problematical

T.A. 34 (Fig. 30; Plate 33)

Classification: Small Dispersed Village.

Natural Setting: 2290-2350 m. Situated on gently sloping ground along the lowermost slopes of the Patlachique Range, at the edge of the piedmont. Erosion has been moderate to severe. However, the

Figure 30

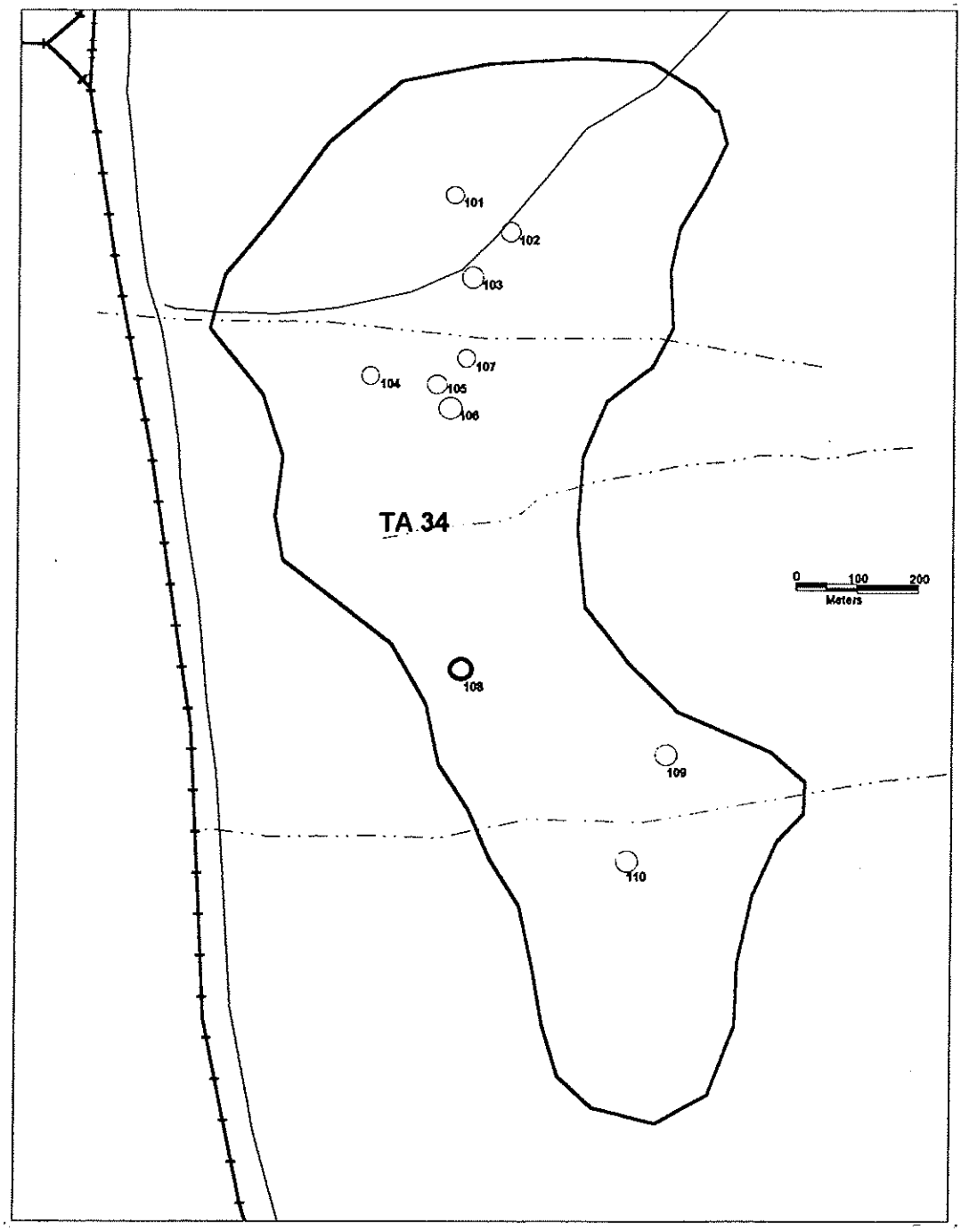
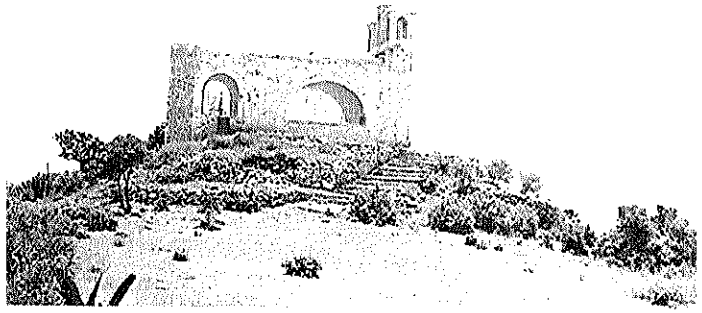
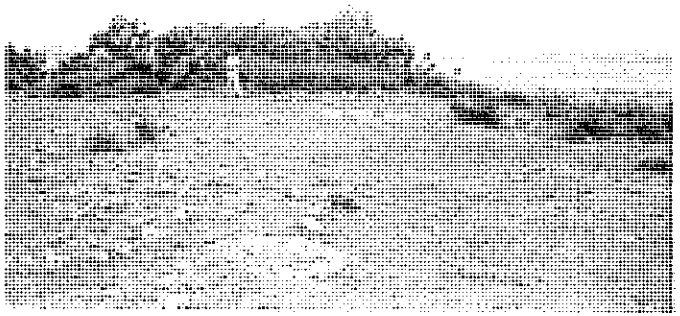


Plate 32

A



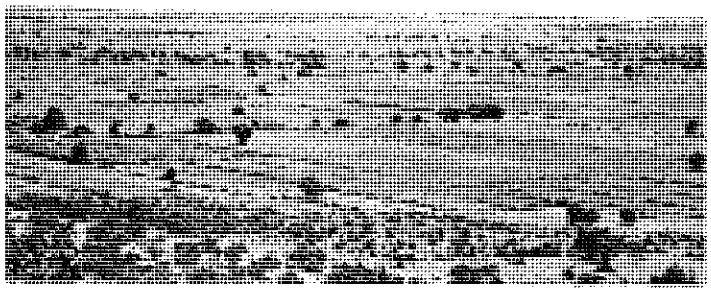
B



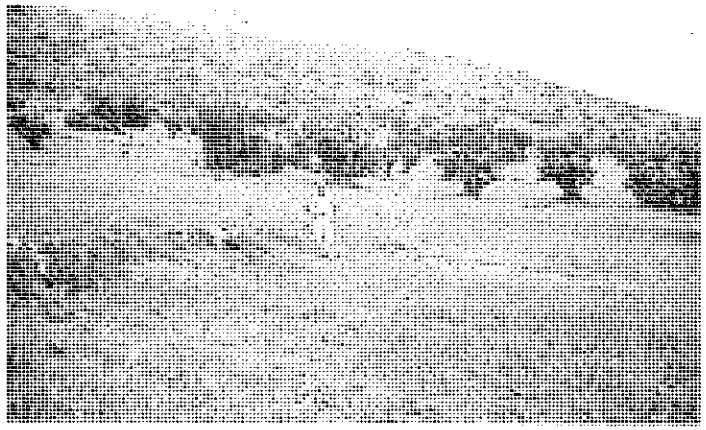
C

D

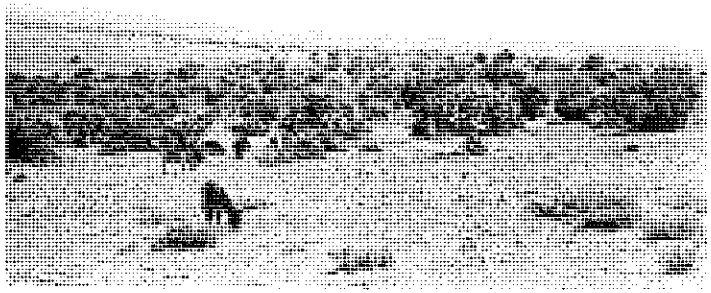
Plate 33



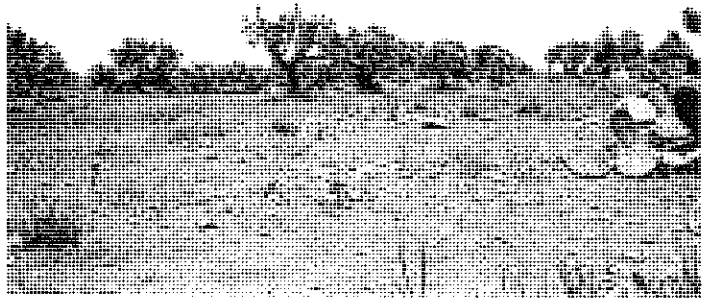
A



B



C



D

construction and maintenance of bancals, earth-stone terracing, maguey terracing, and check dams throughout much of the site area has prevented wholesale sheet erosion. Soil depth varies from nearly bare tepetate, to 10-15 cm in the higher portions of the site, up to 50-75 cm in some of the terraced agricultural fields along the lowermost western edge. Sizable patches of bare tepetate subsoil occur along several major barrancas and wash areas. Pirul trees, wild nopal, and thornbushes are abundant in the higher sections of the site. No permanent streams occur on the site; Rio Papalotla flows east to west, south of San Lucas, several hundred meters south of the south edge of the site. Three major barrancas cut through the site, with numerous small washes.

Modern Land Use: Most of the site area now serves only as grazing land. Lower, flatter land along the western margins of the site area is intensively cultivated in maize, with smaller amounts of beans, barley, squash, and peas. All cultivation is now temporal. Maguey occurs throughout the lower part of the site area, often along low earth terraces. Earth and stone-faced terraces are abundant over much of the site area. Some are clearly modern, but others are probably prehispanic. To the south the site extends into the northern edge of the modern village of San Lucas Huitzilhuacan. A narrow-gauge railroad runs along the western margin of the site area, with a small adobe-stone railroad station at the far northwest corner of the site area. One large jagüey, in the northwest corner of the site, receives water from the northernmost barranca. Modern municipio: Acolman and Tezoyuca; village: Chipiltepec and San Lucas Huitziluacan. Owners: N. half = ejido land of Chipiltepec; S half = ejido land of San Lucas.

Archaeological Remains: Total site area is about 83 ha. Ten badly destroyed mounds were identified scattered throughout the site. Scattered amorphous concentrations of surface pottery and rock rubble indicate the former presence of other structures. Occupation is generally quite dispersed. Surface pottery and occupational debris are usually found in light-to-moderate concentrations on and around mounded areas, with very sparse sherd cover in areas where mounds were definitely never present. Occupation is relatively more concentrated over the northern two-thirds of the site area.

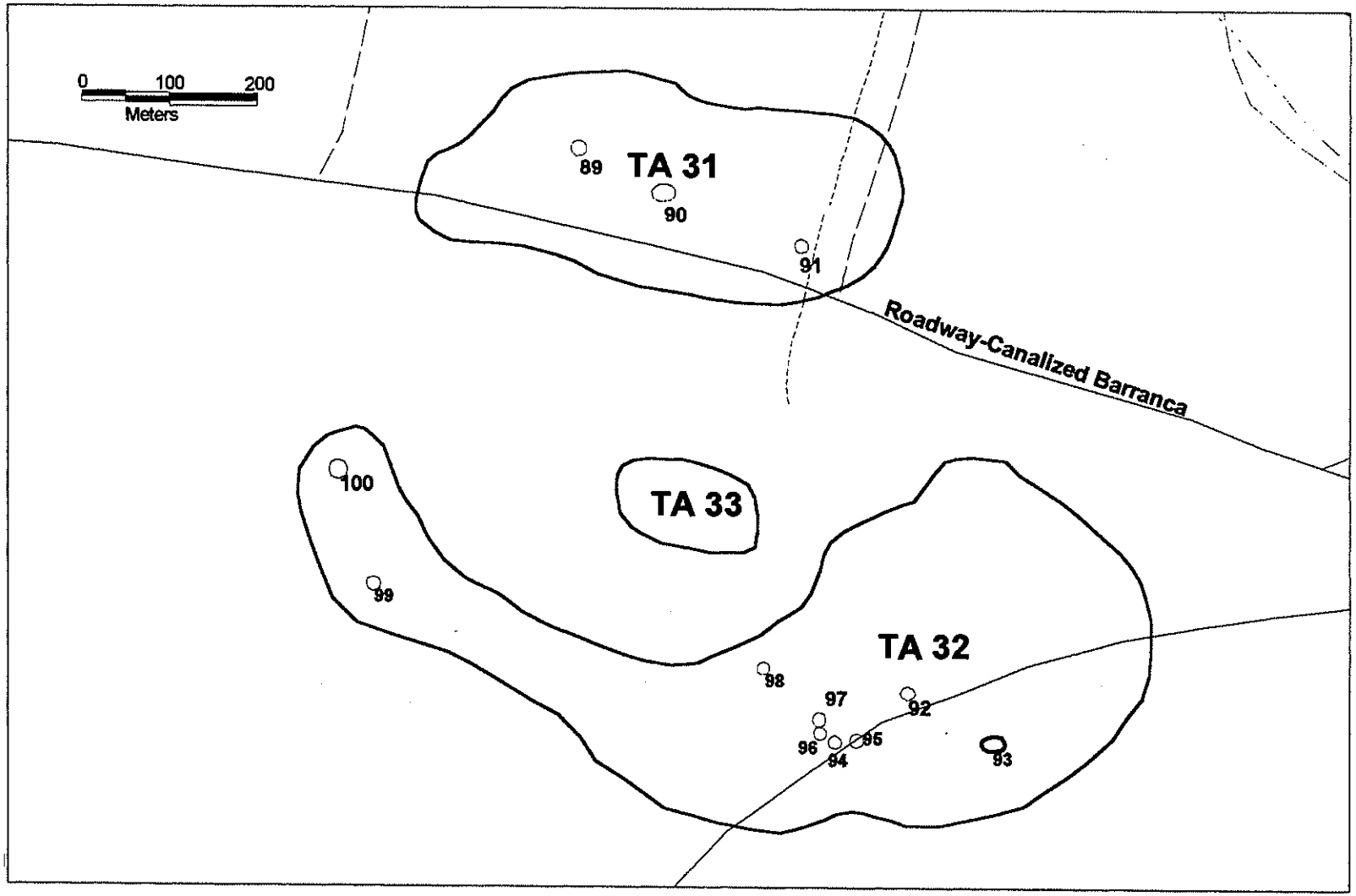
With one exception, all preserved mounds appear to be domestic residences. These measure between 20-30 m in diameter, and 20-40 cm high. Faint traces of stone wall bases occur on one mound. Near the western edge of the site, at a point about two-thirds the total distance south from the north border of the site, is a considerably larger structure (Mound #108) which may be a temple platform. This latter feature measures about 30 m in diameter, and stands roughly 1.5-2 m high.

Remnants of abandoned earth-stone terraces are found over much of the site area. These range in size from 15-20 meters wide on lower parts of the site area, to 2-5 m wide on the steeper slopes along the eastern edge of the site. Some mounds at the northern end of the site appear to be built onto large terraces.

The dominant occupation is Late Aztec, but there are substantial quantities of Early Aztec material over the northern half of the site area. There is also a significant Mazapan occupation over the northern third of the Aztec site and scattered evidence of use of the site area during Teotihuacan and Tzacualli phase (T.F. 99), probably evidence of exploitation but not actual residences. Pottery density light to medium, with obsidian blades and cores, manos & metates, figurines, malacates, and worked sherds. The Mazapan component was recorded as T.T. 206.

Ethnohistoric Information: See page 156.

Figure 31


0
100
200
Meters
89
TA 31
90
91
Roadway-Canalized Barranca
100
TA 33
99
TA 32
98
97
92
96
95
94
93

T.A. 163

Classification: We have no data on the history of this site which underlies the 20th century compact, high density village of Chipiltepec. It may have been a congregación founded in the late 16th or early 17th century. We have assigned it an Aztec site number assuming that there is some Aztec occupation here.

T.A. 33 (Figs. 31, 32; Plate 32 C, D)

Classification: Isolated ceremonial-civic complex.

Natural Setting: 2370 m. Situated on gently sloping to nearly level ground along the top of a small hill (Cerro la Cruz). Moderate to severe erosion, with shallow soil cover (5-30 cm) and abundant rock outcrops. Pirul trees, wild nopal, and thornbushes are scattered over the site area.

Modern Land Use: Grazing.

Archaeological Remains: Total site area is about 0.8 ha. This is a unique site, and we are not wholly certain of its chronological position. Surface pottery, or occupational debris of any kind, is virtually absent. We tentatively assign it to the Aztec period on the basis of its close proximity to Aztec settlements. The site consists of a series of four mounds strung out for a distance of about 150 m along an east-west axis across the hill top. These mounds, which appear to be solid earth-rock rubble platforms, are built into a complicated system of stone-faced terraces and platforms. The steeper slopes below the main complex are also covered with small stone-faced terraces.

The largest mound (no. 1) lies at the approximate center of the site. This structure measures about 20 m square, and is roughly 1.5 m high. East of the mound are a series of long, parallel platforms defined by broad stone walls. These wall bases are generally 20-30 cm wide, and the distances between walls varies between three and five meters. To the west of Mound no. 1 a gently, intensively terraced slope leads down onto a second structure (Mound no. 2). Two additional mounds (nos. 3 and 4) occur west of the no. 2 structure, along the top of the same low, stone-walled platform. Mounds nos. 2 and 3 measure about five by 20 m in surface area, and stand roughly 50 cm high. Mound no. 4's status as an artificial platform is somewhat questionable. This latter feature measures about four meters square, and 50 cm high. A small modern stone structure (now in ruins) has been built atop it.

Ethnohistoric Information: See page 156.

T.A. 32 (Fig. 31; Plate 34)

Classification: Small Dispersed Village.

Natural Setting: 2310-2360 m. Situated on gently sloping to nearly level ground in the saddle between two steep hills and on the adjacent lower hill flanks. Erosion over the saddle area in the eastern half of the site has been only moderate, and soil depth there is consistently 30-50 cm. Elsewhere erosion has been quite severe, and soil depth is seldom greater than 10-15 cm, with large patches of bare tepetate subsoil. The higher slopes around the edges of the site are thickly covered with pirul trees, wild nopal, and thornbush. No streams or springs; barrancas & washes present.

Figure 32

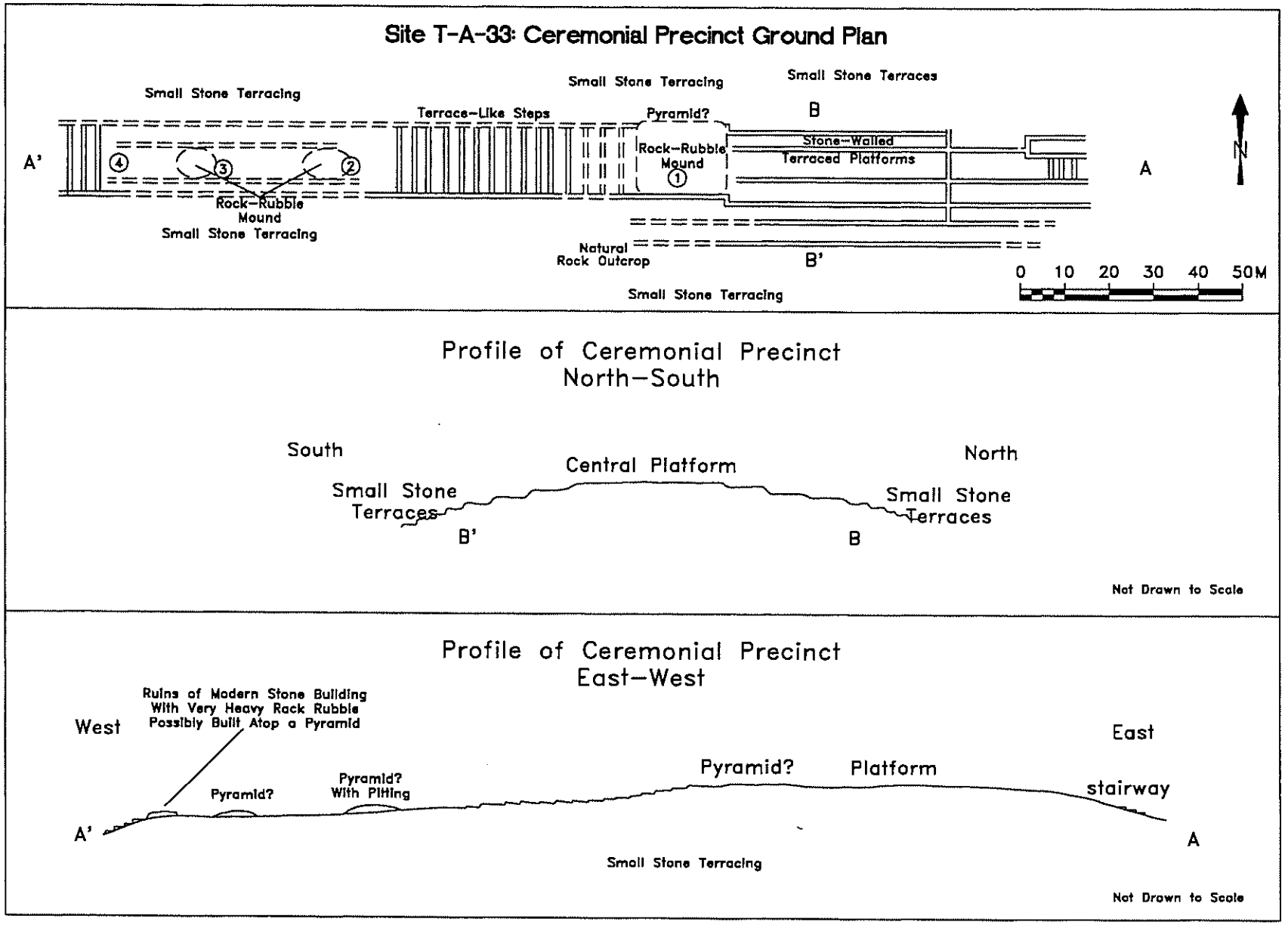
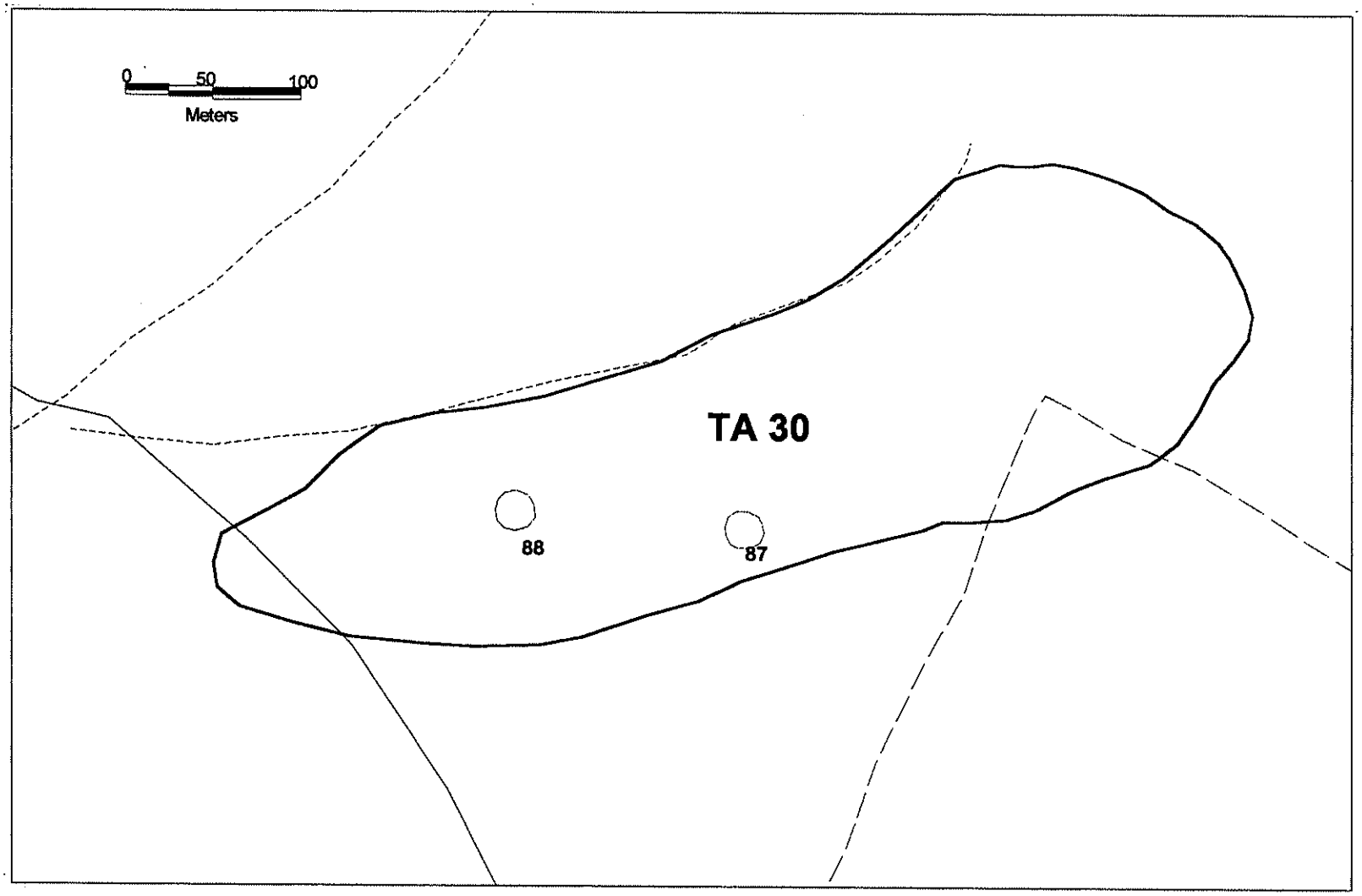

Site T-A-33: Ceremonial Precinct Ground Plan
Small Stone Terracing
Small Stone Terracing
Small Stone Terraces
Terrace-Like Steps
Pyramid?
B
A'
Rock-Rubble Mound
Stone-Walled Terraced Platforms
A
Rock-Rubble Mound
Small Stone Terracing
Natural Rock Outcrop
B'
0 10 20 30 40 50M
Small Stone Terracing
Profile of Ceremonial Precinct North-South
South
Central Platform
North
Small Stone Terraces
Small Stone Terraces
B'
B
Not Drawn to Scale
Profile of Ceremonial Precinct East-West
Ruins of Modern Stone Building With Very Heavy Rock Rubble Possibly Built Atop a Pyramid
West
East
Pyramid?
Pyramid? With Pitting
Pyramid?
Platform
stairway
A'
A
Small Stone Terracing
Not Drawn to Scale

Figure 33



Modern Land Use: The eastern half of the site, where ground is nearly level and soil cover continuous, is intensively cultivated in maize (temporal). Other parts of the site area serve only as pasture, with a few scattered maguey. On the lower main piedmont floor west of the site there is rainfall cultivation of maize, beans, and barley near Chipiltepec.

Archaeological Remains: Total site area is about 22 ha.. Because of the heavy cover of high maize over much of the eastern section of the site, it was not possible to do as intensive a survey in that area as would have been desirable. Our impression is that occupation is relatively more concentrated in this latter area than elsewhere in the site. Nine mounds were identified, most of them clustered within the eastern half of the site. There are undoubtedly several additional preserved structures in the eastern area now covered with high maize, and scattered concentrations of sherds and rock rubble throughout the site indicate the former presence of several more mounds. With one exception, all preserved mounds appear to be domestic residences, measuring 15-25 m in diameter, and standing 10-50 cm high. Traces of stone wall bases are visible on the surface of one mound. Two badly eroded mounds at the far western end of the site appear to be built onto a large stone-faced terrace which runs for several hundred meters around the hillside. Owing to its relatively large size, one mound can be considered as a ceremonial-civic structure, probably a temple platform. This lies near the southeastern corner of the site, measures about 25 m in diameter, and stands roughly 2.5 m high.

Occupational debris is found in light-to-moderate and moderate concentrations on and around preserved mounds. Surface pottery and rock rubble are quite sparse in those areas where mounds are definitely absent.

Both Early and Late Aztec occupation occur in approximately equal proportions over the site. A substantial Late Toltec (T.T. 207) occupation is also present over much of the eastern sections of the Aztec site.

Ethnohistoric Information: See page 156.

T.A. 31 (Fig. 31)

Classification: Hamlet

Natural Setting: 2290-2320 m. Situated on gently sloping ground at the base of a low, steep hill which extends out from the main Patlachique Range. Erosion has been severe, with soil depth seldom exceeding 10-15 cm over most of the site area. Large patches of bare tepetate subsoil are numerous. Scattered pirul trees and a few wild nopal comprise the principal natural vegetation. No streams; no springs; barranca and washes present.

Modern Land Use: The site area itself is mainly grazing land. Lower ground with deeper soil cover along the northern, western, and eastern sides of the site is devoted to rainfall cultivation of maize, beans, and barley, with a few scattered maguey. Large earth terraces and bancals have maintained a continuous shallow soil cover throughout most of the latter area near Chipiltepec.

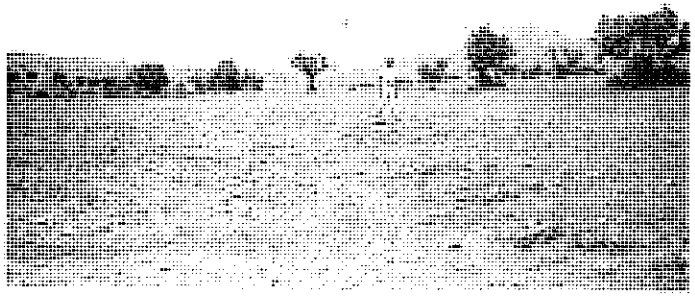
Archaeological Remains: Total site area is about 11 ha. Only three badly destroyed mounds were recognized, but several other scattered concentrations of surface pottery and rock rubble indicate the former presence of several additional structures. All surviving mounds appear to be domestic residences, with a

Plate 34

A

B

C



D

diameter of 20-25 m and standing 20-30 cm high. Surface pottery occurs in light-to-moderate concentrations on and around these mounds. Sherds are quite sparse over those sections of the site where all traces of mounds were absent.

Throughout the site area there are scattered remnants of badly destroyed stone-faced terraces which may be prehispanic. On the higher slopes south of the site stone-faced terraces are more abundant. These latter features measure about three meters wide and 20-30 cm high at the downhill face. These terraces are presently completely abandoned, and probably date to the Aztec period. Occupation throughout the site appears to be entirely Late Aztec.

Ethnohistoric Information: See page 156

T.A. 30 (Fig. 33)

Classification: Hamlet.

Natural Setting: 2350-2370 m. Situated on gently sloping ground at the base of a steep hill. The site actually occurs on the eastern side of the Patlachique Range, at the edge of a major pass through the ridge between the Teotihuacan Valley and the adjacent Texcoco Region. Erosion has been severe throughout the site area, and soil depth seldom exceeds 15 cm. Patches of bare tepetate are abundant. Scattered pirul trees and wild nopal comprise the most abundant natural vegetation. No streams; 1 spring; barranca and washes.

Modern Land Use: Grazing only. The land to the east and southeast of the site area is utilized for rainfall cultivation of maguey, maize, beans, and some barley. Maguey is the dominant crop. Chipiltepec area

Archaeological Remains: Total site area is about 8 ha. Two badly destroyed mounds were noted. Both are apparently domestic residences, now measuring about 20 m in diameter and 20-30 cm high. Surface pottery occurs on and around these structures in light-to-moderate and moderate concentrations. Elsewhere over the site surface pottery and rock rubble occur in variably very light, light, and light-to-moderate concentrations. Occupation is predominantly Late Aztec, with a light scatter of Early Aztec material and a few Late Toltec sherds.

Ethnohistoric Information: See page 156.

T.A. 29 (Figs. 34-38; Plates 35-38, 39 A)

Classification: Small Dispersed Village.

Natural Setting: 2300-2400 m. Situated on gently sloping ground along the western base of the Patlachique Range. Erosion has been most severe over the steeper eastern end of the site and along its southern edge. In both these areas large patches of bare tepetate are numerous, and soil depth seldom exceeds 30 cm. Elsewhere large earth terraces and bancals have prevented wholesale sheet erosion. In such cases soil depth ranges between 20-100 cm. A large barranca (ca. 5 m deep and 20 m wide) forms the site's northern border. The presence of this barranca is the only reason for separating T.A. 29 from T.A. 27 and T.A. 28 to the north. Scattered pirul trees and a few wild nopal are the most significant natural vegetation over the lower site area. Moving eastward onto higher ground, pirul, wild nopal, and thornbush become increasingly abundant. At the far northwestern edge of the site is what appears to be a small, dried-up spring. Faint

Figure 34

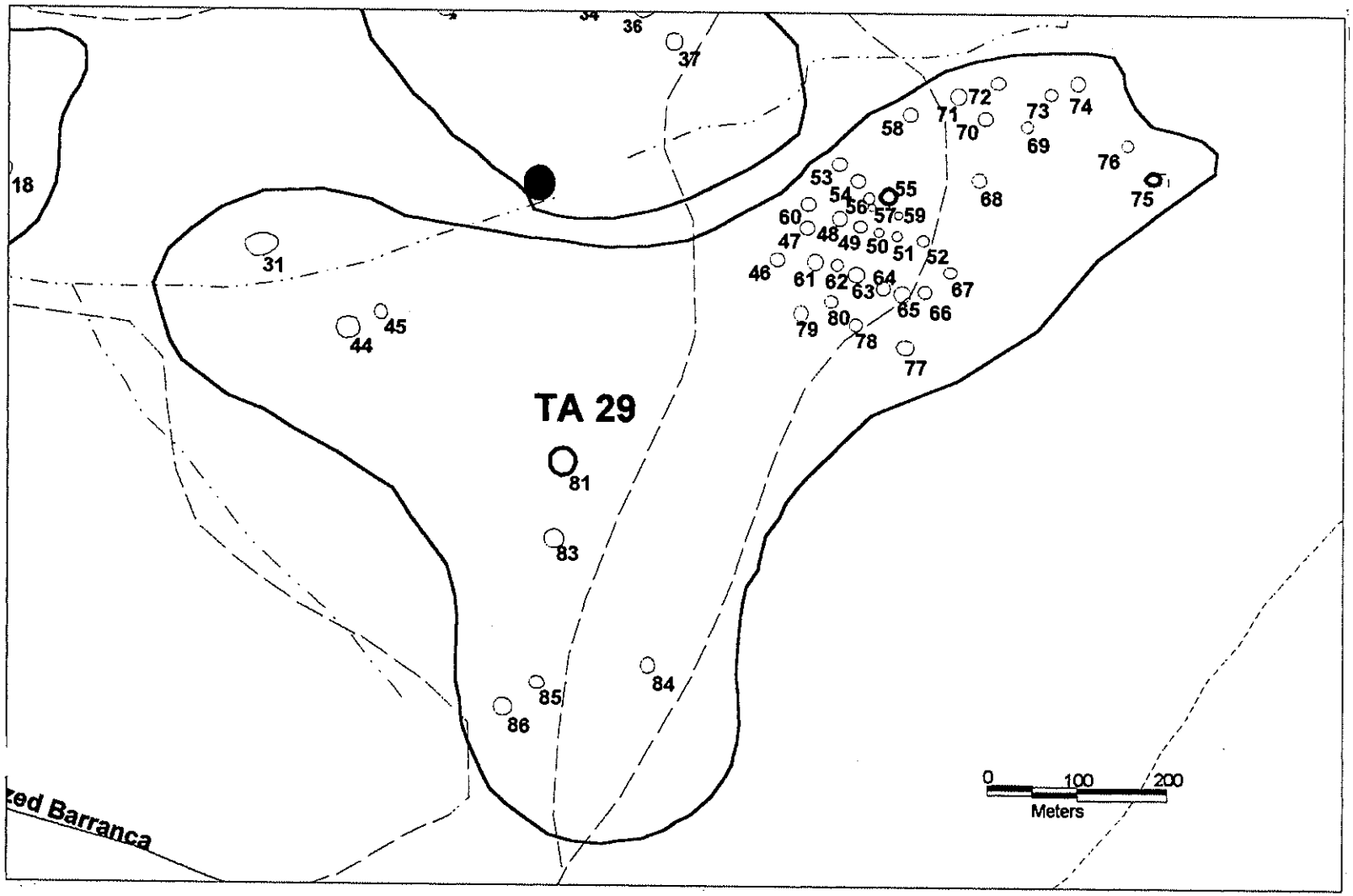


Figure 35

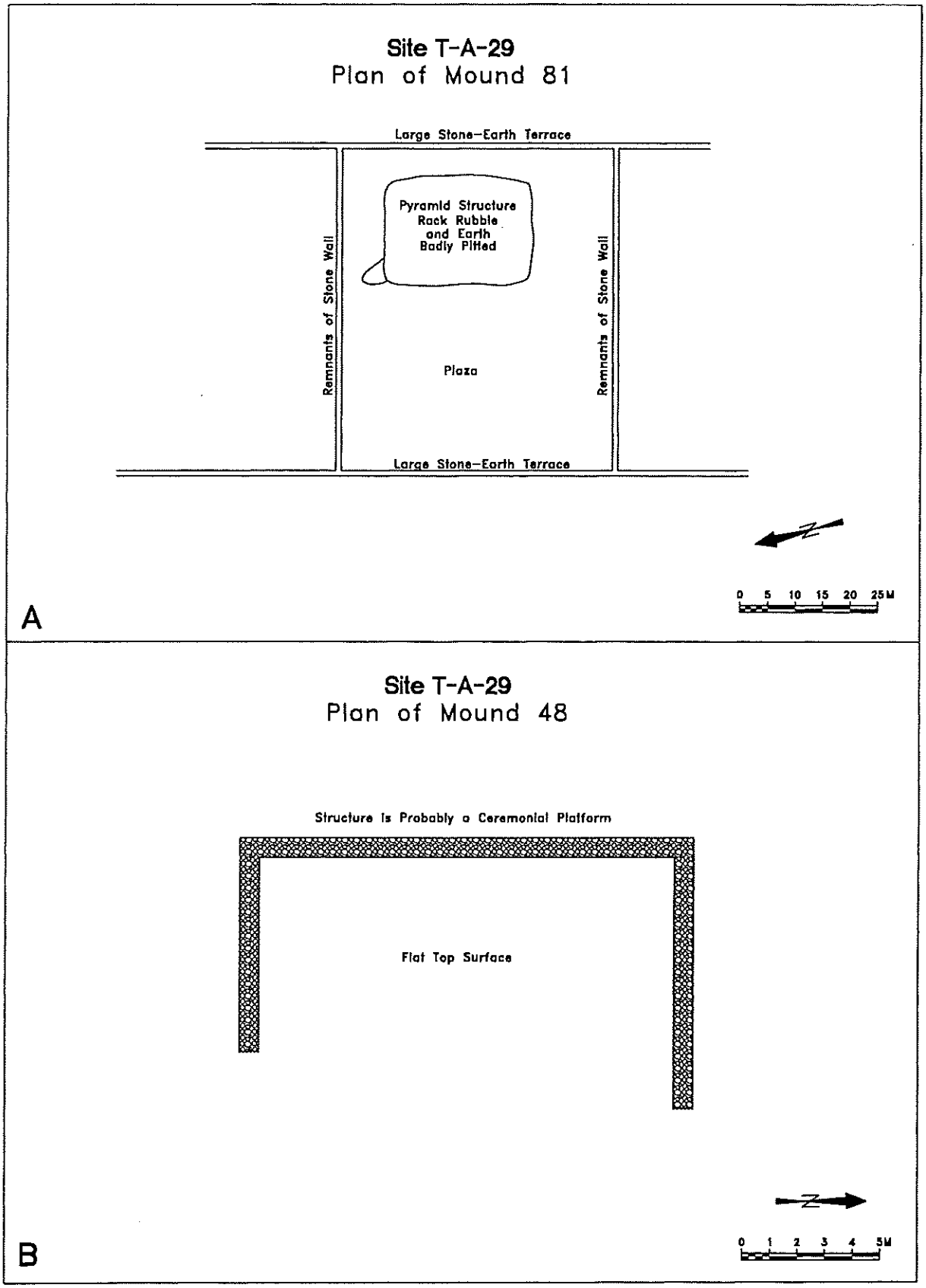

Site T-A-29
Plan of Mound 81
Large Stone–Earth Terrace
Pyramid Structure
Rock Rubble
and Earth
Badly Pitted
Remnants of Stone Wall
Remnants of Stone Wall
Plaza
Large Stone–Earth Terrace
N
0 5 10 15 20 25M
A
Site T-A-29
Plan of Mound 48
Structure Is Probably a Ceremonial Platform
Flat Top Surface
N
0 1 2 3 4 5M
B

Figure 36

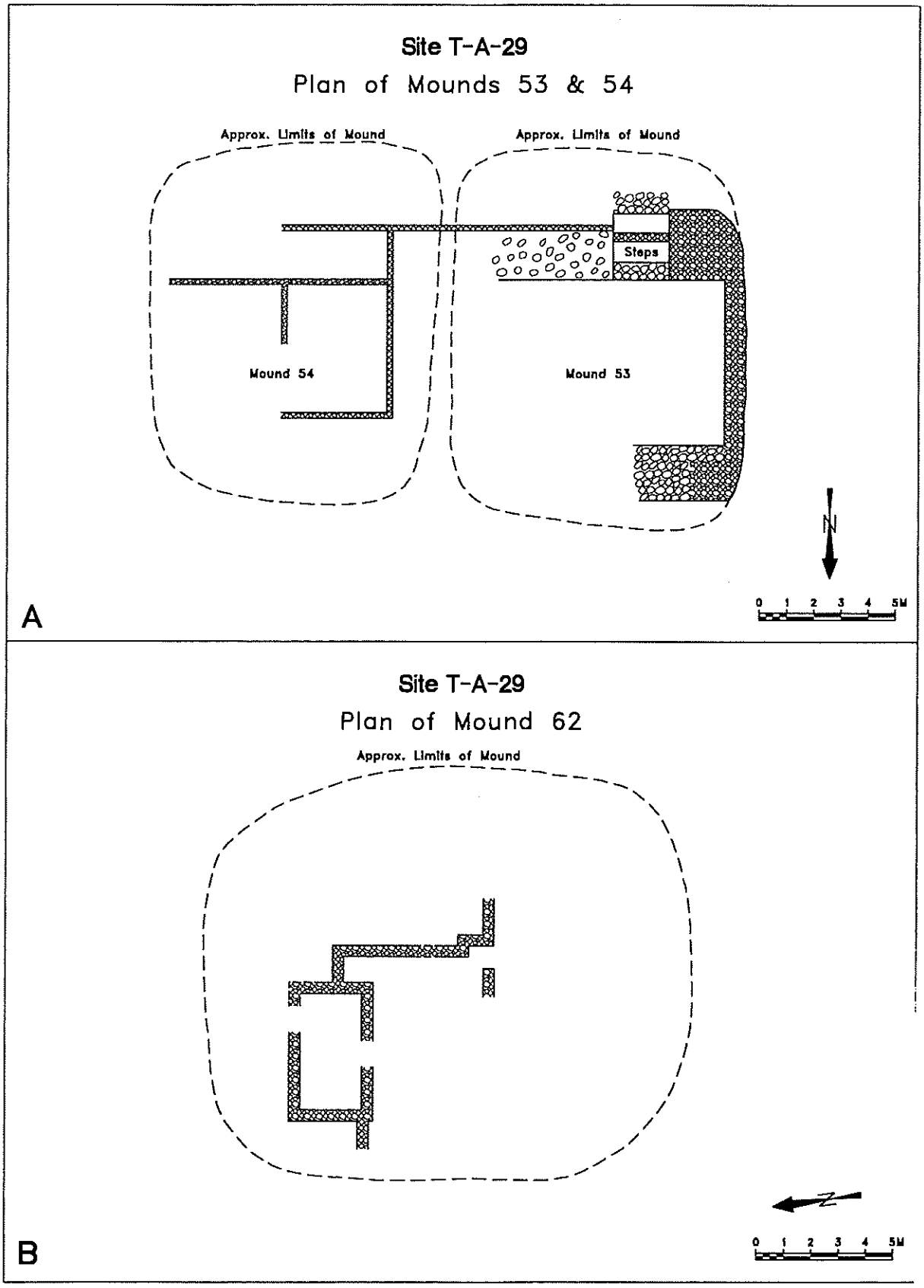

Site T-A-29
Plan of Mounds 53 & 54
Approx. Limits of Mound
Approx. Limits of Mound
Steps
Mound 54
Mound 53
N
0 1 2 3 4 5M
A
Site T-A-29
Plan of Mound 62
Approx. Limits of Mound
N
0 1 2 3 4 5M
B

Figure 37

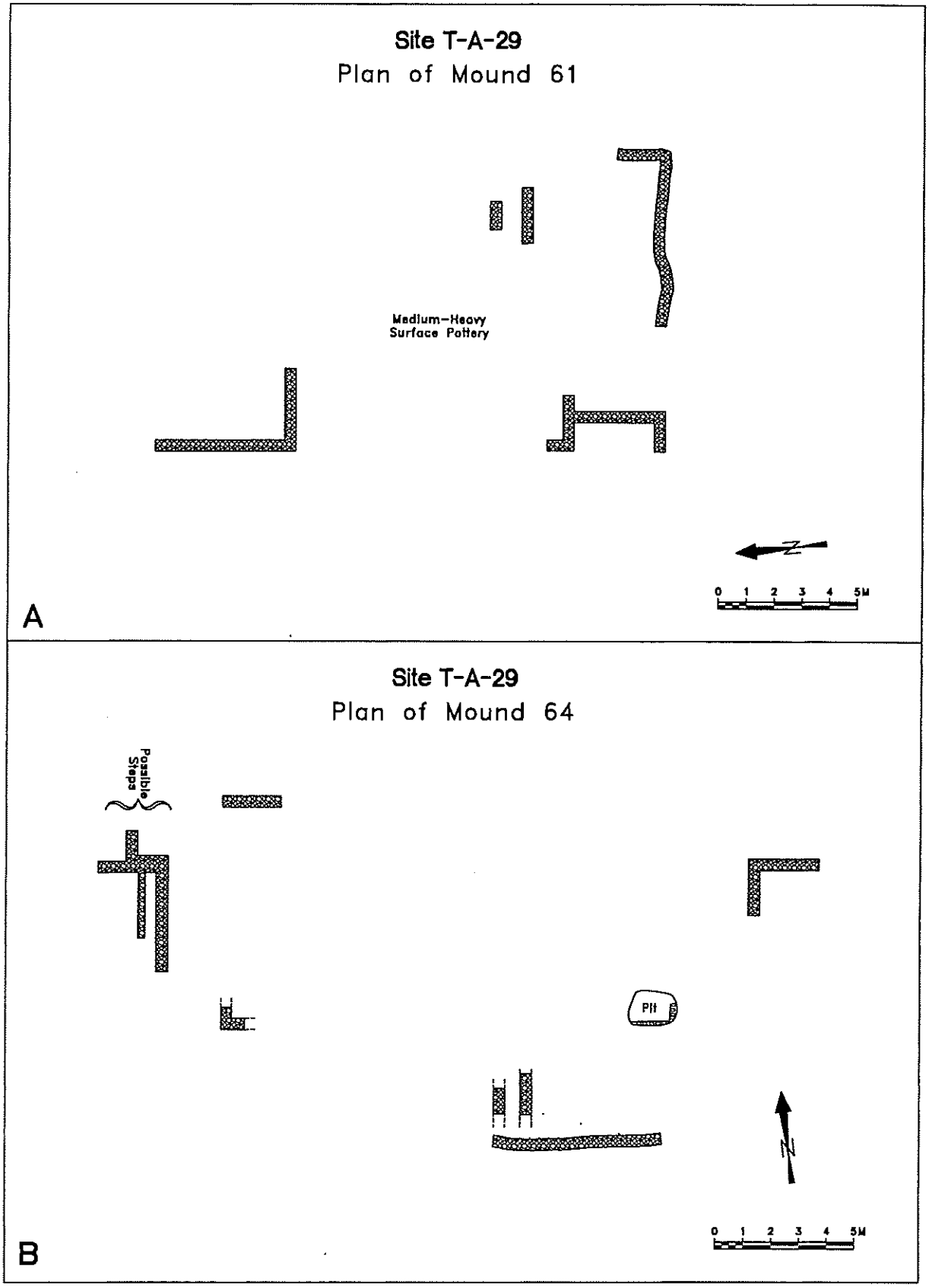

Site T-A-29
Plan of Mound 61
Medium–Heavy
Surface Pottery
N
0 1 2 3 4 5M
A
Site T-A-29
Plan of Mound 64
Possible
Steps
Pit
N
0 1 2 3 4 5M
B

Figure 38

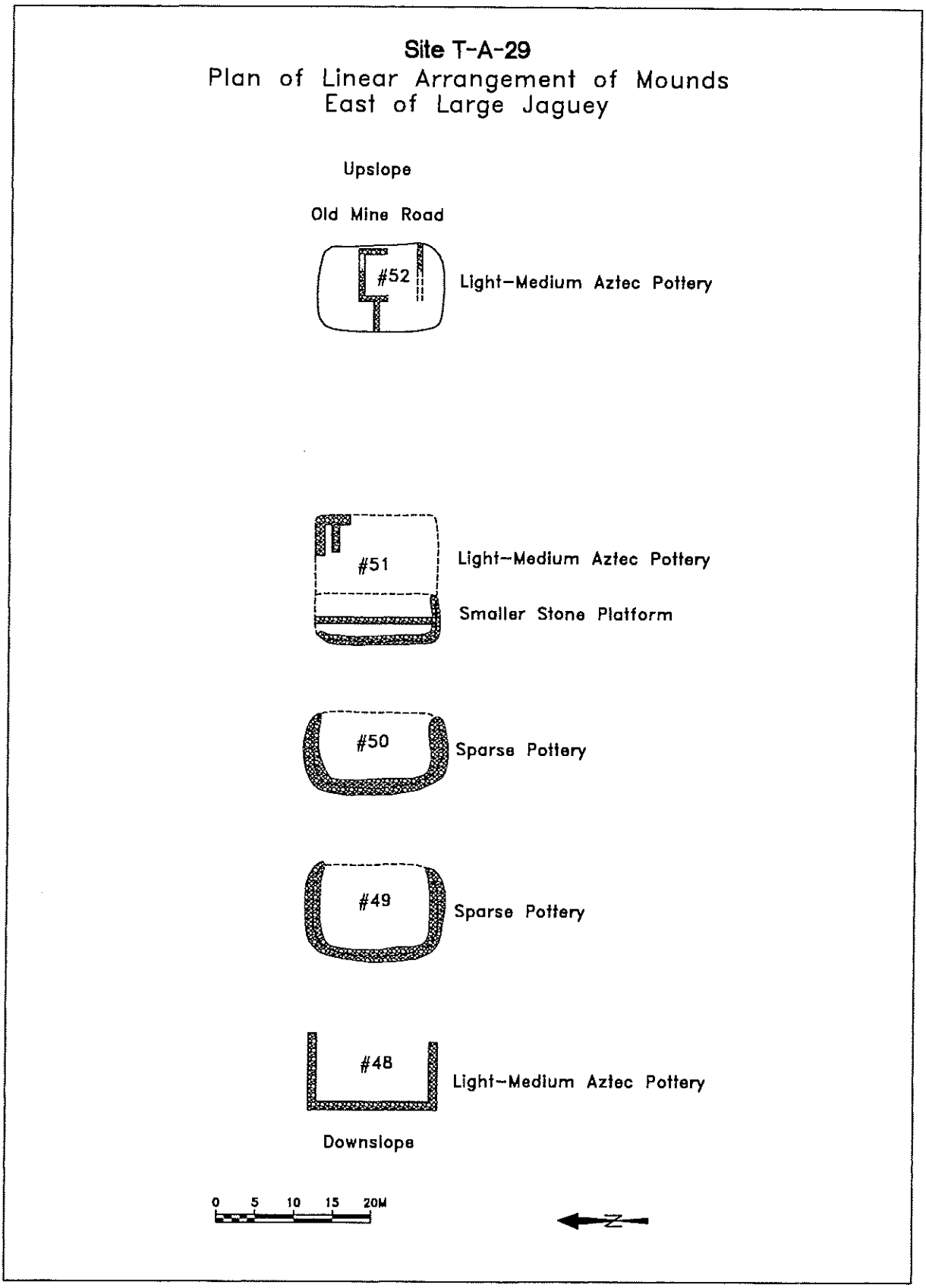
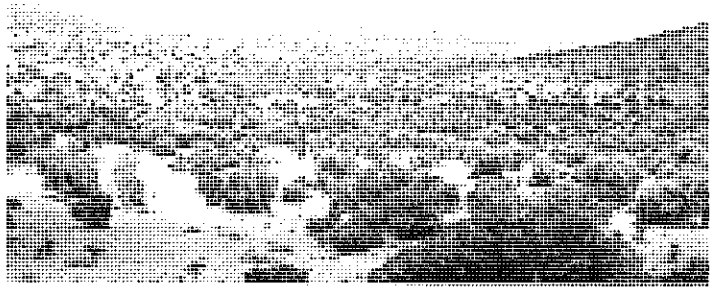
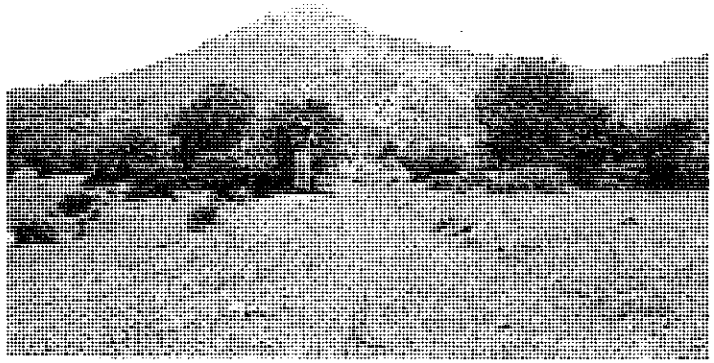

Site T-A-29
Plan of Linear Arrangement of Mounds
East of Large Jaguey
Upslope
Old Mine Road
#52
Light–Medium Aztec Pottery
#51
Light–Medium Aztec Pottery
Smaller Stone Platform
#50
Sparse Pottery
#49
Sparse Pottery
#48
Light–Medium Aztec Pottery
Downslope
0 5 10 15 20M
N

Plate 35

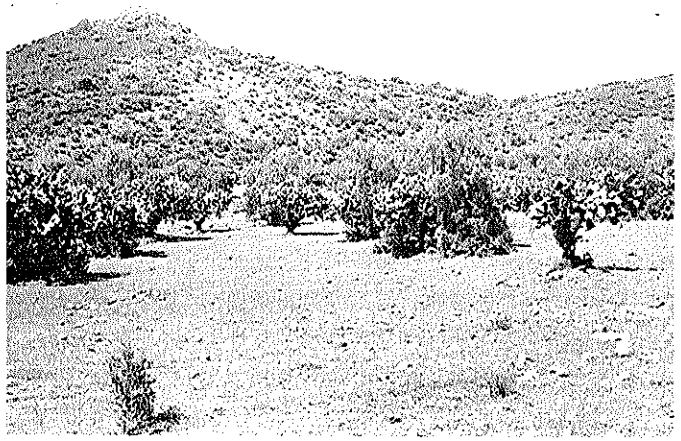


A

B

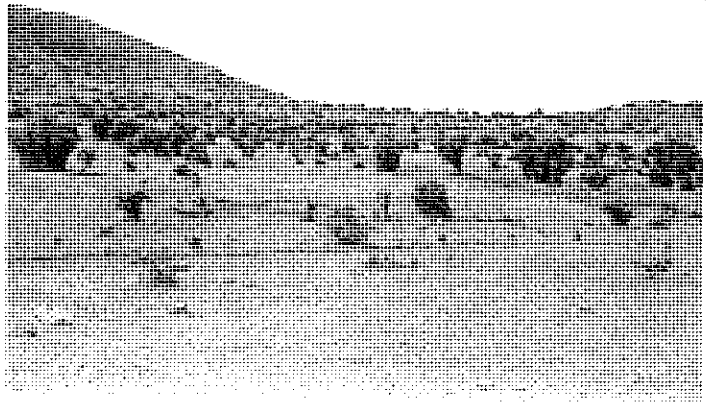


C



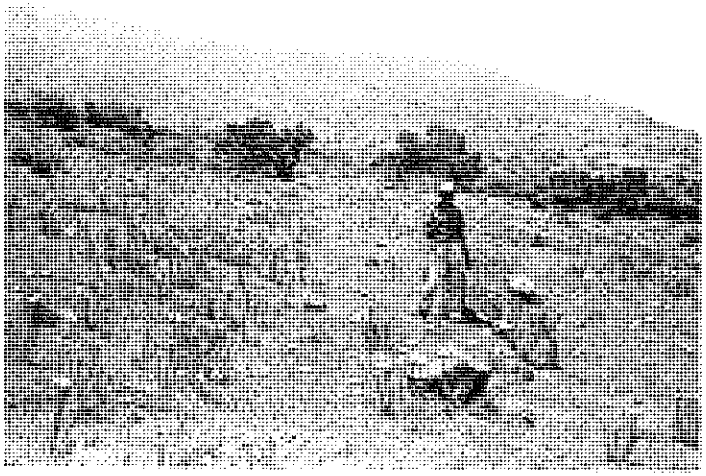
D

Plate 36

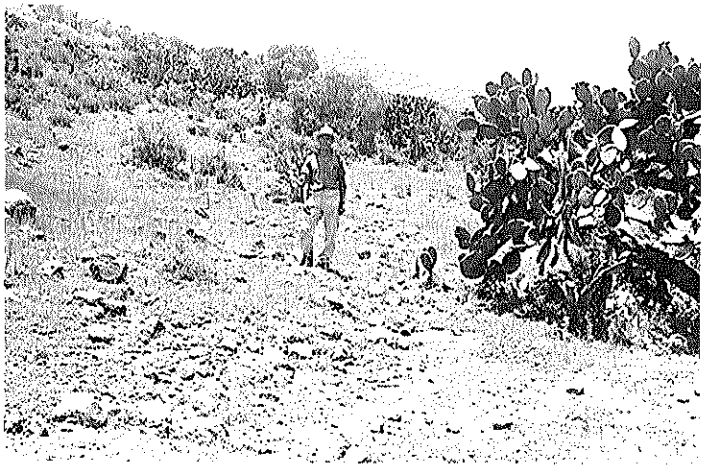


A

B



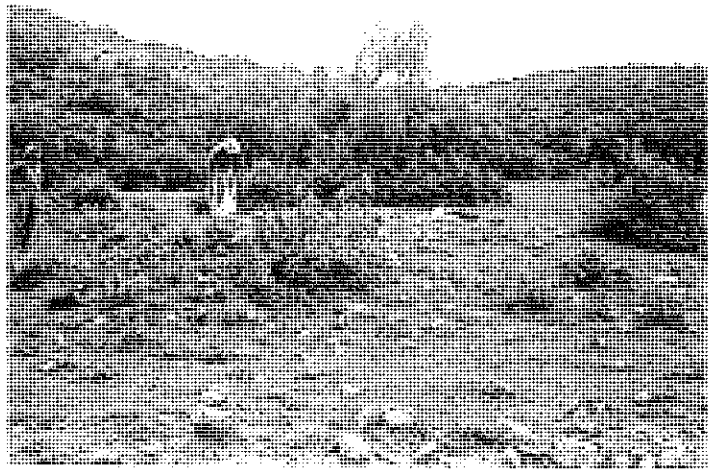
C



D

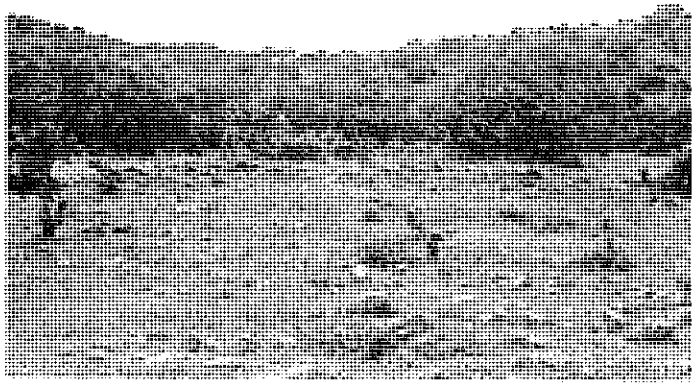
Plate 37

A



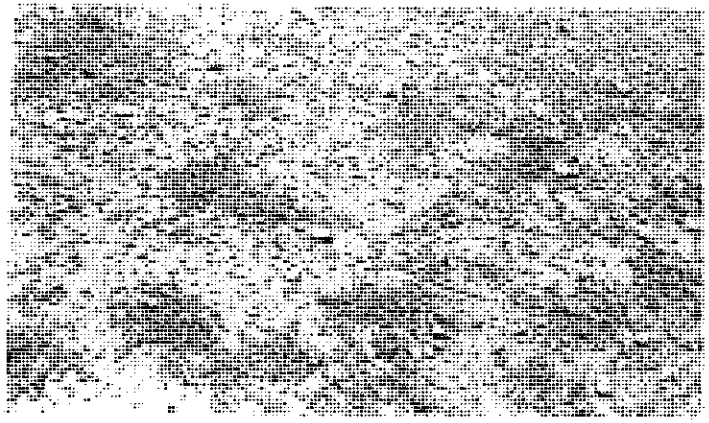
B

C



D

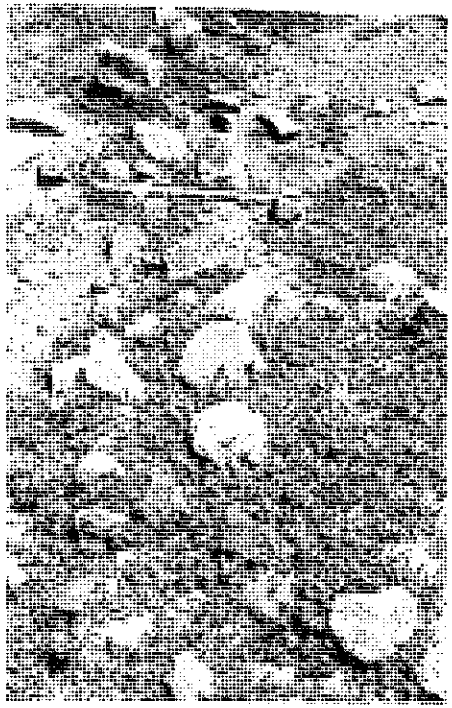
Plate 38

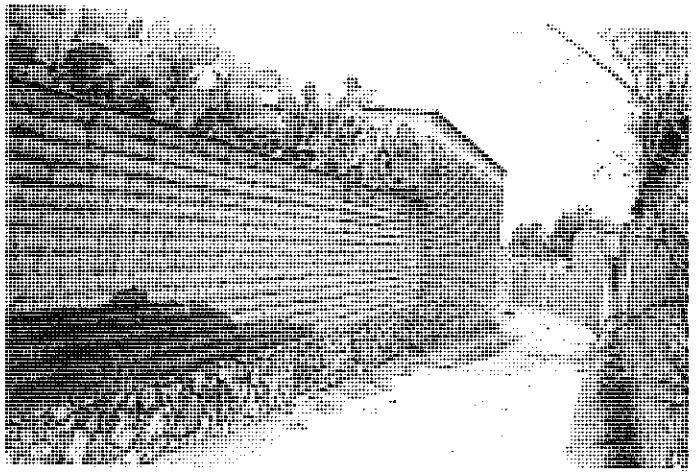


A

B

C

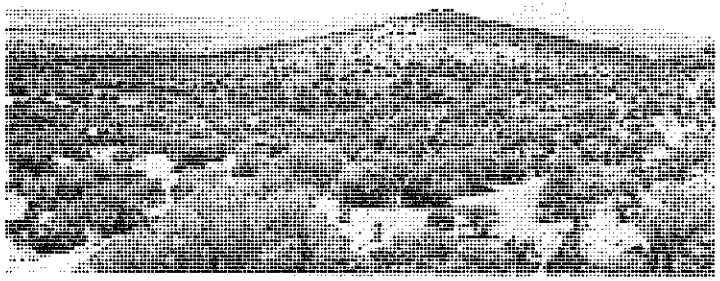




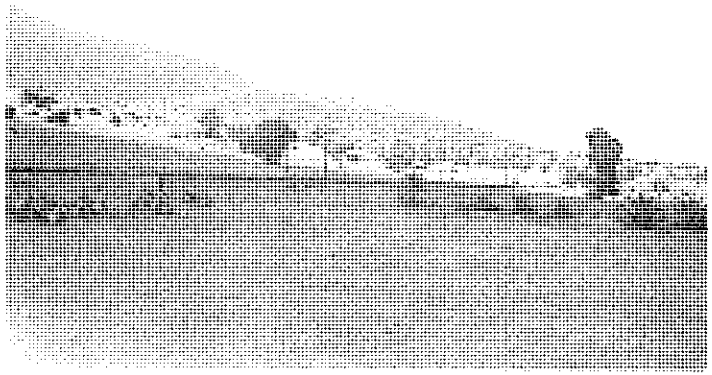
D

Plate 39

A



B



C

traces of a low stone wall can be seen around the edges of the feature.

Modern Land Use: Primarily pasture, with a few fields of maize, beans, and barley in the southern section of the site. All cultivation is now based on natural rainfall, although a series of abandoned ditches or canals suggests the existence of floodwater irrigation in relatively recent times.

Archaeological Remains: Total site area is about 44 ha. A total of 40 mounds were identified, many in a very poor state of preservation. Amorphous concentrations of abundant surface pottery and rock rubble in the most severely eroded portions of the site indicate the former presence of additional structures. Surface pottery on and around mounds is generally fairly abundant--light-to-moderate and moderate concentrations. However, in areas where mounds were definitely absent, sherd debris is generally quite sparse. Mounds and other occupational debris tend to be concentrated in three sections of the site: 1) within the northeastern arm; 2) at the southern end; and 3) over a smaller area at the northwestern end.

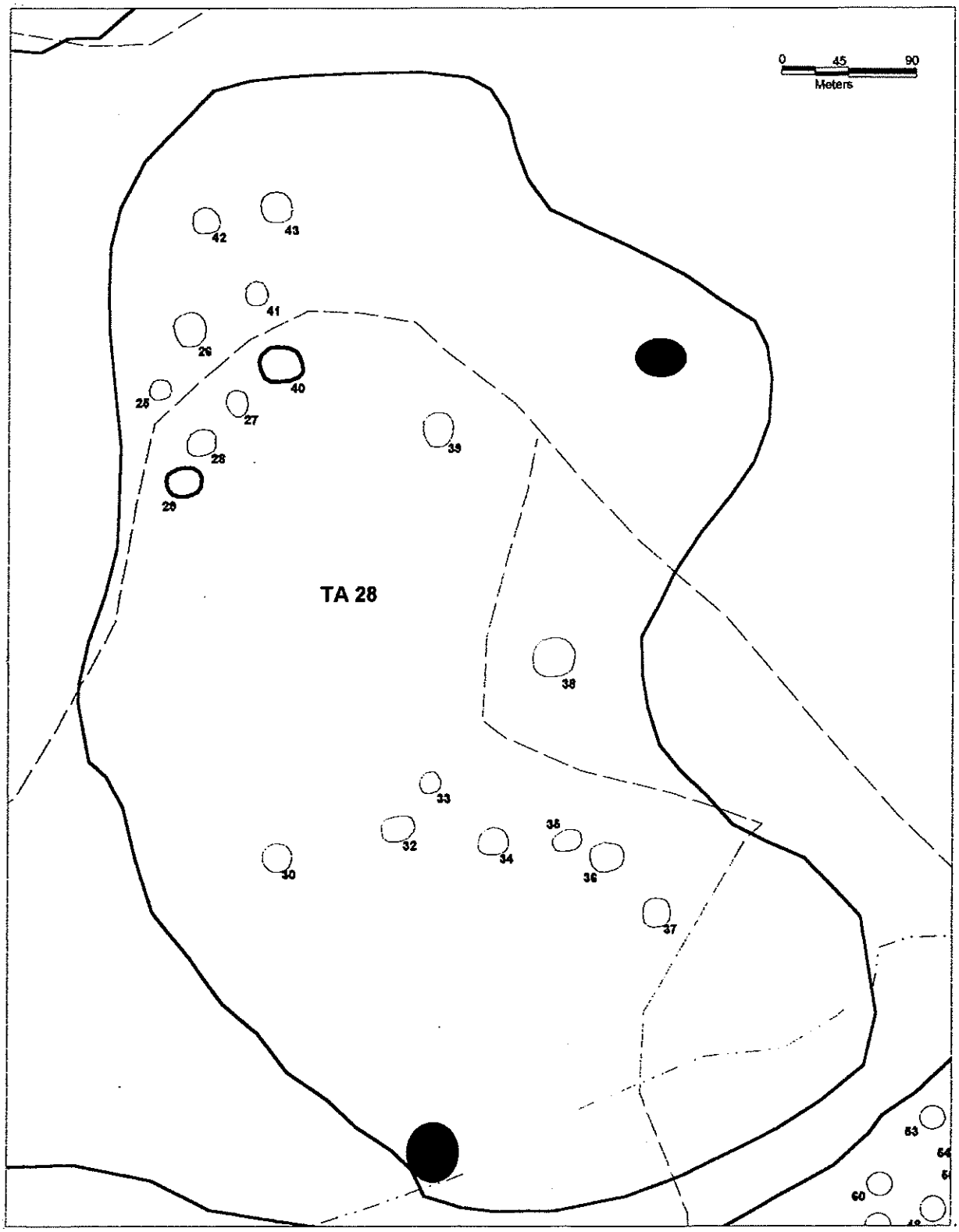
With three exceptions, all identifiable mounds appear to be domestic house platforms. Where best preserved, these structures average about 15-20 m in diameter, and 50-75 cm high. Where more eroded, surface diameter is generally 25-30 m, and the mounds seldom exceed 10-30 cm in height. Eleven of the domestic house platforms show definite traces of stone wall bases on their upper surfaces. In at least one case, a complete rectangular room is outlined, measuring about three by five m. Most mounds are situated at or near the front face of a low earth-stone terrace. These latter features are badly deteriorated, but in many cases they are quite distinct. Within the northeastern arm of the site these terraces are generally about 15-20 m wide and roughly 50 cm high at the downhill face. On lower ground in the site's central area, terraces are consistently larger (ca. 30-60 m wide and extending for several hundred meters parallel to the hillslope). In this latter area there are also similar terraces in areas where Aztec residential structures and occupation debris are absent. Remains of abandoned small stone-faced terraces (two to four m wide) are abundant on higher, unoccupied ground above the entire eastern margin of the site.

Mound 81 is probably a temple platform. This feature is situated slightly southwest of the site's center, near the uphill edge of a broad, low earth terrace which measures about 60 m wide. The mound itself measures about 20 by 30 m in surface area, and stands about two m high. It lies midway along one side of an open plaza-like area which measures about 50 by 60 m in area. The upslope and downslope (east and west) edges of the plaza are delineated by the front and rear edges of the large terrace upon which the mound-plaza complex is built. The north and south limits of the plaza are marked by low stone walls. Surface pottery is quite sparse on and around this entire mound-plaza complex. Mound 75 is a flat topped oval shaped structure measuring 10 x 15 m; it rises four meters above the hill slope. It is built onto a steep hillside on top of a natural prominence and it overlooks the entire site area. Directly behind it is a small plaza surrounded by wall remnants. It is probably a ceremonial complex. Mound 55 may be a third but badly eroded temple platform, again fronting on a small walled plaza. It measures 10 x 15 m in basal area.

Occupation is predominantly Late Aztec, with a lighter concentration of Early Aztec sherds over most of the site. Substantial Late Toltec occupation (T.T. 208) occurs in the northwestern and northeastern sections of the Aztec site.

Ethnohistoric Information: This site was probably a spatial component of San Pedro Tepetitlan, a sujeto of Acolman in 1580.

Figure 39


0 45 90
Meters
TA 28
42
43
41
26
40
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36
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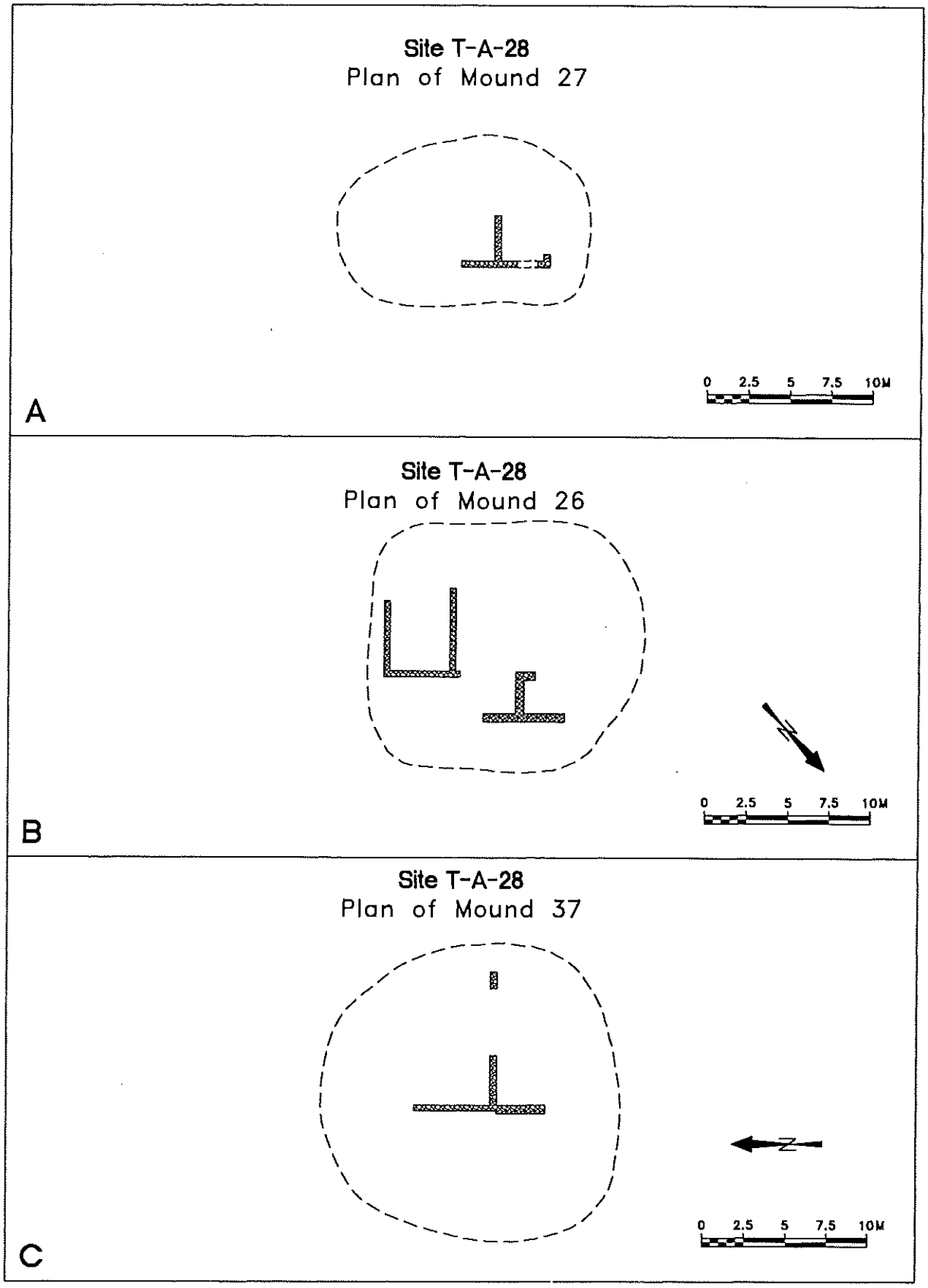
37
53
60

Figure 40


Site T-A-28
Plan of Mound 27
0 2.5 5 7.5 10M
A
Site T-A-28
Plan of Mound 26
0 2.5 5 7.5 10M
B
Site T-A-28
Plan of Mound 37
N
0 2.5 5 7.5 10M
C

T.A. 28 (Figs. 39-40; Plate 39 A, B)

Classification: Small Dispersed Village.

Natural Setting: 2320-2350 m. Occupies a low saddle of gently sloping to nearly level ground between two hills. The south edge of the site area is defined by a large barranca (ca. 5 m deep and 20 m wide). A much deeper barranca (ca. 10 m deep and 30 m wide) runs along the north edge of the site, and forms the border between T.A.-26 and T.A.-28. Erosion has been moderate to severe. Soil depth averages about 10-30 cm over most of the site, with more severe erosion along the northern and southern edges where large patches of bare tepetate subsoil are exposed. Scattered pirul trees and wild nopal comprise the principal natural vegetation.

Modern Land Use: Primarily pasture, with rainfall cultivation of maguey, maize, beans, and barley at the southern end of the site.

Archaeological Remains: Total site area is about 28 ha. A total of 17 mounds were identified, most in a very poor state of preservation. Two mound clusters were discerned: one of eight or nine structures within the far northwestern corner of the site; a second of seven or eight mounds strung out in linear form across the south-central site area. Scattered concentrations of surface pottery and rock rubble throughout much of the remaining site area indicate the former existence of several additional mounds. Occupation is dispersed, with light-to-moderate and moderate sherd concentrations on and around mounds, and quite sparse sherd cover where mounds are definitely absent. Nearly all preserved mounds appear to represent domestic residential structures--most are roughly 15-30 m in diameter, and less than 30 cm high. Remnants of stone wall bases were found on the surfaces of four mounds. Two mounds are markedly higher than average, and may represent small ceremonial-civic architecture. Both are located in the northwest mound cluster, and stand between 1.5 and 2 m high, with diameters of 15-20 m (Mounds 29, 40).

Occupation is dominantly Late Aztec, with a significant quantity of Early Aztec material. A light Late Toltec occupation was also noted (T.T. 209).

Ethnohistoric Information: See T.A. 129.

T.A. 26 (Fig. 41)

Classification: Small Dispersed Village.

Natural Setting: 2280-2370 m. Situated on gently sloping ground at the base of a steep hill, with the northern edge of the site extending up onto the more steeply sloping hill flanks. Severe erosion. Shallow soil cover, with large patches of bare rock and exposed tepetate subsoil. A large barranca (ca 10 m deep, 50 m wide) cuts across the entire length of the site's southern edge. The hillslope is heavily covered with wild nopal and thick stands of thornbush. Pirul trees and wild nopal are scattered over the lower site area.

Modern Land Use: Hillslopes and eastern edge of the site area now serve only for grazing. Small fields of maize, beans, and barley are found on lower ground along the west edge of the site (all rainfall cultivation). A series of large abandoned stone quarries occur at the eastern edge of the site. These are linked by a well-constructed stone road and bridge, and probably date mainly to the turn of the century.

Figure 41

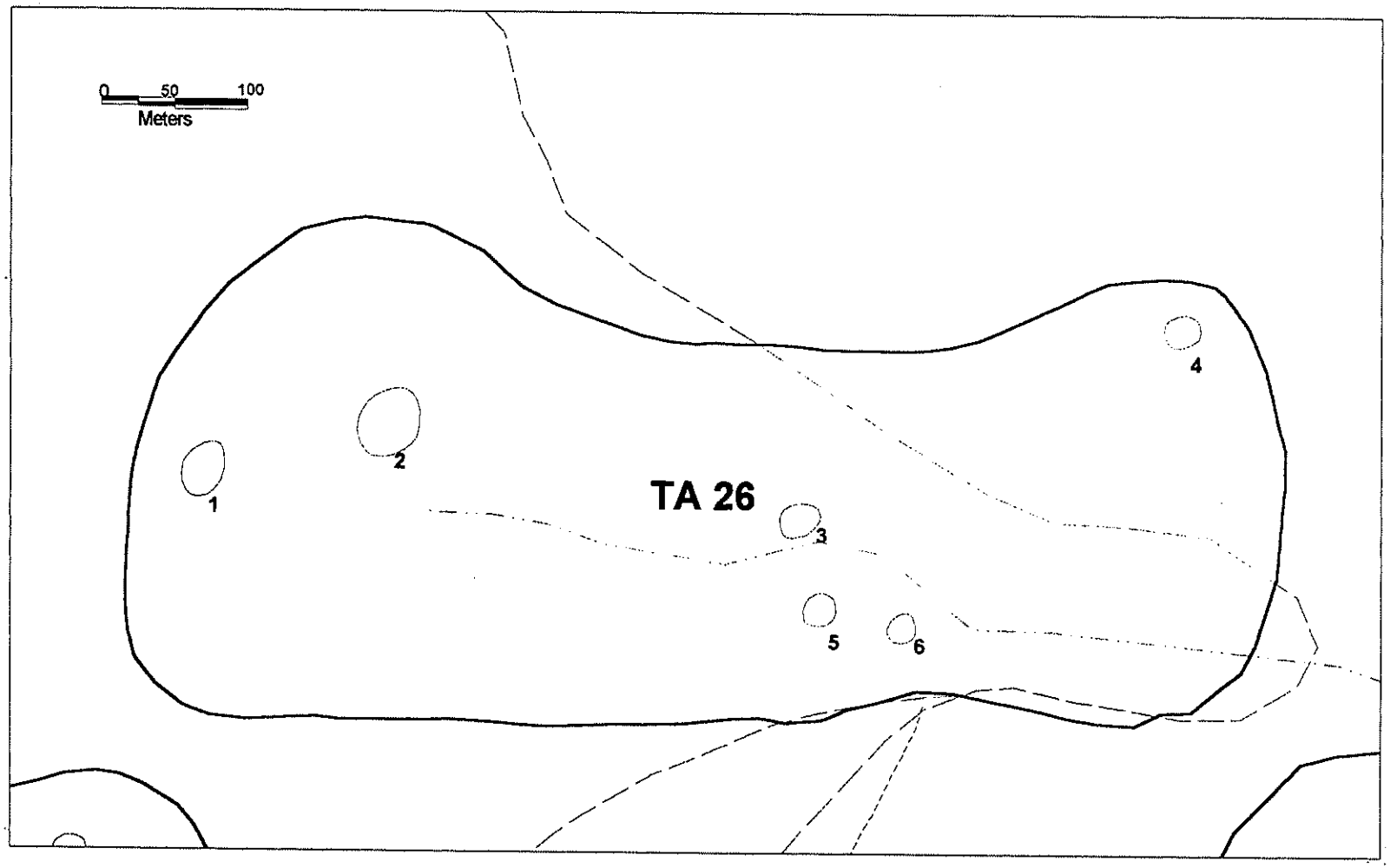
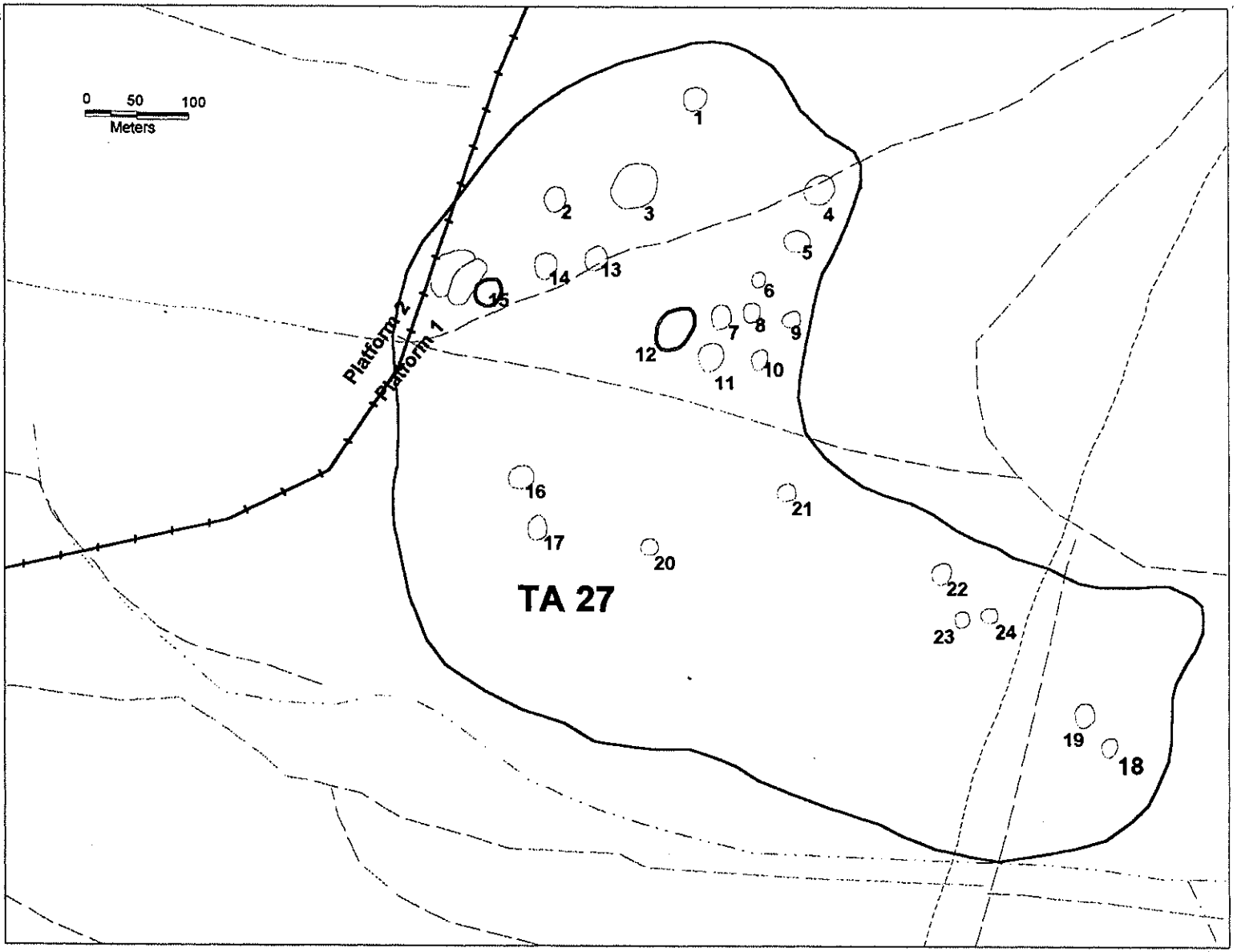


Figure 42


0 50 100
Meters
Platform 2
Platform 1
TA 27
1
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24

Figure 43

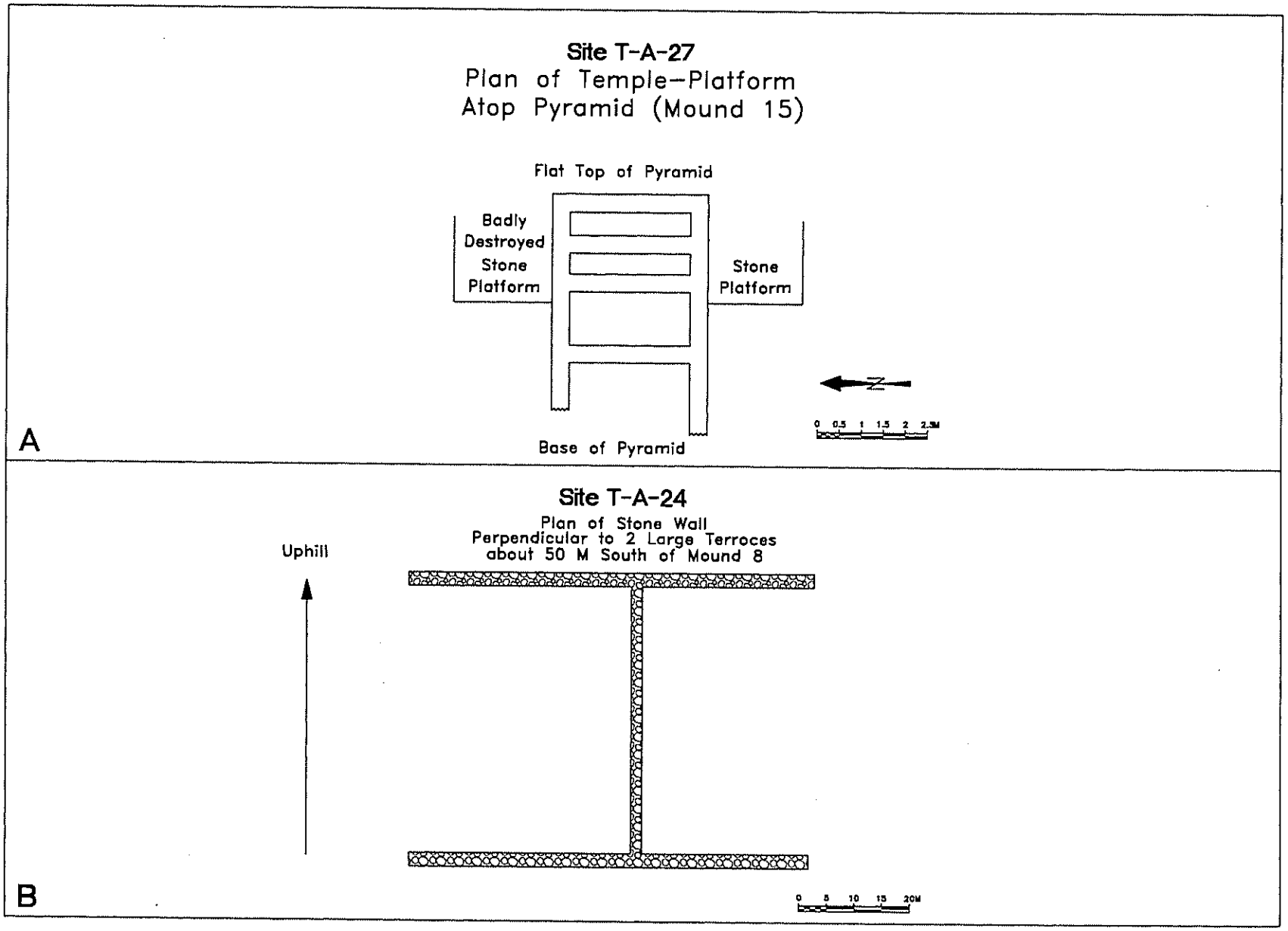
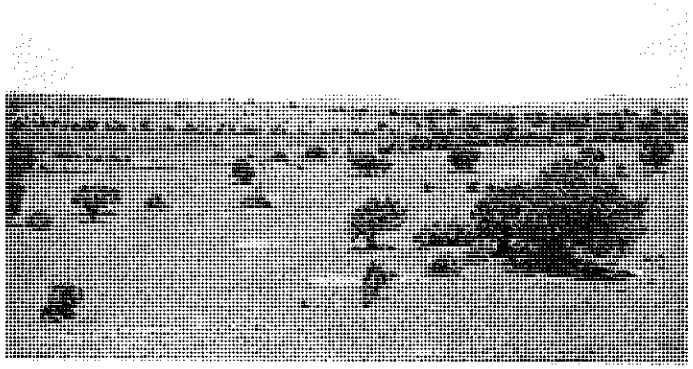
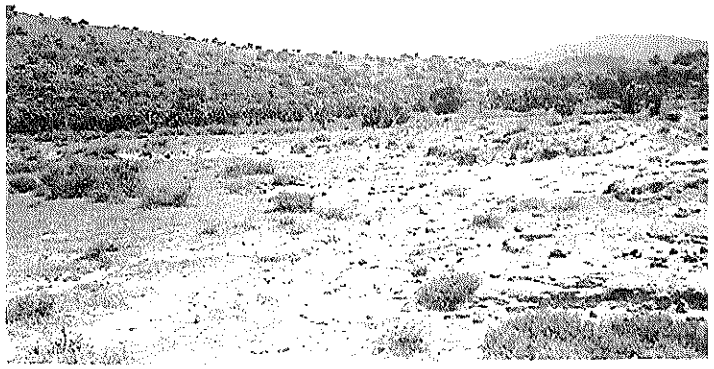

Site T-A-27
Plan of Temple-Platform
Atop Pyramid (Mound 15)
Flat Top of Pyramid
Badly Destroyed Stone Platform
Stone Platform
Base of Pyramid
N
0 0.5 1 1.5 2 2.5M
A
Site T-A-24
Plan of Stone Wall
Perpendicular to 2 Large Terroces
about 50 M South of Mound 8
Uphill
0 5 10 15 20M
B

Plate 40



A

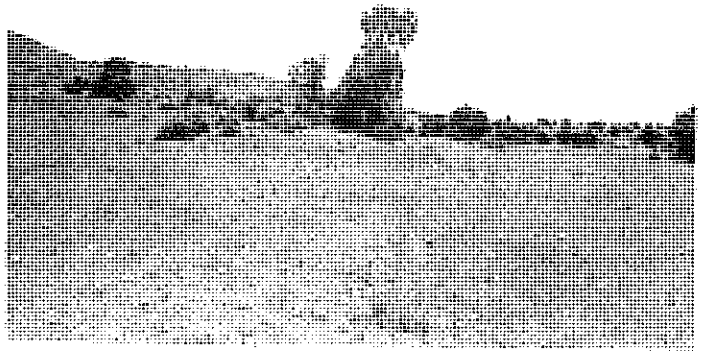


B

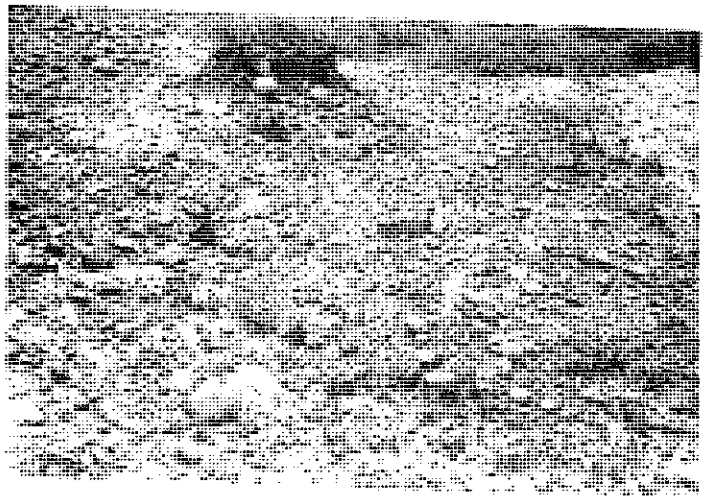
C

D

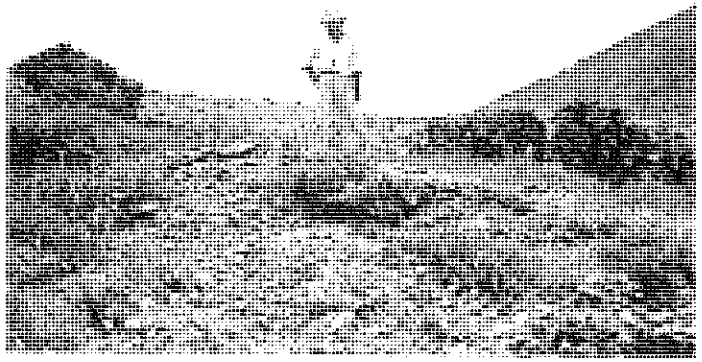
Plate 41



A



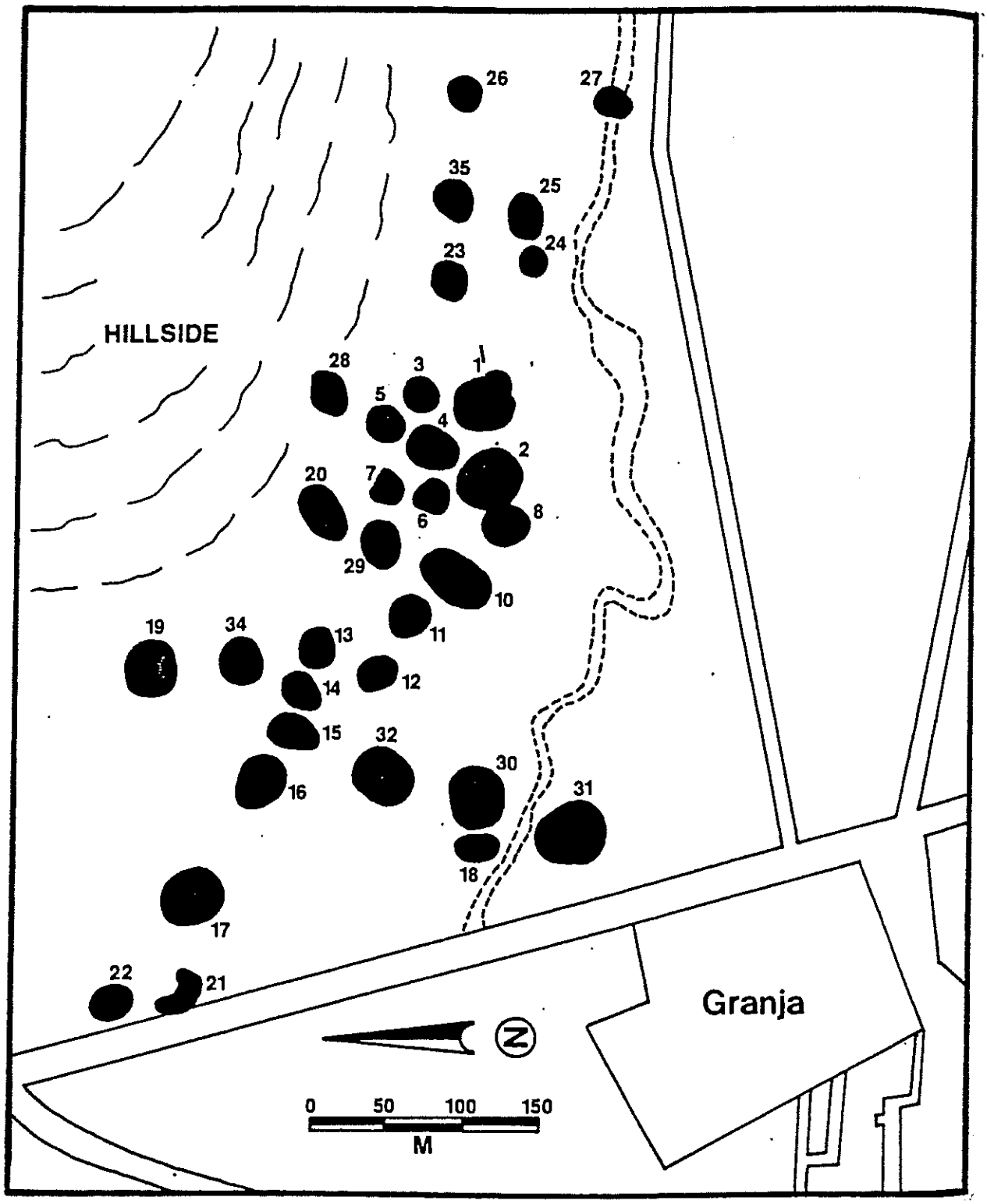
B



C

D

Figure 44


HILLSIDE
Granja
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Archaeological Remains: Total site area is about 22 ha. Occupation is quite dispersed. Six badly eroded mounds were noted. These features occur scattered over the site area, and intermittent heavy concentrations of sherds and rock rubble along the barranca's edge indicate the former presence of several more structures. Surface pottery is light-to-moderate and moderate on and immediately around the mounds, but extremely sparse elsewhere. Recognizable mounds measure roughly 30 m in diameter, and now rise only a few cm above ground level. Traces of stone wall bases were noted on one mound. All structures appear to be domestic house platforms. Occupation is dominantly Late Aztec, with a light scatter of Early Aztec and Late Toltec material.

Ethnohistoric Information: See T.A. 29.

T.A. 27 (Figs. 42, 43; Plates 39 A, C, 40, 41)

Classification: Small Dispersed Village.

Natural Setting: 2270-2300 m. Situated on gently sloping ground around the western and southern flanks of a low hill (Cerro Santa Cruz). Erosion has been moderate to severe. Average soil depth varies from ca. 10-15 cm in upper parts of the site to about 50-75 cm on lower ground. Erosion has been particularly severe in the southern and western sections where there are large patches of bare tepetate subsoil. A broad, shallow barranca cuts along the southern edge of the site. Major natural vegetation consists of scattered pirul trees and wild nopal.

Modern Land Use: Most of the site area is used a pasture. The lower-lying land at the western and southern margins of the site are devoted to rainfall cultivation of maize, beans, and barley. A few scattered maguey are present.

Archaeological Remains: Total site area is about 35 ha. Twenty-four mounds were identified, most of them clustered at the northern end of the site where erosion has been the least severe. Numerous concentrations of surface pottery and rock rubble are found scattered over more eroded areas, indicating the former presence of several other structures. Surface pottery generally occurs in light-to-moderate and moderate concentrations on and around mound structures, and is relatively light in areas where mounds were obviously absent. Most mounds appear to be small domestic residences, generally measuring 20-30 m in diameter and 50-75 cm high. Remnants of stone wall bases were noted on three mounds.

There are two substantially larger structures, both of which may have had a ceremonial-civic functions: 1) At the west edge of the site, immediately adjacent to the railroad track, is a structure which now stands about 2 m high, and measures roughly 15 m on a side. Several pits recently excavated into the mounds upper surface indicate this structure is constructed of solid earth and rock rubble fill. Traces of stone wall bases on the mound's flat upper surface outline a series of two or three adjacent rectangular spaces, each about three meters long and one meter wide. These wall bases lie at the head of what appears to be a badly deteriorated stone stairway on the mound's west face. This main mound sits on the east side of what appears to be a two-level plaza, measuring about 40 by 60 m. 2) About 150 m upslope and due east from the first pyramidal mound is second large structure. This is comprised of a single mound built into the hillslope, standing about 2.5 m high at its front face and measuring about 20 m in diameter.

Occupation is predominantly Late Aztec, with a light scatter of Early Aztec and Late Toltec (T.T. 210) material. Some posthispanic occupation was also noted in the northern site area.

Ethnohistoric Information: see T.A. 29

T.A. 166 (Fig. 44)

Classification: We have assigned the number T.A. 166 to the compact, high density 20th century village of San Pedro Tepetitlan. The village itself was not surveyed during the Teotihuacan Valley Project. On the southeastern periphery of the village we located a site with Toltec and Teotihuacan occupation, which was surveyed by those teams. In their survey they recorded Aztec occupation. We have assumed that this site extends beyond the surveyed area and underneath the 20th century village of Tepetitlan. In the 1580 Relación San Pedro Tepetitlan is listed as a subject village of Acolman. Because the Patlachique Range at this point has a high projecting promontory (Cerro Tezontlalli) constricting the area occupied by the village to a very narrow band along the edge of the alluvial plain we feel almost certain that the Aztec occupation in fact does extend underneath this community. The surveyed portion of this site was probably a small dispersed village in the Late Toltec times, a hamlet in the Early Toltec phase,and either a small or large dispersed village in the Late Aztec phase, in the latter case assuming the site does extend under the modern village.

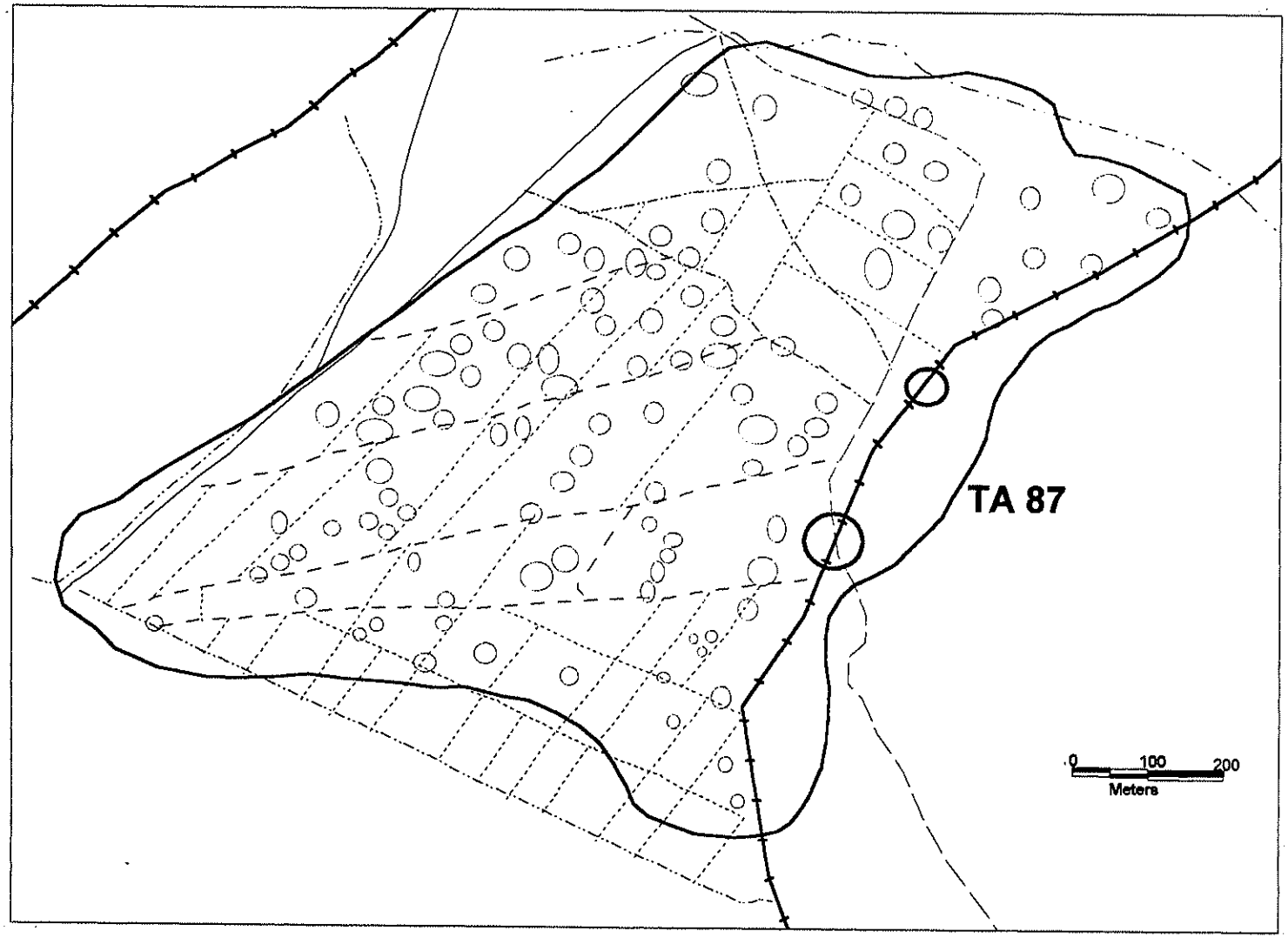
Natural Setting: The surveyed portion of the site is located at 2292 to 2296 m, on a hillside rising abruptly from the irrigated plain, just east of the Granjas of San Miguel Xometla. This is a rocky, barren slope today. In several areas, however, wetness and sponginess of the soil indicates that springs may have formerly surfaced within the site area. Erosion has been extensive. The soils are very thin where present. To the south of the site runs a barranca which is about a meter deep, where it comes into the plain, but reaches a depth of approximately 24 m at the southeastern, or upper edge of the site. The site is located on a hilly slope to the south of the large Xometla type site (T.T. 21) and to the south of Cerro Tezontlalli. The hills continue to rise father east from the site, providing a source of floodwater for this area. The canal of San Antonio and the irrigated plain are directly to the west of the site area.

Modern Land Use: This land pertains to the ejido of San Pedro Tepetitlan. No agricultural utilization, except for the maguey and nopal and some scanty grazing. No modern structures. A wall of the Granja rests on a mound at the extreme western edge of the site. An abandoned, ruined dam is found just to the south of the site, in the barranca.

Archaeological Remains: Within the site are at least 33 mounds, some attributable to the Toltec occupation. The majority of these mounds are in good condition, except for those near the Granja, and those near the top of the hill, which have been seriously pitted and pothunted. The pottery distribution is localized and variable in frequency from sparse to heavy. Pottery counts taken between Mounds 1 and 2 show 3 per m^2, while a count taken on Mound 3 reached 76 per m^2. The Early Toltec occupation is confined to the western and lower part of the site, in approximately the same area as the earlier Teotihuacan village, T.C. 131. Lithic material, including mano and metate fragments and obsidian blades and scrapers are abundant.

Erosion has exposed wall stubs and house floors in a number of areas of the site. In the process of exposing one of these, a burial with associated Toltec pottery was encountered. The Late Toltec and Aztec occupation cover an area of 12 ha, nearly four times as great as that in the Early Toltec occupation. This increase in area was accompanied by a drop in population density per unit of area for both the Late Toltec and Aztec occupations. The mounds here are in good condition for observation because of the lack of cultivation, erosion, and ironically, the pitting or pothunting activities. Numerous wall stubs are observable. Other occupations include a Zacualli hamlet T.F. 242, a Teotihuacan hamlet T.C. 131; and Toltec sites T.T. 22 and 160.

Figure 45



Site Area: 12 ha in Late Toltec and Aztec times; 3.2 ha in Early Toltec times.

Ethnohistoric Information: See T.A. 29.

T.A. 87 (Fig. 45)

Classification: Multi-phase site. This site seems to have been a medium density compact village or town in Early Toltec times; a large, dispersed village in the Late Toltec and Aztec phases.

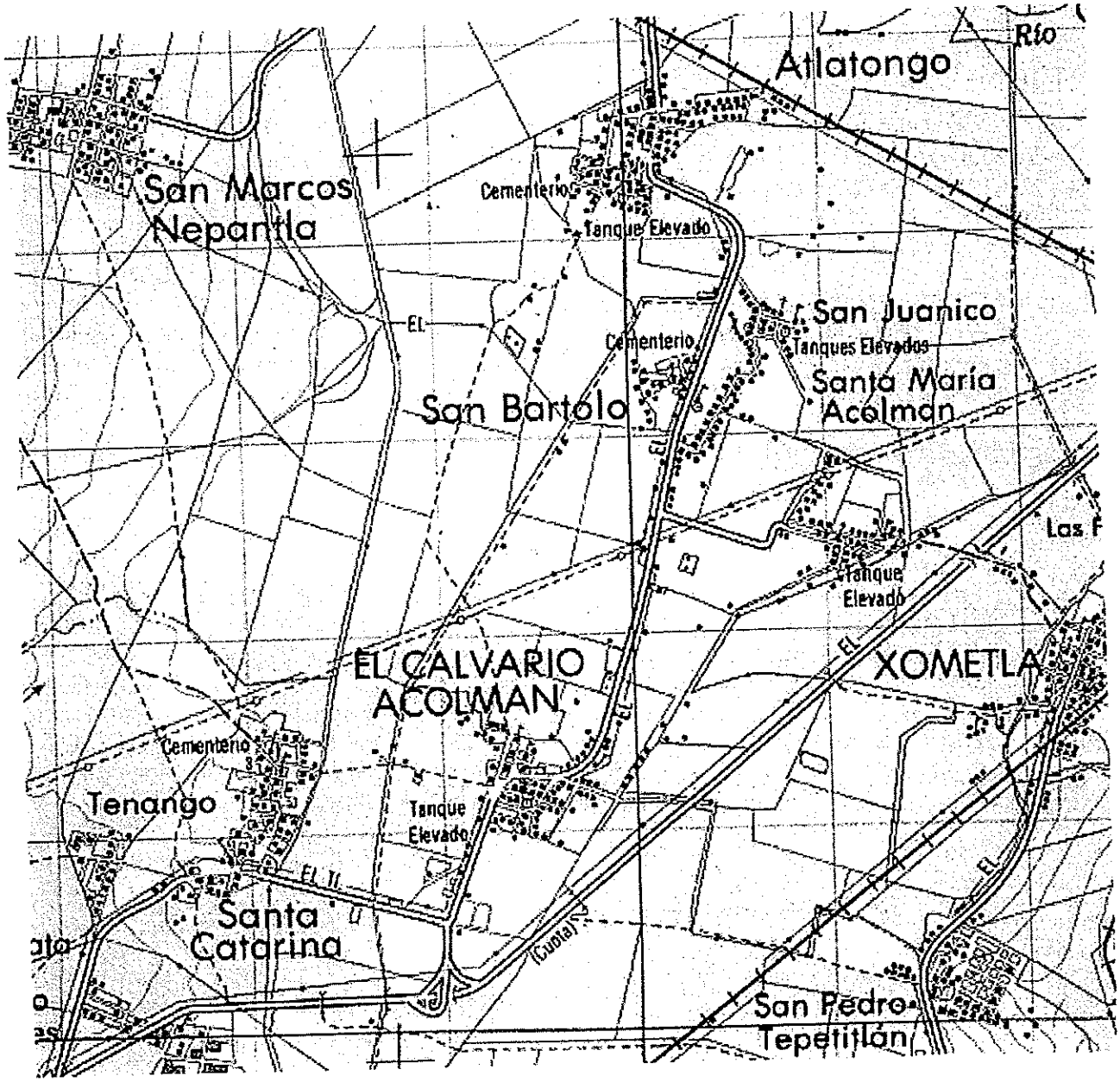
Natural Setting: The site is located at 2282 to 2290 m, on a gently rising, narrow strip of piedmont directly east and above the Canal de San Antonio and the alluvial plain, and just west of the sharply rising knob of Cerro Xoconosco. The soils here are variably thin to more than a meter in depth, and from light brown to dark brown in color. There has been erosion to tepetate at both the northern and southern edges of the site, where westward-cutting barranca-wash areas are encountered, but the site area itself displays little erosion, and on the lower, or westernmost terraces, deep soils preserved behind carefully tended bancals and terraces and walls are seen. The maguey, which forms lines along many of these bancals, does very well here, and the pirul tree, so often a stunted dwarf when found in piedmont areas of the valley, here grows to its maximum size. Grouped cacti are also found scattered through the site.

Modern Land Use: Mostly agricultural. The crops include maize, beans, and on the lower terraces, squash; as well as both maguey and nopal. In the past, the cut made through the upper, eastern edge of the site for the roadbed of the Mexico City-Vera Cruz railroad, which passes on a sinuous southwest to northeast line through the eastern edge of the site, has been widened even farther by quarrying activities in the vicinity of the large temple mound-pyramid in the southeastern section of the site. During the 1973 resurvey it was noted that 2 small stone houses had been built on the southwestern section of the site, which now have families living in them, where formerly (1963), there were only open fields. The entire site is covered with maguey bancals averaging 8 to 10 m in width.

Archaeological Remains: The terraces of the site conform to the natural contours of the hillside but are nevertheless undulating affairs, due to the presence of at least 86 clearly distinguishable mounds scattered over the 64 ha of the site. On a little less than two-thirds of this area, or 40.6 ha, the Early Toltec occupation T.T. 21 may be seen, primarily in the eastern section of the site, descending to the western or lower terraces in the central portion, on a line drawn east to west from a point approximately midway from the northern and southern edges of the site. In addition to the aforementioned 86 mounds, an additional 22 areas have been recorded which show concentrations of tezontle rubble which may represent former dwellings, bringing the maximum possible total of house mounds to 108. Nearly all of the mounds have some Early Toltec phase materials on them, but in the northwestern and southwestern section of the site Early Toltec is sparse in comparison to the Mazapan (T.T. 159) and Aztec debris. There we judged the materials to represent possible wash from the upper terrace Early Toltec occupations.

At the upper edge of the site near the center of its long dimension, is a large pyramid 12 to 15 m in diameter and three to four meters high that has been dissected by the construction of the railroad. Immediately west and south of it are two large plazas. The west plaza is bordered along its northern side by a low, rambling mound that looks like a large multi-roomed structure. The other mounds are comparable in size and elevation to Aztec domestic mounds. Most of the sherds from the pyramid pertain to the Xometla phase.

Figure 46


Río
Atlatongo
San Marcos
Nepantla
Cementerio
Tanque Elevado
San Juanico
Tanques Elevados
Cementerio
Santa María
Acolman
San Bartolo
Las F
Tanque
Elevado
EL CALVARIO
ACOLMAN
XOMETLA
Cementerio
Tenango
Tanque
Elevado
Santa
Catarina
(Cuota)
San Pedro
Tepetitlán

The Late Toltec phase occupation covered a larger area (64 ha) than that covered by the Early Toltec town site, but the occupation appears to be less nucleated than in the early period Toltec town. It is inferred that while the area of occupation expanded in this later period, the occupational density may have dropped, and that the population level may have remained constant or declined.

Approximately 100 meters to the north of the Early Toltec temple mound and east of the railway right-of-way is a smaller mound that represents the remains of an additional temple platform. Sherds from the fill and surface nearby suggest an Aztec dating and it may represent the remains of the principal temple of the Aztec village site. Exposed sections of the mound indicate that there are at least two levels of plaster floors within it.

A major problem here is sorting out the Aztec from the big Toltec site. The Toltec site was one of the largest in the Teotihuacan Valley, and as we pointed out has definite architecture over much of the area. The Early Toltec occupation is heavier than the Aztec, one of the rare cases in out multi-component sites. The center or heart of the site, with the ceremonial structures, is dominated by the Toltec occupation, and the Aztec appears heavier on the northern and southern peripheries, possibly because the Toltec is much lighter, rather than because of an increase of density of the Aztec occupation. Our impression is that the Early Toltec site was more densely nucleated, with a greater population, and that the Aztec was a lighter and more dispersed community. Also we found very few cases of mounds with only Aztec occupation, indicating that they probably used the older mounds as house platforms in the Aztec period. This conclusion is supported by the excavation of one of the mounds, reported in the Toltec volume (Volume 4) of our series.

Ethnohistoric Information: The Aztec village site here was probably that listed in the Relación de Tecciztlan of 1580 as San Antonio Huixtonco, a sujeto of Acolman.

T.A. 168

Classification: PNE. The 20th century compact, high density village of Xometla is located on the edge of the alluvial plain. It was not surveyed by the Teotihuacan Valley Project. Most known Aztec sites in the general area occur along a band of gently, sloping piedmont set well back from the plain (see description of T.A. 87). It is possible, therefore, that the modern settlement of Xometla is the product of the Congregación. If this is the case then the 1580 Relación community of Tumetla (Xometla) is not located here but somewhat upslope, possibly the two sites located during general survey T.A. 175 and T.A. 176 (renumbered T.A. 231, 232) are the original Xometla site. We have tentatively assigned a site number to the location of the 20th century village with the understanding that it may not actually be an Aztec site.

6. ZONE 5: LOWER VALLEY: ALLUVIAL PLAIN (Fig. 46; Plate 3)

The irrigated plain of the Lower Valley, along with the Delta, have the deepest, richest, and most fertile soils to be found within the entire survey area. Within the chinampa area, at the upper end of this zone, is found the highest water table, just 1 m from the surface. The soils have a balance of silt, sand, and clay that are ideal for agriculture. Elevations include the high banks of the major canals (the result of annual cleaning), and the levee formed by the Rio de San Juan (the result in part of natural deposition). The most intensive agriculture of the entire survey area is practiced in the irrigated plain. The greatest variety of cultigens is found in the chinampa area, stretching from the Parroquia of San Juan Teotihuacan, west and south of the barrios of San Juan Evangelista, Puxtla, and Maquixco Bajo. The central and lower part of the

irrigated plain, during the rainy season, supports nearly continuous, tall, dense crops of maize, beans, and squash interspersed with recently established dairy along with chicken-and egg-producing granjas, or farms. During the dry season wheat is double cropped in the same fields using irrigation.

This is the most productive zone within the two surveyed areas i.e. the Teotihuacan Valley and the Temascalapa region, with deep, fertile soils and perennial springs at the upper northern edge to supply water for a permanent irrigation system. Subsequent to the reforms of the Agrarian Revolution, the springs were taken over from the haciendas in the area by the federal government, to administrate the irrigation system. Most of the lands of the haciendas were turned over to the fifteen villages that lie within and on the edges of the alluvial plain of the Lower Valley and Delta areas. The 1580 Relación lists and locates on the map the following settlements within the plain; San Juan Acolman, Santa Maria Acolman, San Bartolo Acolman, and Santiago Atlatongo.

All these settlements were dependencies of Acolman in 1580. All exist today and are high density, compact, nucleated villages. The alluvial plain of the Teotihuacan Valley was only cursorily surveyed, primarily during the general survey phase of the project, because we saw little or no evidence of occupation during these surveys. The villages themselves, although they almost certainly are prehispanic communities, were not surveyed because of the difficulty of obtaining data in dense compact settlements of this type. As we indicated in the previous section, some of the plain was also cultivated by villages and towns located on the adjacent piedmonts. Presumably settlements within the plain were located in the same places as on the 1580 Relación map and we suspect that they were compact dense settlements then. They seem to be placed on a levee, or strip of high ground, probably produced by the San Juan River, which flows through the center of the plain. This levee is several meters above the adjacent plain, based on observations by Sanders immediately north of Calvario. These observations should be checked by additional transect measurements, particularly at Atlatongo and San Juanico. Assuming that the string of settlements in the center of the plain is of prehispanic origin we have assigned T.A. sites numbers to them, since none of these sites was intensively surveyed we have no site descriptions.

T.A. 169

Classification: PNE. This is the village of Santa Ana Atenpa in the 1580 Relación, at which time it was a dependent community of Acolman. We did not survey this site. It has not survived as a settlement in the 20th century and its precise location is, therefore, problematical.

T.A. 179

Classification: PNE. This is a detached barrio of San Juan Teotihuacan, both today and in the 1580 Relación, at which time it was called San Lorenzo Atezcapa. It was not surveyed during the Teotihuacan Valley Project.

T.A. 170

Classification: PNE. This is the 20th century compact, high density village of Santa Maria Acolman. In 1580 it was a dependent community of Acolman. It was not surveyed by the Teotihuacan Valley Project.

T.A. 171

Classification: PNE. This is the 20th century, high density, compact village of San Juanico which was a dependent village of Acolman in the 1580 Relación. It was not surveyed by the Teotihuacan Valley Project.

T.A. 172

Classification: PNE. This is the 20th century, high density, compact village of San Bartolo Acolman, a dependent village of Acolman in 1580. It was not surveyed by the Teotihuacan Valley Project.

T.A. 173

Classification: PNE. This is the 20th century, high density, compact village of Santiago Atlatongo, a dependent community of Acolman in the 1580 Relación. It was not surveyed by the Teotihuacan Valley Project.

Summary

Sites T.A. 179, 170, 171, 172, and 173 are all very densely settled 20th century villages, and were all subject communities to Acolman, according to the 1580 Relación. Because of their location in the center of the alluvial plain, it was almost certain that these were villages in 1519, and found in the same localities as they are in the 20th century

All of these communities were probably high density, compact settlements in Aztec times, of village size. Santiago Atlatongo (T.A. 173) and San Lorenzo Atezcapa (T.A. 179) were undoubtedly large villages.

7. ZONE 6: LOWER VALLEY: NORTH PIEDMONT (Figs. 47, 48; Plate 42)

Adjacent to and north of the alluvial plain of the Lower Valley is a broad, gently sloping piedmont, highly variable in soil depth, and productivity, and today of marginal agricultural value. Defining this piedmont to the north is a range of small hills, beginning from west to east, Cerro Zagualuca, Cerro Mixcuyo, Cerro Maravillas, and Cerro de las Calaveras. A tributary barranca flows from north to south between Cerro Mixcuyo and Cerro Maravillas (Rio de la Gapila) and a second barranca separates Cerro Calaveras from Cerro Malinalco, the great volcanic cone that borders the piedmont to the north of the town of Teotihuacan. The north piedmont rises from 2260 m at Santa Catarina Acolman to the 2340 m contour of Cerro Zacualuca, (elevation 2390 m) and to the 2480 m contour of Cerro Malinalco (elevation 2580 m). The first studies of prehistoric irrigation systems within the Valley of Teotihuacan (Millon 1954, 1957), were undertaken in this section of the north piedmont, in the lower part of the drainage of the seasonally dry course, Rio de la Gapila. Within the area are the low density villages of Zacualuca and San Agustin Actipac, and the rancherias of Tlachinolpan ("The Place of the Nopal Harvest"), Ixtlahuaca, Tezompa, and the Colonia Agricola of Progreso. Small temporary check dams are found in many of the arroyos leading into the main drainage system. Some

Plate 42

Figure 47

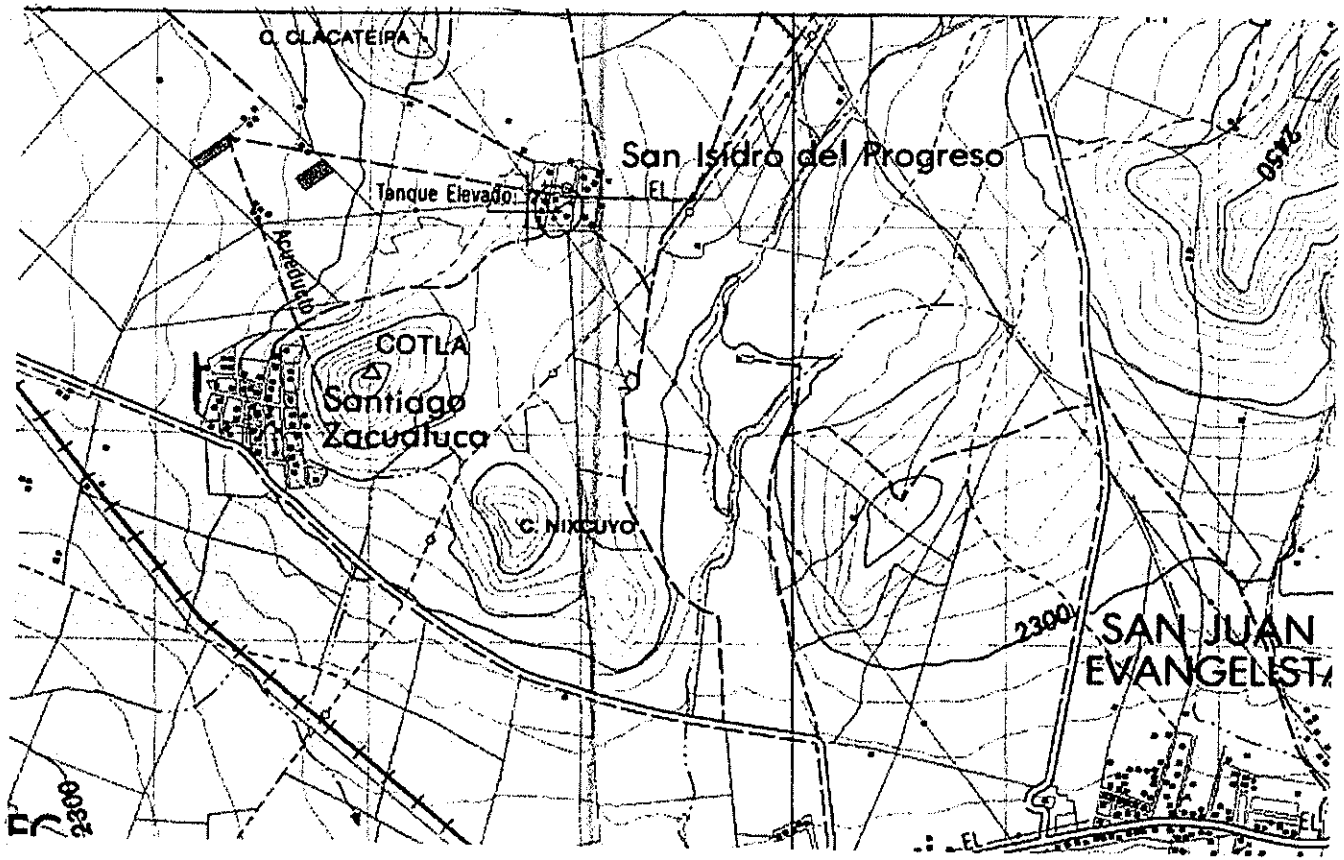
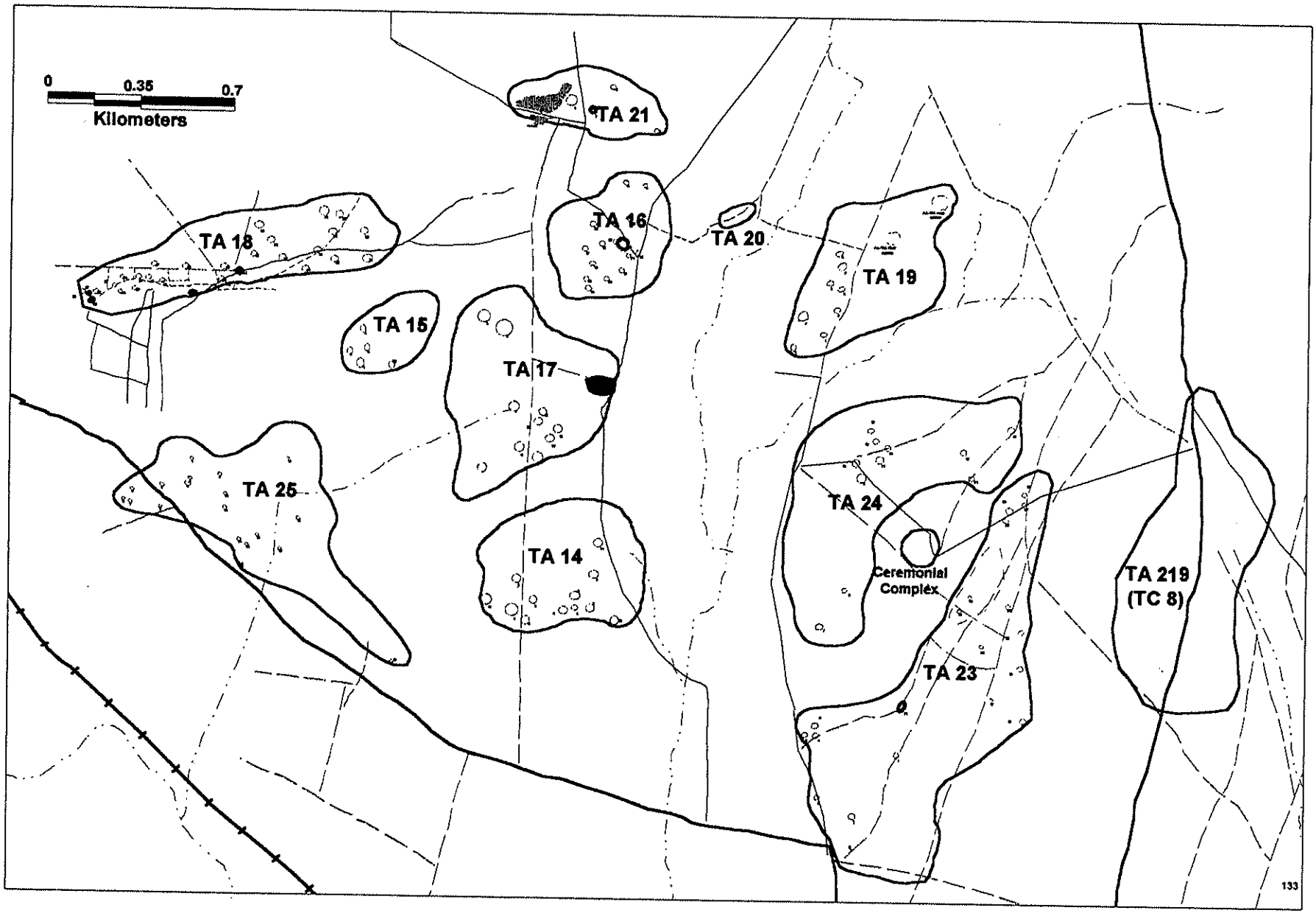

C. CLACATEIPA
San Isidro del Progreso
Tanque Elevado
EL
Acueducto
COTLA
Santiago
Zacualuca
C. NIXCUYO
2300
SAN JUAN
EVANGELIST
2300

Figure 48


0
0.35
0.7
Kilometers
TA 21
TA 16
TA 20
TA 19
TA 18
TA 15
TA 17
TA 25
TA 24
TA 14
Ceremonial Complex
TA 219 (TC 8)
TA 23
133

of these water and soil-control features are washed out annually. Others of more solid construction hold back enough soil and moisture for the precarious planting of small milpas. However, the most important plants here are the maguey and nopal. Goat grazing is also an important activity. The soils through most of the upper reaches of the north piedmont are very thin, from 0 to 20 cm. Sheet erosion has completely denuded large areas. Only in the lower sectors are there to be found secure, thriving milpas, in the ejido lands of Calvario Acolman, Atlatongo, and Maquixco. These ejidos cover most of the lower piedmont area. The dams and bridges, all stone-built that were left behind by the hacienda, are all very impressive. Some of the lands here are left fallow, but for the most part maize, frijol, and squash are secure annual crops. Most of the campesinos utilizing this portion of the north piedmont are from villages on the northern edge of the irrigated plain of the Lower Valley.

Virtually all Aztec settlement occurs as bands of dispersed residences and associated terraces on the lower flanks of the hills, and virtually encircles them. With the exception of T.A. 157 and T.A. 219, surveyed by the Toltec and Teotihuacan teams respectively, all of the settlements were intensively surveyed by one of the Aztec survey teams. Site T.A. 219 is the same site as T.C. 8, where we conducted the extensive excavations reported in Volume 3. The descriptions given below of T.A. 157 and T.A. 219 are rewritten versions of those found in the earlier volumes of the series. Because of their geographic location, we have also included in this section several sites to the north, that were surveyed during the 1977 Temascalpa survey, TM1, 2, and 3. The sites intensively surveyed by the Aztec team during the Teotihuacan Valley Project include T.A. 13-24.

T.A. 23, T.A. 24, T.A. 219 (Figs. 49, 50; Plates 43-45)

Classification: Large Dispersed Village or three small dispersed villages.

Natural Setting: 2290-2340 m. Situated on a broad, gentle slope rising gradually from the edge of the alluvial plain. The western arm of the site surrounds a small, low hill (Cerro Acuila). Erosion has been severe over most of the site area. Soil depth is seldom greater than 15-20 cm, and large patches of bare tepetate subsoil are numerous. Maguey terracing and bancals at the lower, southern end of the site have maintained a fairly continuous shallow soil cover in that area. Natural vegetation consists mainly of widely scattered pirul trees and wild nopal.

Modern Land Use: Grazing, except for the lower, southern end of the site where there is rainfall cultivation of maize and beans. Maguey grows throughout the site area. Earth-maguey bancals and small earth-stone check dams act as erosion checks over many parts of the site. An extensive system of canals or ditches have been cut into the tepetate subsoil around the southern flanks of Cerro Acuila in the western section of the site. These ditches are no longer functioning, but probably served for floodwater irrigation during the late 19th or early 20th centuries.

Archaeological Remains: Total site area is about 144 ha. Occupation intensity increases markedly to the east, and a maximum of about 70 mounded structures with Aztec occupation were identified within the eastern quarter of the site area (coded as T.A. 219). Another 30 structures were located scattered over the more dispersed settlement area to the west (coded as T.A. 23-24). The eastern section of the Aztec site overlies an area of substantial Teotihuacan settlement (T.C.-8). There is also a light Toltec occupation throughout the T.A. 219 of the Aztec site (T.T. 212).

Figure 49

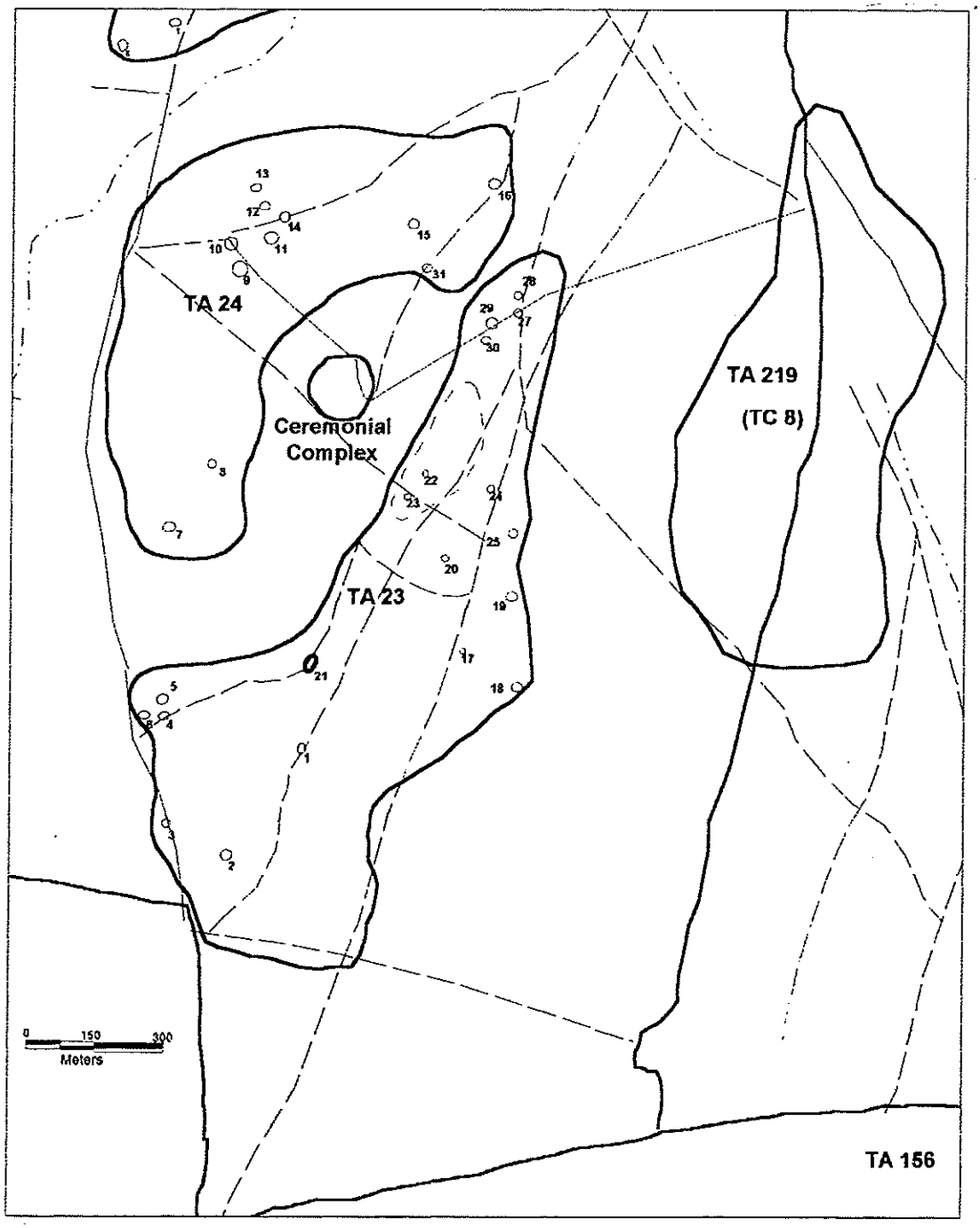

TA 24
Ceremonial Complex
TA 23
TA 219
(TC 8)
TA 156
0 150 300
Meters

Figure 50

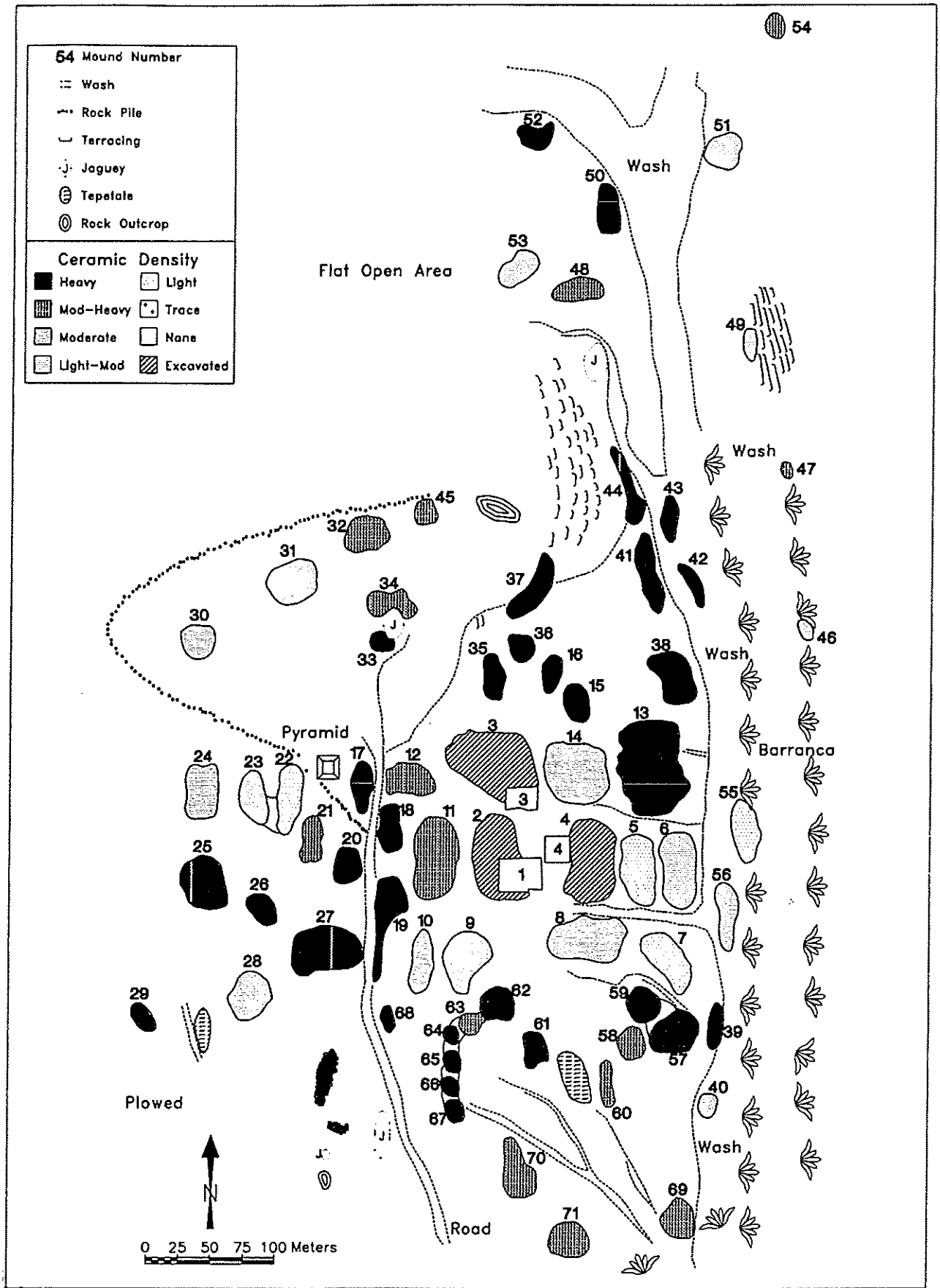
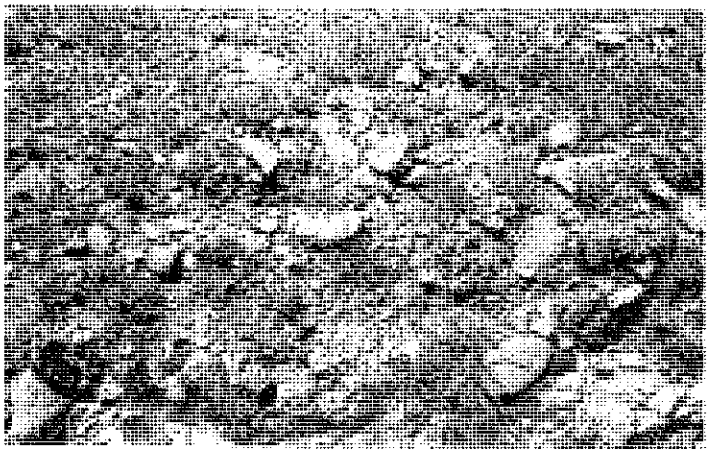

54 Mound Number
Wash
Rock Pile
Terracing
Jaguey
Tepetate
Rock Outcrop
Ceramic Density
Heavy
Mod-Heavy
Moderate
Light-Mod
Light
Trace
None
Excavated
Flat Open Area
Wash
Pyramid
Barranca
Plowed
Road
N
0 25 50 75 100 Meters

Plate 43

A

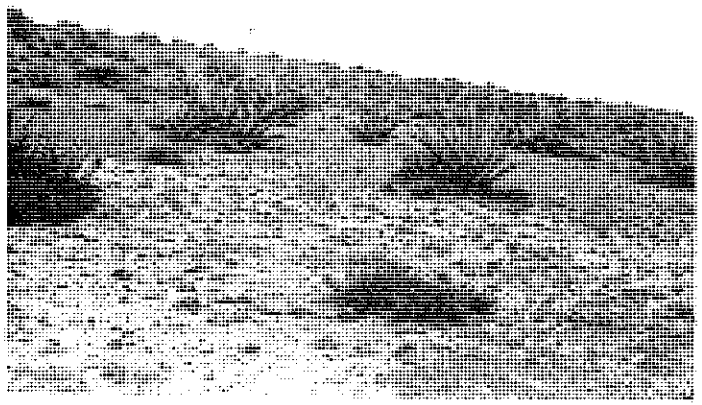
B

C

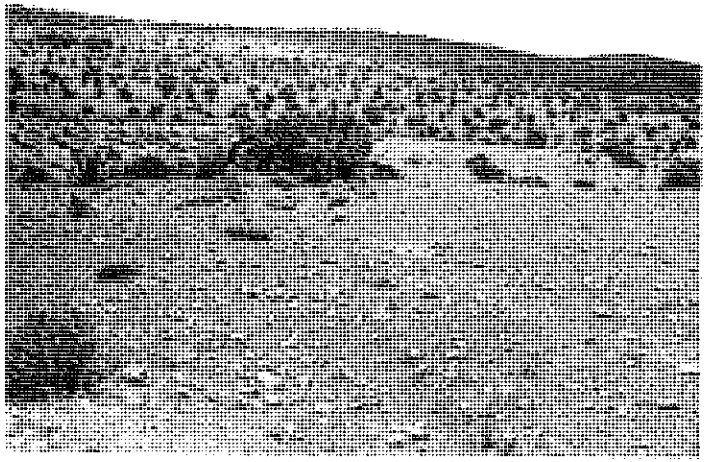


D

Plate 44

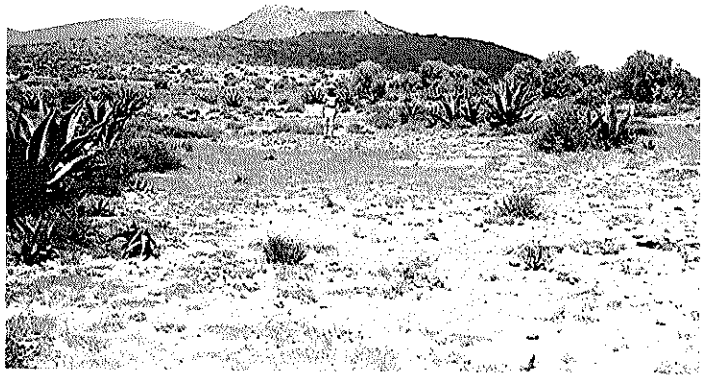


A



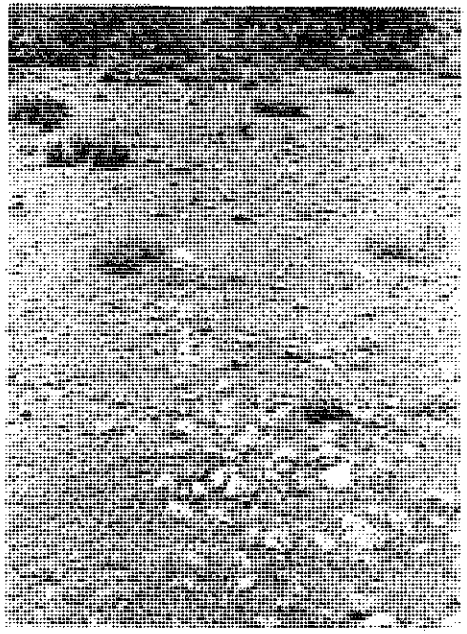
B

C

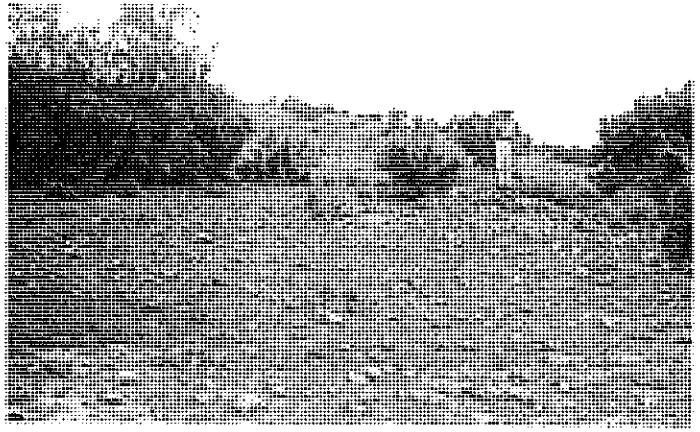


D

Plate 45

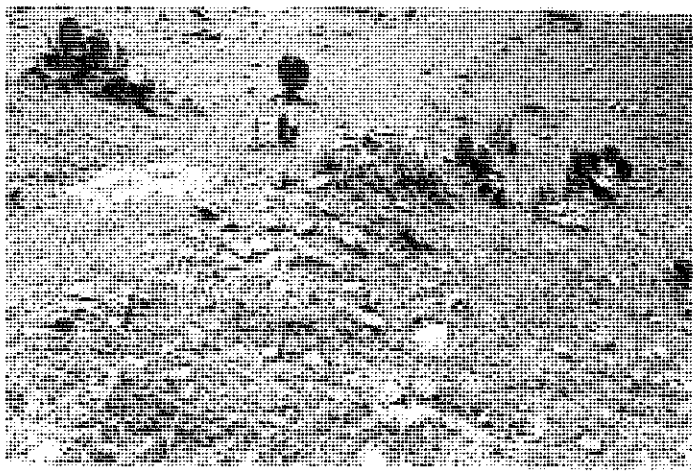


A



B

C



D

Over the eastern 2/3 of T.A. 23 and much of T.A. 219, Aztec surface pottery occurs in light-to-medium concentrations over much of the ground surface. To the south of T.A. 23 and over much of T.A. 24 Aztec surface pottery is generally restricted to the immediate vicinity of preserved mounds, or occurs in scattered areas where mounds probably once existed prior to their obliteration by severe erosion. Elsewhere sherd cover is usually sparse.

All preserved structures whose construction probably dates only to Aztec times appear to be domestic residences. A relatively complex and elaborate Teotihuacan architectural complex with numerous large Teotihuacan type apartment complex mounds in the eastern section of the Aztec site (T.A. 219) has somewhat confused the character of Aztec occupation there. In addition there is at least one Teotihuacan temple mound near the northeast corner of the Aztec site which may have functioned for ceremonial-civic purposes during Postclassic times as well. However, all definite Aztec mounds measure between 20-35 m in diameter, and are 20-40 cm high.

In Figure 50 all of the large mounds, primarily found in the center of this multicomponent site, are of Teotihuacan age. Our 1961-1962 excavations in three of these mounds (Mound 1-2, 3 and 4) indicate that they have much smaller Aztec residences on their summits. This is probably the explanation for the substantial amount of Aztec pottery in the surface samples taken from the large Teotihuacan mounds. The coded shading of the mounds, therefore, simply represents the amount of Aztec pottery found in the surface samples taken from these Teotihuacan period sites, not the area extent of the Aztec occupation on them.

There are extensive remnants of badly-deteriorated earth-stone terracing throughout much of the site area, and on the higher flanks of Cerro Acuila. Much or all of this is probably prehispanic.

Aztec occupation is predominantly Late, but there are significant quantities of Early Aztec material throughout much of the site area.

Ethnohistoric Information: This is probably the location of the 1580 community of Los Reyes Izquitlan, a subject community of Acolman.

T.A. 99

Classification: Located in general survey and not resurveyed, probably a hamlet (is in the same location as the Mazapan site T.T. 12).

T.A. 19 (Fig. 51; Plates 46 B-D, 47 A-B)

Classification: Small Dispersed Village.

Natural Setting: 2320-2330 meters. Situated along the relatively level top of a broad, low ridge which rises a few meters above the main piedmont floor. Moderate to severe erosion. Average soil depth of 10-15 cm, with several patches of bare tepetate subsoil, especially in the northern site area. To the southwest is the main floor of a small valley, with flatter land and deeper soil cover. Scattered pirul trees and a few wild nopal comprise the only important natural vegetation.

Figure 51

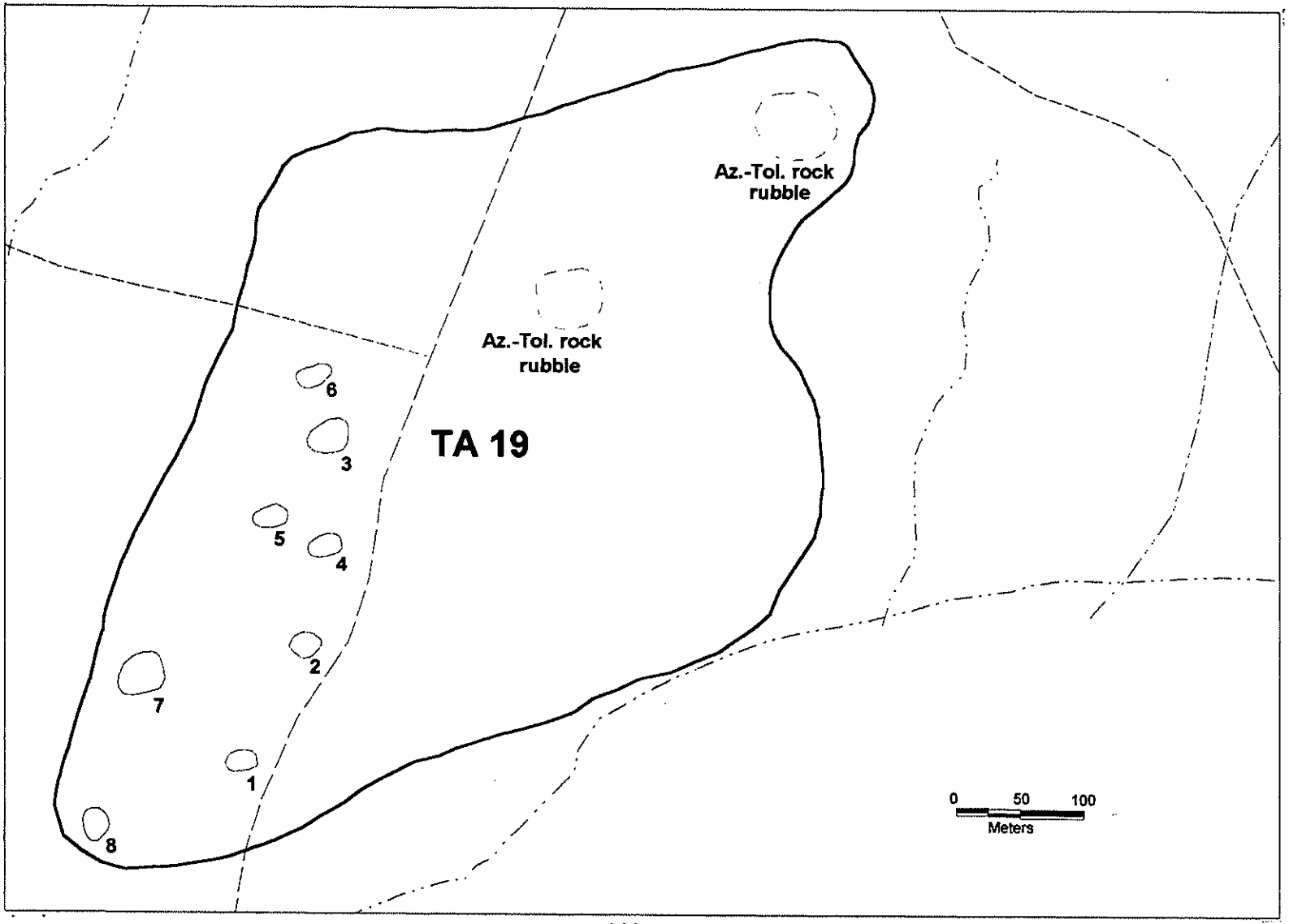
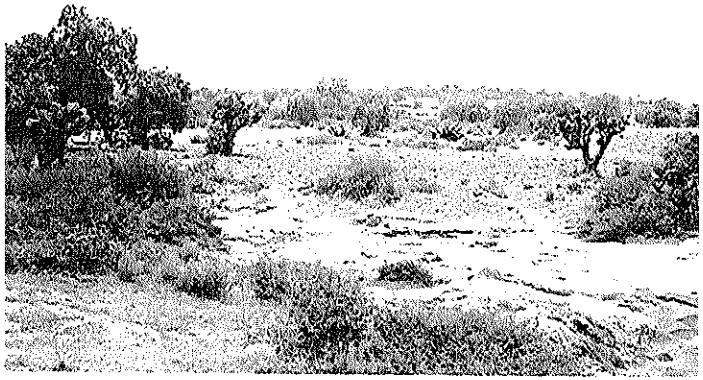

Az.-Tol. rock rubble
Az.-Tol. rock rubble
TA 19
6
3
5
4
2
7
1
8
0
50
100
Meters

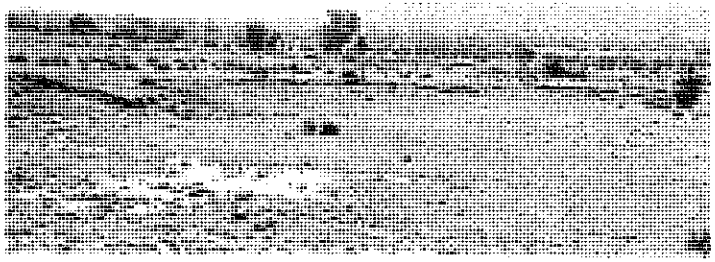
Plate 46



A

B

C



D

Figure 52

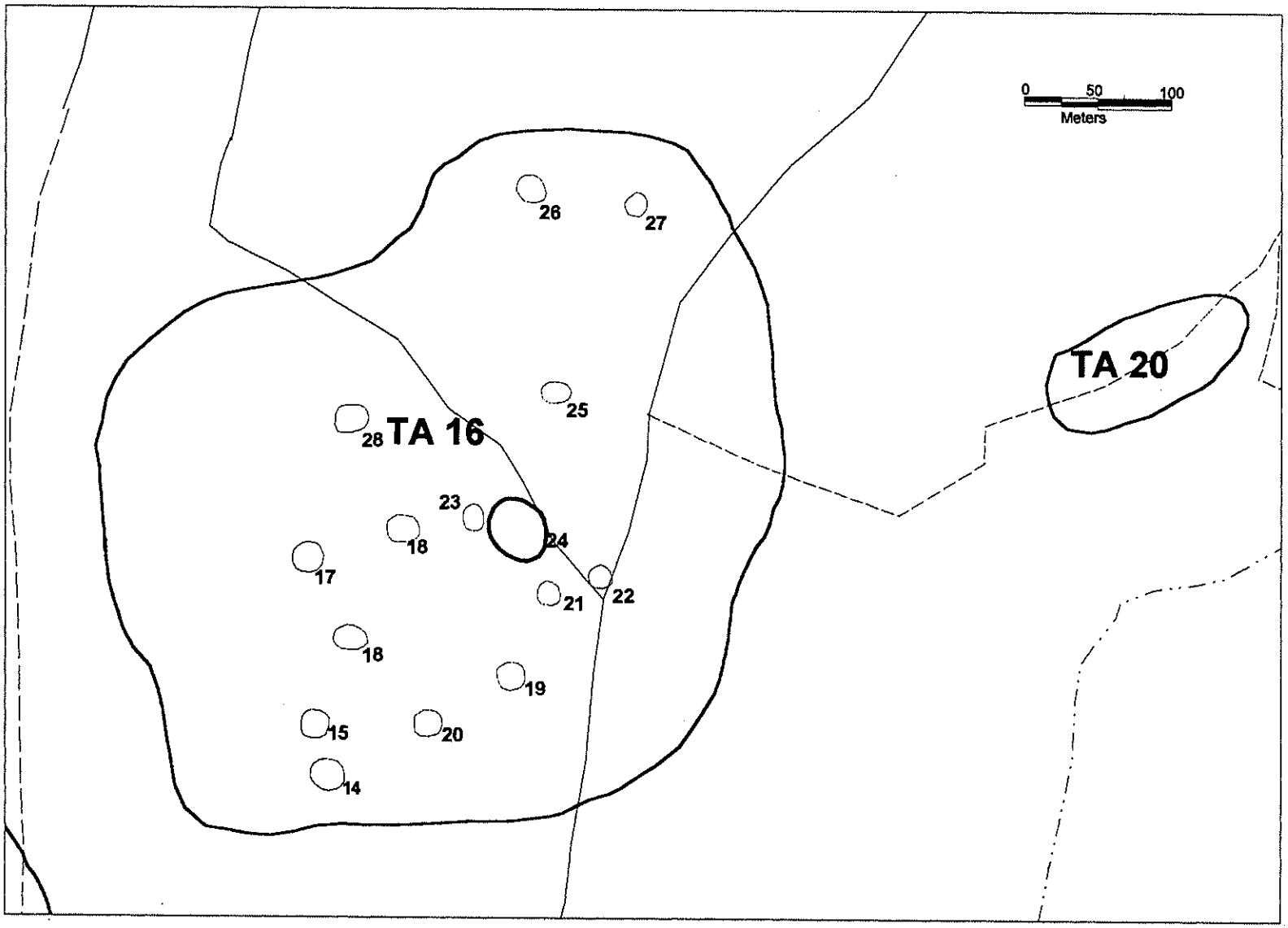
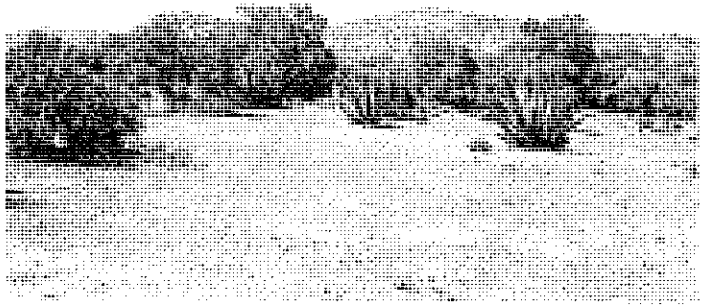
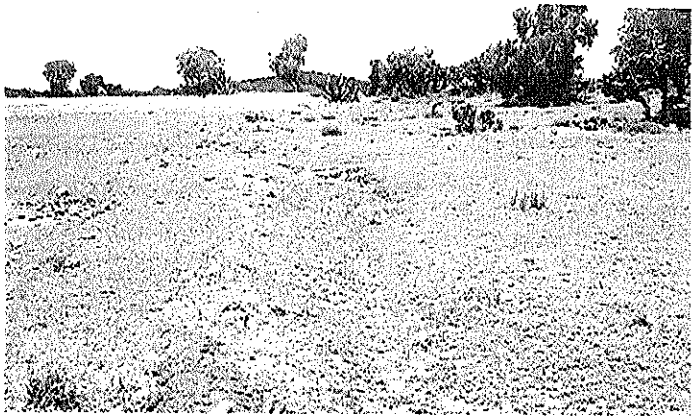

0
50
100
Meters
TA 16
TA 20
26
27
25
28
23
24
18
17
22
21
18
19
15
20
14

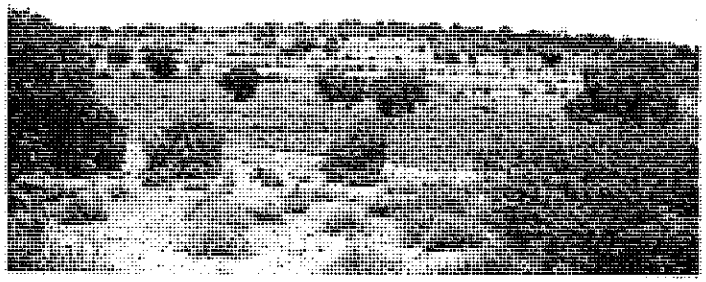
Plate 47



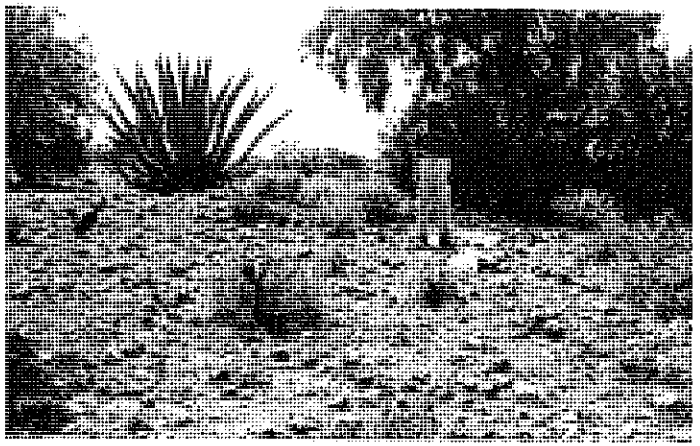
A



B



C



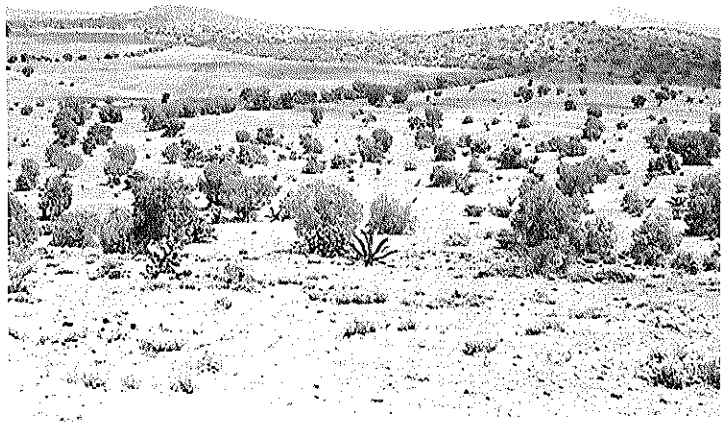
D

Plate 48

A

B

C



D

Modern Land Use: Greater part of the site area is devoted to rainfall cultivation of maguey, maize, beans, and barley. Perhaps a third of the general area now lies fallow and is used for grazing. Large earth-maguey bancals and small earth-rock check dams have prevented wholesale sheet erosion here. All cultivation is presently temporal, although in the large barranca about 200 m northwest of the site there is an abandoned masonry dam and iron sluice gate system which indicates a recent use of floodwater irrigation (probably in the early 20th century).

Archaeological Remains: Total site area measures about 26 hectares. Surface pottery is found in variably very light, light, and light-to-moderate concentrations, with some moderate concentrations on and around preserved mounds. Obsidian tools are fairly common, and several basalt grinding stones were noted. A total of eight mounds were identified, scattered rather evenly over the low ridge surface in the western half of the site area. It is obvious from the extent of rock rubble and sherd concentration in other localities that a number of additional structures have been obliterated in several badly eroded areas. Mounds generally measure 15-25 m in diameter, and are 10-50 cm high. All appear to be domestic residential units. A series of large earth terraces just east of the site are possibly prehispanic structures. These measure roughly 120 m long, 50 m wide, and stand about 1 m high at the front face. Occupation is very dominantly Late Aztec, with a few early Aztec sherds. A light Late Toltec occupation is also present (T.T. 213).

Ethnohistoric Information: Possibly an outlier of Los Reyes Izquitlan - see T.A. 23-24-219 description.

T.A. 20 (Fig. 52; Plate 46 A)

Classification: Hamlet.

Natural Setting: 2320 m. Situated on a low rocky knoll rising a few meters above the level of the general piedmont surface. Severe erosion. Soil depth averages about 10 cm, with many patches of bare tepetate subsoil. Scattered pirul trees, wild nopal, and small thorn bushes comprise the principal natural vegetation.

Modern Land Use: Grazing, plus a few maguey. The surrounding lower land is used for rainfall cultivation of maize, beans, and barley. A few hundred meters east of the site are the remains of a small masonry dam and iron sluice gate extending across the width of a small barranca. This indicates that floodwater irrigation was utilized in this area during the recent past.

Archaeological Remains: No preserved structures. Variably light, light-to-moderate, and moderate concentrations of surface pottery and rock rubble over an area of about 0.9 ha. Occupation is very dominantly Late Aztec. A few Late Toltec sherds are also present.

Ethnohistoric Information: See T.A. 16.

T.A. 16 (Fig. 52; Plate 47, C, D)

Classification: Hamlet or small Dispersed Village. Our border between this site and T.A.17 is somewhat arbitrary.

Natural Setting: 2310-2320 meters. Situated on gently sloping ground around the base of a low hill, where erosion has been moderate to severe. A shallow soil cover averaging about 25 cm deep has been maintained over much of the area by earth-maguey bancals, low stone terraces, and small earth check dams. To the east

Figure 53

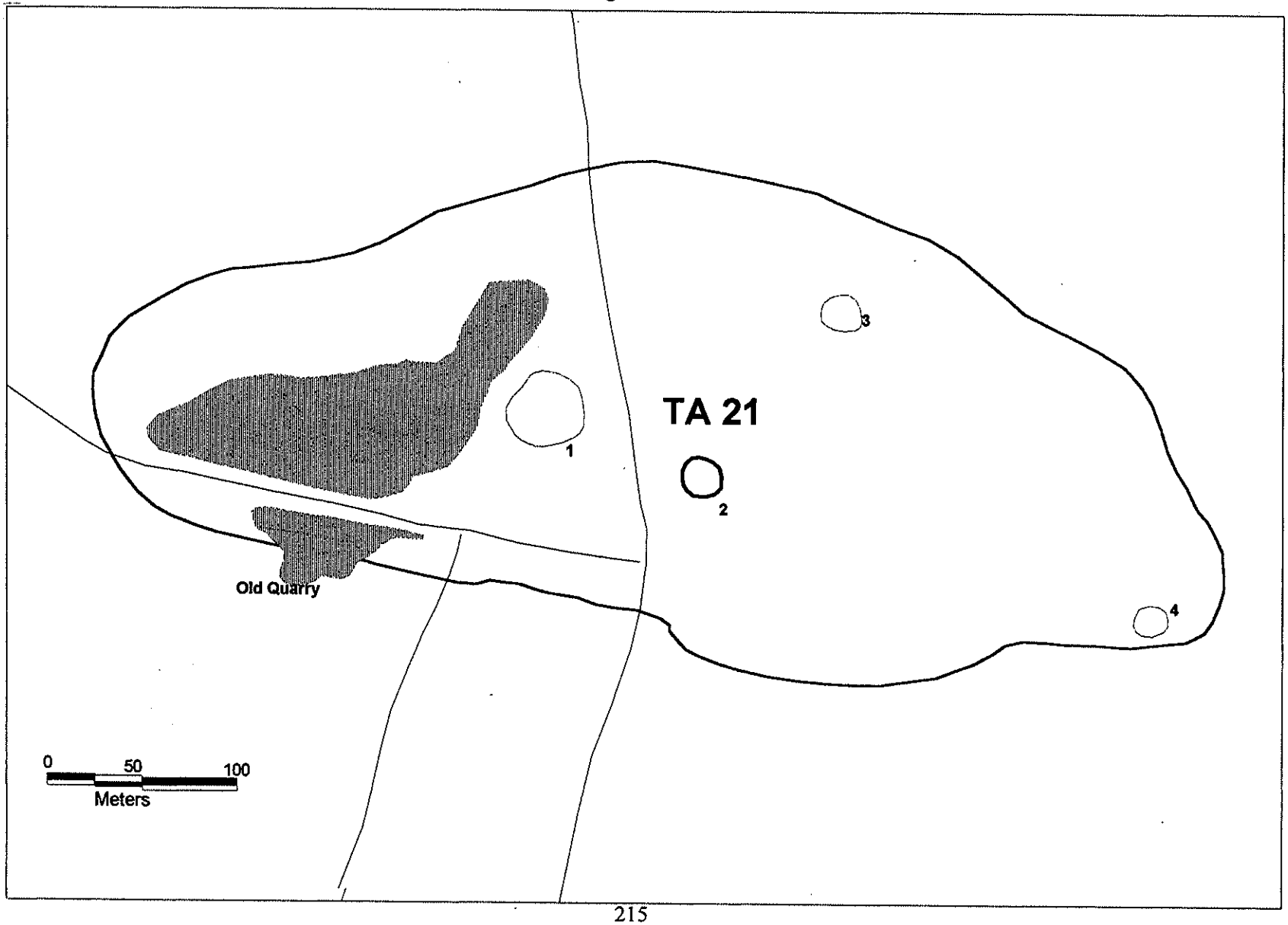
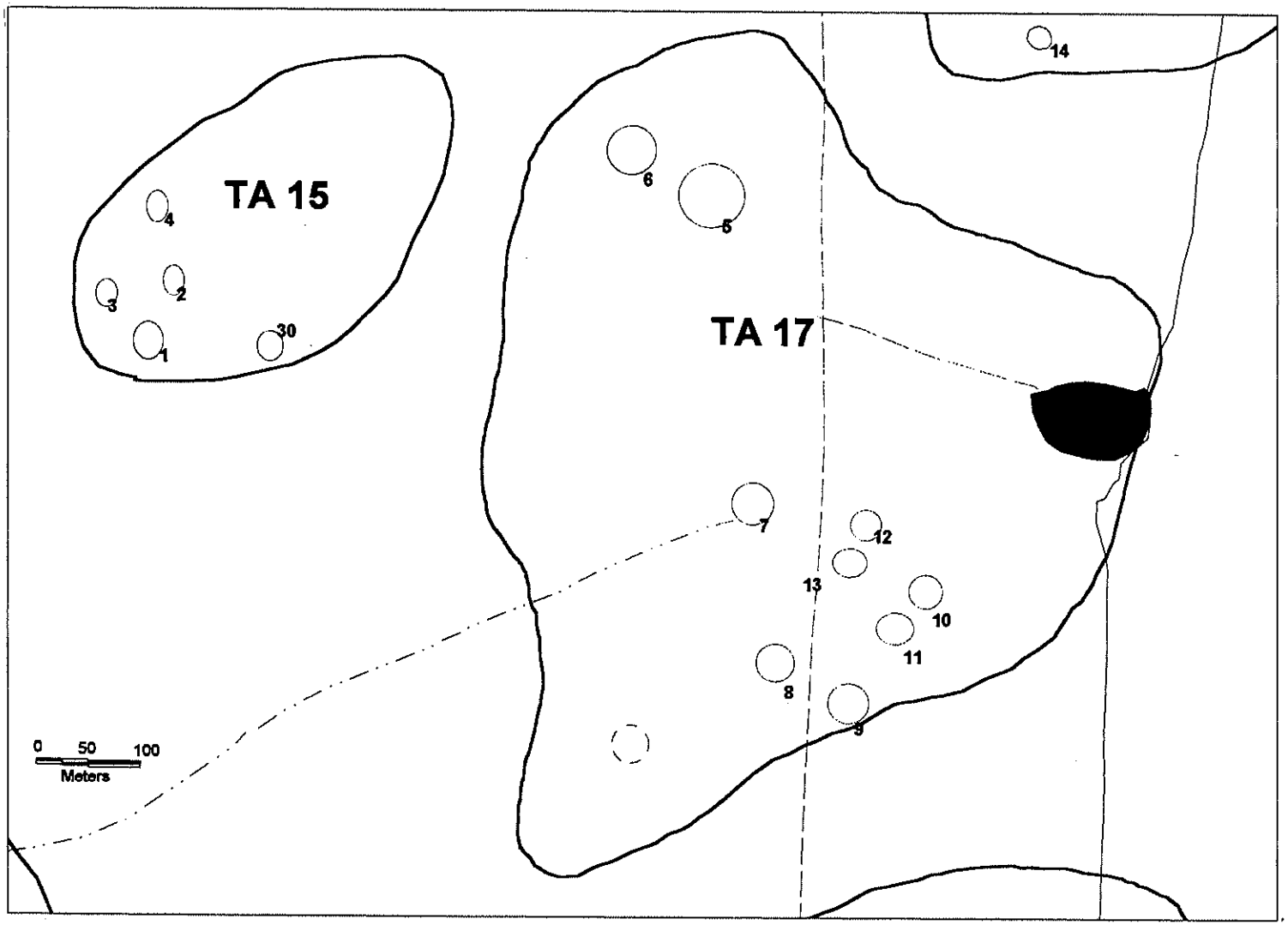


Figure 54



lies the level floor of the small subvola which drains the local area. Major natural vegetation consists of scattered pirul trees, wild nopal, plus several cactus and thornbush species.

Modern Land Use: Most of the immediate site area is used for rainfall cultivation of beans, barley, maize, and maguey. The higher hillslope above the site is mainly pasture. Moving downslope onto flatter land, with a deeper soil, maize becomes the dominant crop. The modern hamlet of San Isidro Tenistlacotla sits atop the low hill just northwest of the T.A.16 site area.

Archaeological Remains: A total of 15 mounds was identified. These occur scattered rather evenly over an area of about 17 hectares. In contrast to most adjacent sites, preservation here is relatively good, probably because of the successful prevention of wholesale sheet erosion through the construction and continued maintenance of bancals, terraces, and check dams. There are probably only a few mounds within this site which are no longer recognizable as such. Surface pottery is largely restricted to the immediate area of the mounds, where light-to-moderate and moderate concentrations of predominantly Late Aztec sherds were noted. Elsewhere, pottery debris is quite sparse.

Of the 15 mounds, 14 appear to represent individual domestic residences--these average roughly 20 meters in diameter, and about 50 cm high. One structure was markedly larger, however, and for this reason we have tentatively assigned it a ceremonial-civic function. This measures about 35 meters in diameter, and presently stands about two meters high. It appears to be solid platform structure, probably having served as a base for a small temple or civic structure.

Ethnohistoric Information: This is probably the location of San Nicolas Tenextlacotla, a subject village of Acolman in 1580.

T.A. 21 (Fig. 53; Plate 48 A)

Classification: Hamlet.

Natural Setting: 2310-2320 m. Moderate to severe erosion. Soil depth varies from a maximum of about 35 cm over the lower, western end of the site, to an average of about 10 cm higher up to the east. patches of bare tepetate subsoil occur. Scattered pirul trees comprise the major natural vegetation.

Modern Land Use: Rainfall cultivation of maize, beans, and barley. Higher ground east of the site is mainly pasture. Modern village of San Isidro Tenestlacotla abuts the site area on the south. Large abandoned gravel quarries cover a sizable section of the site's southwestern corner.

Archaeological Remains: Total site area is about 11 ha. Four mounds were identified scattered widely over the eastern two-thirds of the site area. There are several other localities where concentrated surface pottery and heavy rock rubble indicate the former presence of mounds now totally eroded. The large quarry in the southwestern corner of the site has undoubtedly destroyed other structures. Over the site as a whole surface pottery occurs in variable light, light-to-moderate, and moderate concentrations. Occupation is very dominantly Late Aztec, with a few Early Aztec sherds. A light Late Toltec occupation is also present (T.T. 214). Three mounds are probably domestic residences--these measure between 20 and 40 m in total diameter, and 10-20 cm tall. A fourth mound stands about 1.5-2 m tall, with a diameter of roughly 20 m. Its relative height suggests a possible ceremonial-civic function. Several pits in its east face indicate a construction of solid rock rubble and earth, with a possibly interior stone wall. Also noted in the surface pottery were a few Cuanalan phase (T.F. 278) and Zacualli phase (T.F. 279) sherds.

Figure 55

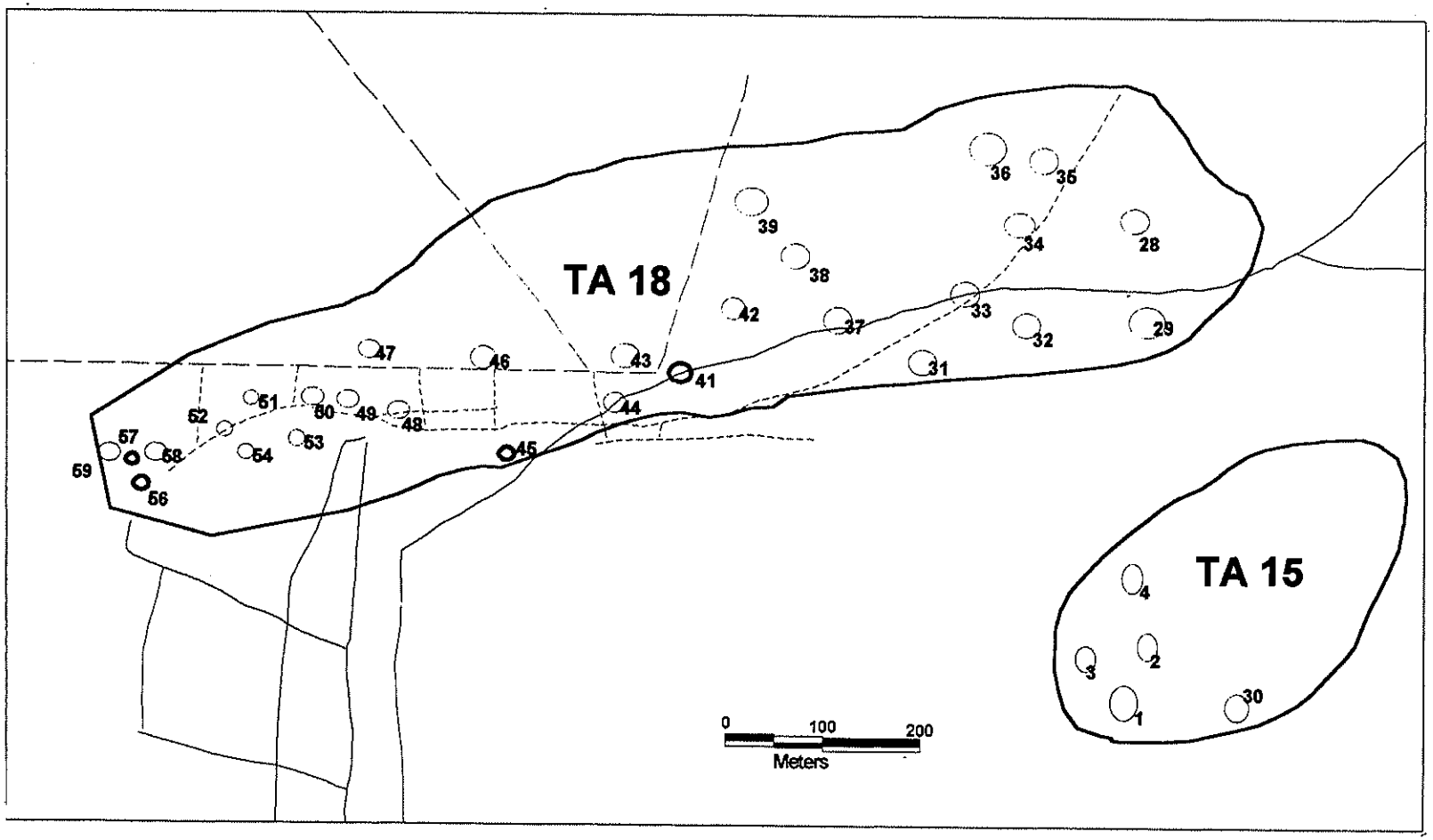

TA 18
TA 15
36
35
39
34
28
38
42
37
33
29
32
47
46
43
41
31
51
52
50
49
48
44
57
53
58
54
45
59
56
4
2
3
30
1
0
100
200
Meters

Figure 56

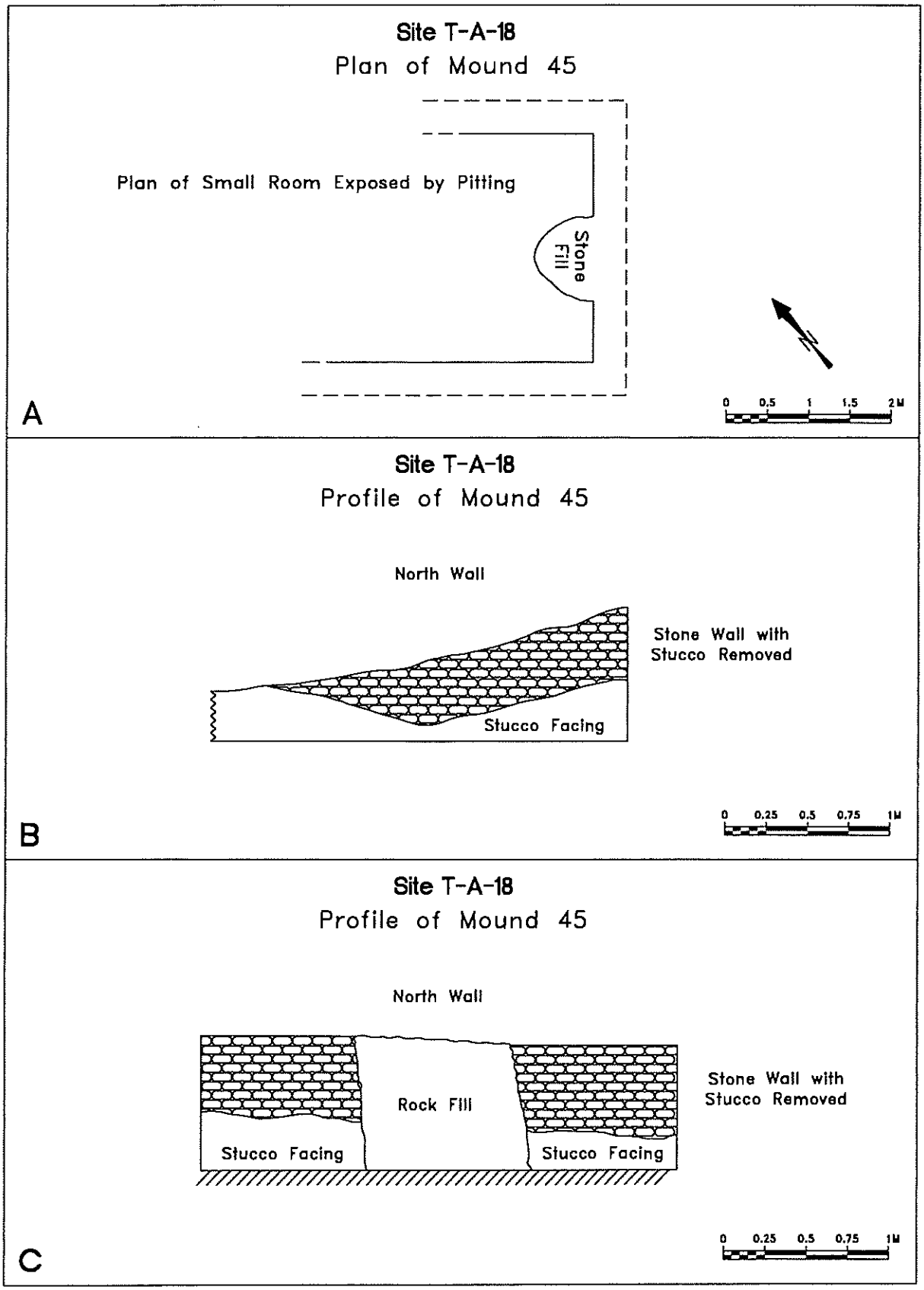

Site T-A-18
Plan of Mound 45
Plan of Small Room Exposed by Pitting
Stone Fill
0 0.5 1 1.5 2M
A
Site T-A-18
Profile of Mound 45
North Wall
Stone Wall with Stucco Removed
Stucco Facing
0 0.25 0.5 0.75 1M
B
Site T-A-18
Profile of Mound 45
North Wall
Rock Fill
Stucco Facing
Stucco Facing
Stone Wall with Stucco Removed
0 0.25 0.5 0.75 1M
C

Figure 57

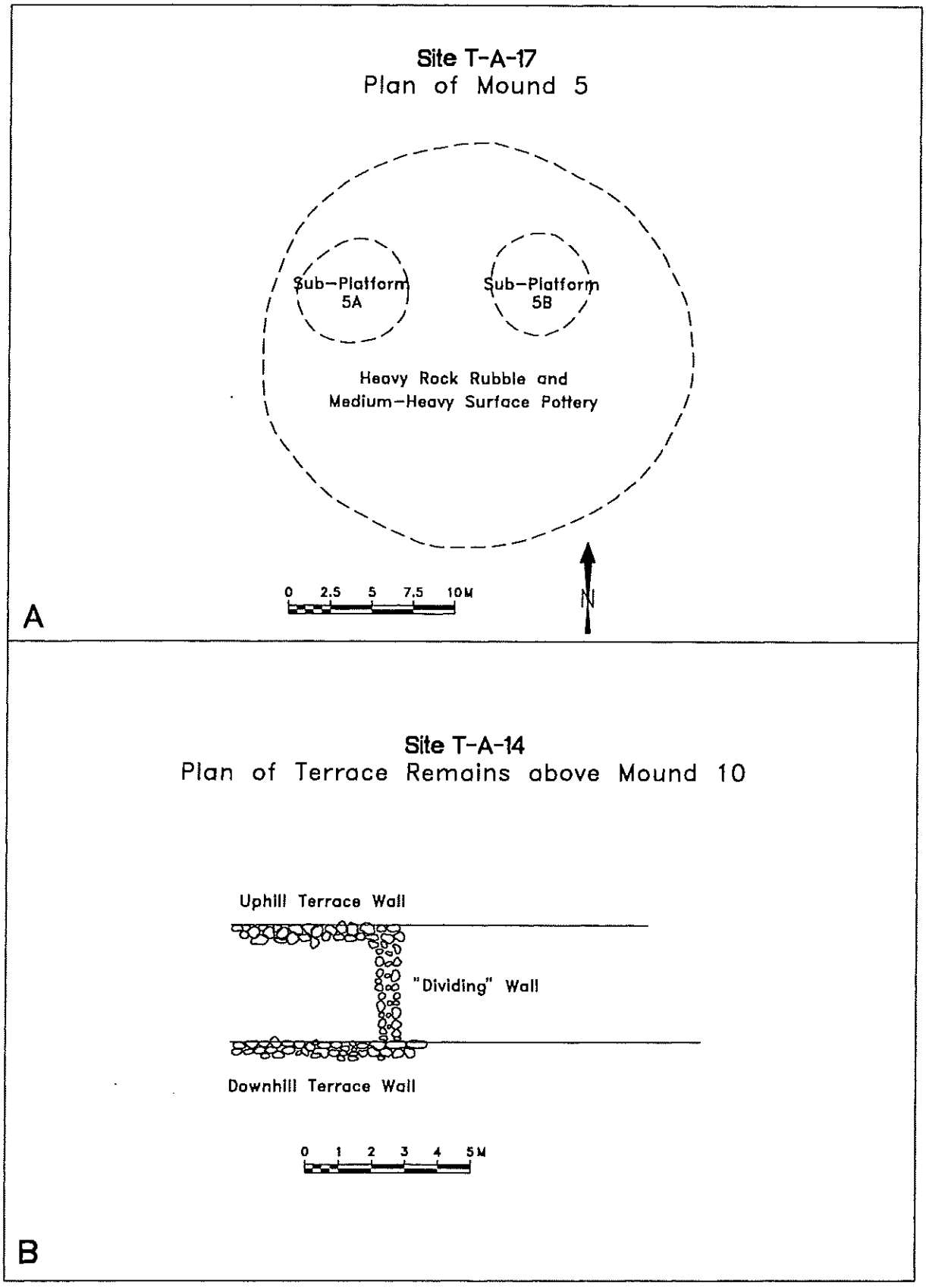
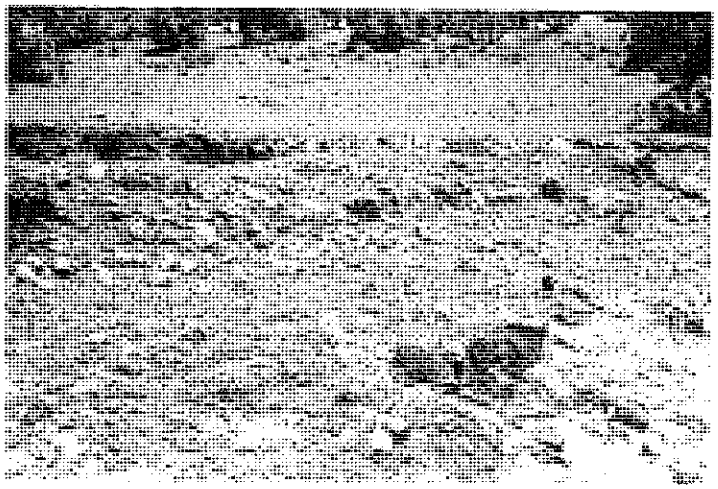

Site T-A-17
Plan of Mound 5
Sub-Platform 5A
Sub-Platform 5B
Heavy Rock Rubble and Medium-Heavy Surface Pottery
0 2.5 5 7.5 10M
N
A
Site T-A-14
Plan of Terrace Remains above Mound 10
Uphill Terrace Wall
"Dividing" Wall
Downhill Terrace Wall
0 1 2 3 4 5M
B

Plate 49

A

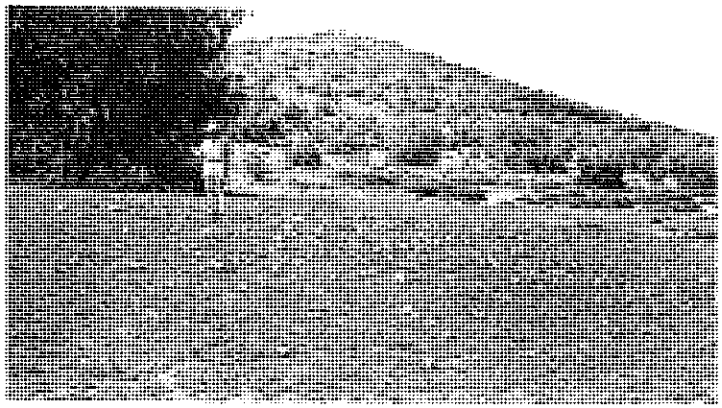


B

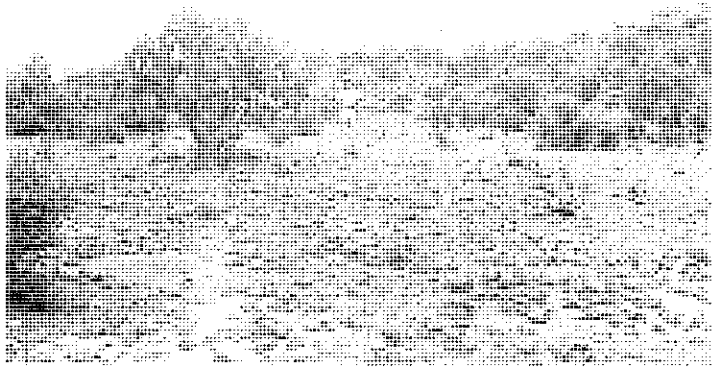
C

D

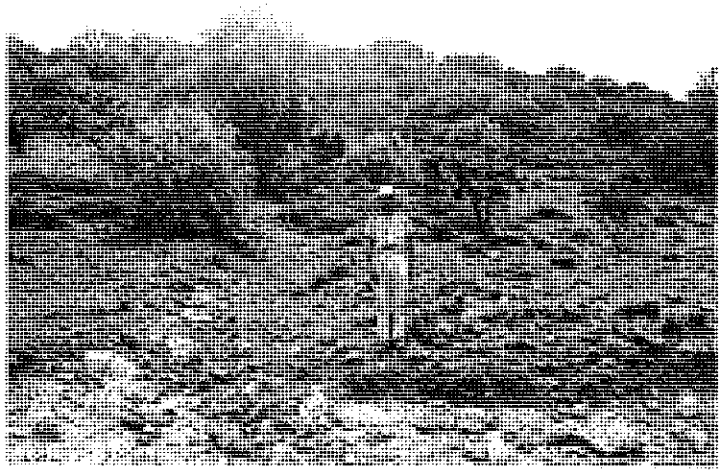
Plate 50



A



B



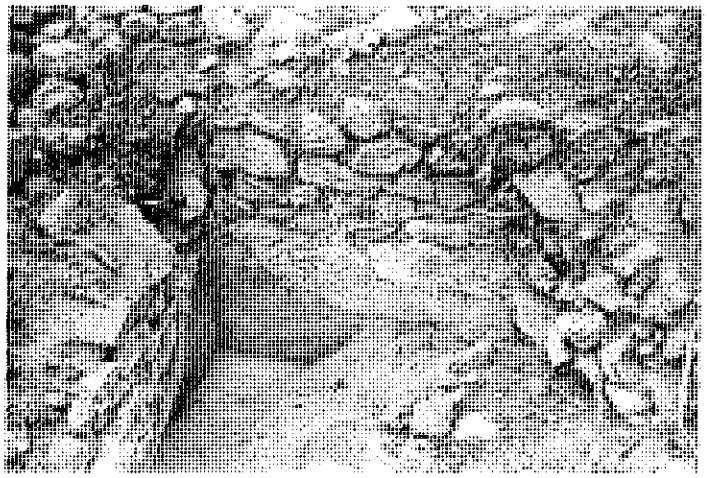
C

D

Plate 51

A

B



C

Ethnohistoric Information: See T.A. 16.

T.A. **18** (Figs. 55-57; Plates 48 B-D, 49-51)

Classification: Small Dispersed Village. Our border between T.A.18 and T.A.15 is somewhat arbitrary. There does not appear to be any significant Aztec occupation beneath the modern Zacualuca community.

Natural Setting: 2300-2340 meters. Situated on gently sloping ground at the base of a steep hill (Cerro Zacualuca). Moderate to severe erosion. Soil depth average about 20-30 cm in the lower part of the site, and becomes progressively shallower upslope. Patches of bare tepetate subsoil are exposed in several places. Dominant natural vegetation is scattered pirul trees, wild nopal, and a variety of small cactus and thorn bush.

Modern Land Use: Aside from scattered maguey, most of the site area is uncultivated and used only for grazing. The higher slopes south of the site are devoted exclusively to pasture. The lower, flatter ground along the north edges of the site contains some fields of beans, barley, and maize. Maize becomes the dominant crop further downslope to the north and east. All cultivation is temporal. At its western end T.A.18 abuts on the modern village of Zacualuca.

Archaeological Remains: A total of 31 mounds were identified. These occur scattered fairly evenly throughout the site area of about 28 hectares. All these features are badly eroded, seldom standing more than 30-50 cm high, and occasionally marked only by a dense concentration of rock rubble and surface pottery at ground level. In most cases surface pottery is found in light-to-moderate and moderate concentrations on or immediately around the mounds. Between the mounds density of surface pottery drops noticeably, but is usually found in light or even light-to-moderate quantities over all the site area. A number of structures have almost certainly been totally obliterated, particularly in the badly eroded north-central section. Occupation is very dominantly Late Aztec, with a light scatter of Early Aztec material. A light Late Toltec occupation (T.T. 215) also occurs over much of the Aztec site.

Nearly all identifiable structures are low and fairly small (generally 15-25 meters in diameter), and appear to be domestic residences of single household units. However, two or three are markedly higher than average, and may be small ceremonial-civic structures. The most definite of these is situated in a relatively isolated position about midway along the south edge of the site. This feature measures about 2.5-3 meters tall. Several pits have exposed a nicely constructed room or walled patio with plastered stone walls and a prepared gravel floor, also plastered, which measures about three meters wide and at least four meters long. This plastered room or patio appears to have been filled with earth and rock rubble during Aztec times, probably in order to raise the total height of the structure an additional meter or so.

There are two other possible small temple platforms, both located close together at the west end of the site near the edge of the modern Zacualuca community. These measure about 20-25 meters in diameter, and stand roughly 1.5-2 meters high. Extensive pitting in one reveals an internal construction of solid earth and rock rubble. It may be significant that these two mounds are situated within an area of residential occupation somewhat different from the normal situation at T.A.18: on either side of the two possible small temple platforms are low mounded areas extending continuously over areas of roughly 45 meters in diameter. These latter may well be closely spaced or contiguous residential quarters incorporating larger numbers of people than most other structures at this site.

The steep hillslopes south of the site are covered with abundant remains of abandoned stone-faced terraces. In addition, extending around much of the base of Cerro Zacualuca there are clear traces of an abandoned canal which enters the T.A.18 site area at about its midpoint near the major temple platform described above. From here the canal divides, with one branch extending northeast across the eastern half of the site, and the other branch leading west through the western half of the site. At several points smaller stone-lined branch canals can be seen leading off the main canal at right angles.

The main canal could not be traced to its original starting point which appears to have been somewhere higher up on the southeast or south side of Cerro Zacualuca. There are no definite associations of this canal with any of the Aztec structures at T.A.18, but neither does the canal appear to cut through any Aztec structures (as it might do if it had been constructed in Posthispanic times). Thus it is quite possible that this network of canals served to lead water from higher up on the hill into the Aztec community for household and/or agricultural use. The water source may have been a spring (now dried up), or simply rainfall runoff.

Ethnohistoric Information: This is probably part of the 1580 community of Santiago Sagualuca, then a subject village of Tepexpan (but see discussion in Chapters 12 and 13).

T.A. 15 (Fig. 54)

Classification: Hamlet. Our borders between T.A.15 and the adjacent T.A.18 and T.A.17 sites are largely arbitrary.

Natural Setting: 2320-2340 meters. Situated on gently sloping ground at the base of two steep hills (Cerro Mixcuyo and Cerro Zacualuca). Severe erosion. Soil depth averages 10-20 cm, with numerous patches of bare tepetate subsoil. Scattered pirul trees, wild nopal, and a variety of small cactus species and thornbushes comprise the main natural vegetation.

Modern Land Use: Except for a few scattered maguey, the immediate site area serves only as pasture land. Slightly lower, flatter ground to the north, southwest, and east is used for temporal cultivation of beans, with minor amounts of maize and barley. About 500 meters southwest of the site there is a large earth dam extending across the low ground between Cerro Zacualuca and Cerro Mixcuyo. This appears to have functioned in a fairly elaborate floodwater irrigation system (probably at about the turn of the century, during the height of the hacienda era), but now acts only to block the movement of sediment downslope from the northeast.

Archaeological Remains: Variably light and light-to-moderate concentrations of surface pottery over an area of about 8 hectares. Five badly destroyed mounds were identified scattered over the western half of the site. Rock rubble concentration over the remaining site area suggests the former presence of others, now completely eroded. The recognizable mounds average between 20 and 25 meters in diameter (full extent of heavy rock rubble), and stand from 20-50 cm high. The heaviest concentrations of surface pottery are found on and around these structure. All appear to be domestic residential units. Dominant occupation is Late Aztec.

The higher slopes to the west and south of the site are covered with extensive remains of abandoned stone-faced terraces. These are seldom more than three or four meters wide, and are now preserved to only 10-15 cm high at the front face.

Ethnohistoric Information: See T.A. 18.

T.A. 17 (Fig. 54)

Classification: Small dispersed village. Our borders between T.A.17 and the adjacent sites of T.A.16, T.A.14 and T.A.15 are somewhat arbitrary.

Natural Setting: 2290-2310 meters. Situated on gently sloping ground just above the floor of a small sub-valley, and below the eastern base of a steep hill (Cerro Mixcuyo). Moderate to severe erosion. Soil depth averages between 10 and 25 cm, with some patches of bare tepetate subsoil exposed. Major natural vegetation consists of scattered pirul trees and wild nopal.

Modern Land Use: Most of the western half of the site now serves only as grazing land. Eastern area is cultivated in maize, beans, barley, and maguey, with proportion of maize increasing in the flatter, lower, deeper-soil land to the east. All cultivation is temporal. Small earth-maguey bancals and check dams have acted to prevent wholesale sheet erosion within the site area.

Archaeological Remains: Variable light, light-to-moderate, and moderate concentrations of surface pottery over an area of about 34 hectares. A total of nine or ten probable structures were identified. These occur in two clusters--a smaller group of two mounds at the north end of the site, and a larger group of seven-eight structures in the southeast corner. The extensive rock rubble and sherd cover in other parts of the site area indicate the former presence of other structures now completely eroded. The surviving mounds are badly eroded, generally measuring about 15-20 meters in diameter and standing roughly 20-30 cm high. A single mound, near the site's northern edge, is somewhat larger, measuring about 25 meters in diameter and 50 cm high (Mound 51). Two small sub-platforms, each about five meters in diameter, were noted on the surface of this larger mound. Surface pottery and a variety of stone tools are abundant on and around all identifiable structures. All the preserved mounds appear to be domestic residential units.

Occupation is dominantly Late Aztec (Chimalpa phase), with much smaller quantities of Early Aztec (Zocango phase) material. A fairly substantial Late Toltec occupation (T.T. 216) was noted over parts of the eastern half of the Aztec site.

Ethnohistoric Information: Problematical, if it lies within the area of Acolman's jurisdiction it could be part of the sujeto of Tenextlacotla; if within that of Tepexpan could be part of the sujeto of Zagualuca.

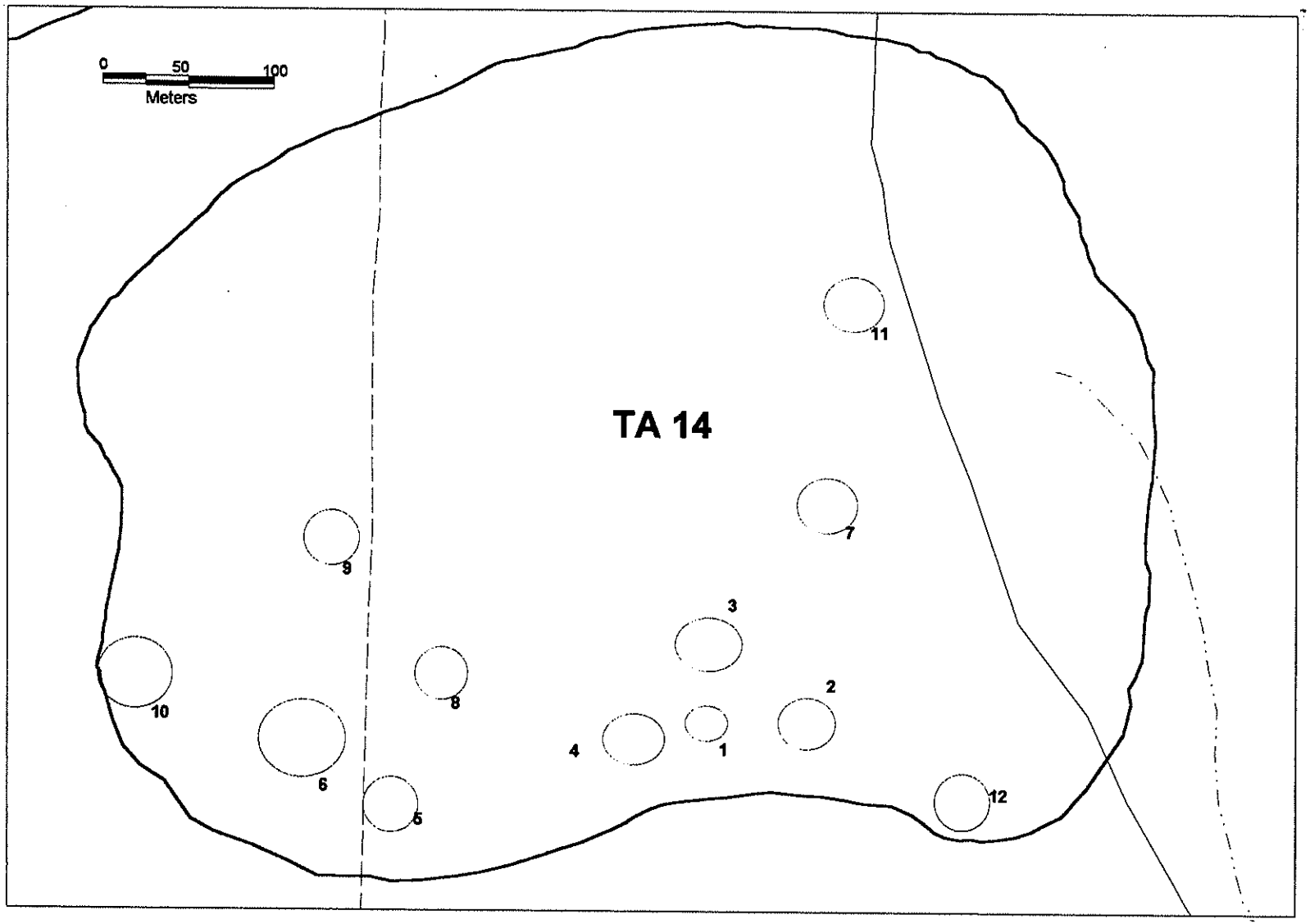
T.A. 14 (Fig. 58)

Classification: Small dispersed village. There is no distinct border between T.A.14 and T.A.17 to the north. Our division between these two settlement areas is largely an arbitrary one, mainly dictated by considerations of convenience, at a point where there is a slight gap in occupation debris.

Natural Setting: 2290 to 2320 m. Situated on gently sloping ground at the base of two steep hills (Cerro Mixcuyo and Cerro Maravillas). Severe erosion, with soil depth nowhere greater than about 25 cm, and numerous patches of bare tepetate subsoil. The site lies near the mouth of a small subvola leading down onto the main piedmont floor. Primary natural vegetation consists of scattered pirul trees and wild nopal.

Modern Land Use: Apart from a few scattered maguey, the site area is uncultivated today. The small valley floor to the east is devoted to rainfall cultivation of maize. Beginning just east of the site there is a large

Figure 58



masonry-earth dam which extends westward across most of the valley floor. This probably once functioned in an elaborate floodwater irrigation system (probably during the hacienda era at the turn of the present century), but now acts only to block the movement of sediments from the north.

Archaeological Remains: Variably very light, light, and light-to-moderate concentrations of surface pottery over an area of about 26 hectares. Twelve badly eroded small mounds were identified, scattered fairly evenly over the southern half of the site area. These structures average about 15-20 meters in diameter, and stand between 30 and 75 cm high. A few show traces of stone wall bases on their upper surfaces. All are presumably domestic residences of individual household units. A few traces of ancient stone-faced terraces were noted on the slopes just above the western limit of the site. Occupation is very predominantly Late Aztec (Chimalpa phase). There is also a fairly substantial Late Toltec (Mazapan phase) occupation in the badly eroded eastern third of the site area (T.T. 16).

Approximately 200 meters southeast of the site Millon (1957) excavated a section across what he considered to be a small-scale floodwater irrigation system probably dating back to the Early Postclassic. If this chronological evaluation is correct, the use of floodwater irrigation in this area would appear to be contemporary with the Aztec and Toltec occupation at T.A.14, and adjacent sites clustering around the edges of the small-valley floor at the edge of the main piedmont.

Ethnohistoric Information: See T.A. 17.

T.A. 25 (Fig. 59)

Classification: Small Dispersed Village.

Natural Setting: 2290-2330 m. Situated on gently sloping ground and the lower flanks of two steep hills (Cerro Mixcuyo and Cerro Zacualuca). Moderate to severe erosion. Soil depth varies from 10-15 cm in the higher parts of the site, to 20-30 cm over the lower area. Patches of bare tepetate subsoil have been exposed in several places. The surrounding slopes are covered with extensive remains of abandoned terraces which continue to function as erosion checks. Scattered pirul, wild nopal, and a variety of small thornbush and cactus comprise the major natural vegetation.

Modern Land Use: The higher parts of the site now serve only for grazing, as do the higher slopes to the northeast and north. The lower site area is used for rainfall cultivation of maguey, maize, beans, and barley. Moving southward and westward onto lower, flatter ground maize becomes the dominant crop. A large deteriorated modern dam crosses the low area between the two steep hills at the north end of the site. This probably functioned in a system of floodwater irrigation, which is no longer operating. The modern village of Zacualuca abuts the site on the northwest.

Archaeological Remains: The total site area measures about 37 ha. Surface pottery and rock rubble occur in variably light, light-to-moderate, and moderate concentrations. Stone tools of obsidian and basalt are common. A total of 19 badly eroded mounds was identified, and amorphous concentrations of surface pottery and rock rubble in other localities indicate the former presence of several more. Most of the recognizable mounds are scattered throughout the west-central section of the site. All mounds appear to be domestic house platforms, averaging about 20-30 m in diameter, and standing between 20 and 50 cm high.

Occupation is predominantly late Aztec, with a light scatter of Early Aztec material. A substantial Late Toltec occupation (T.T. 186) was noted in the north-central section, and a substantial Teotihuacan village

Figure 59

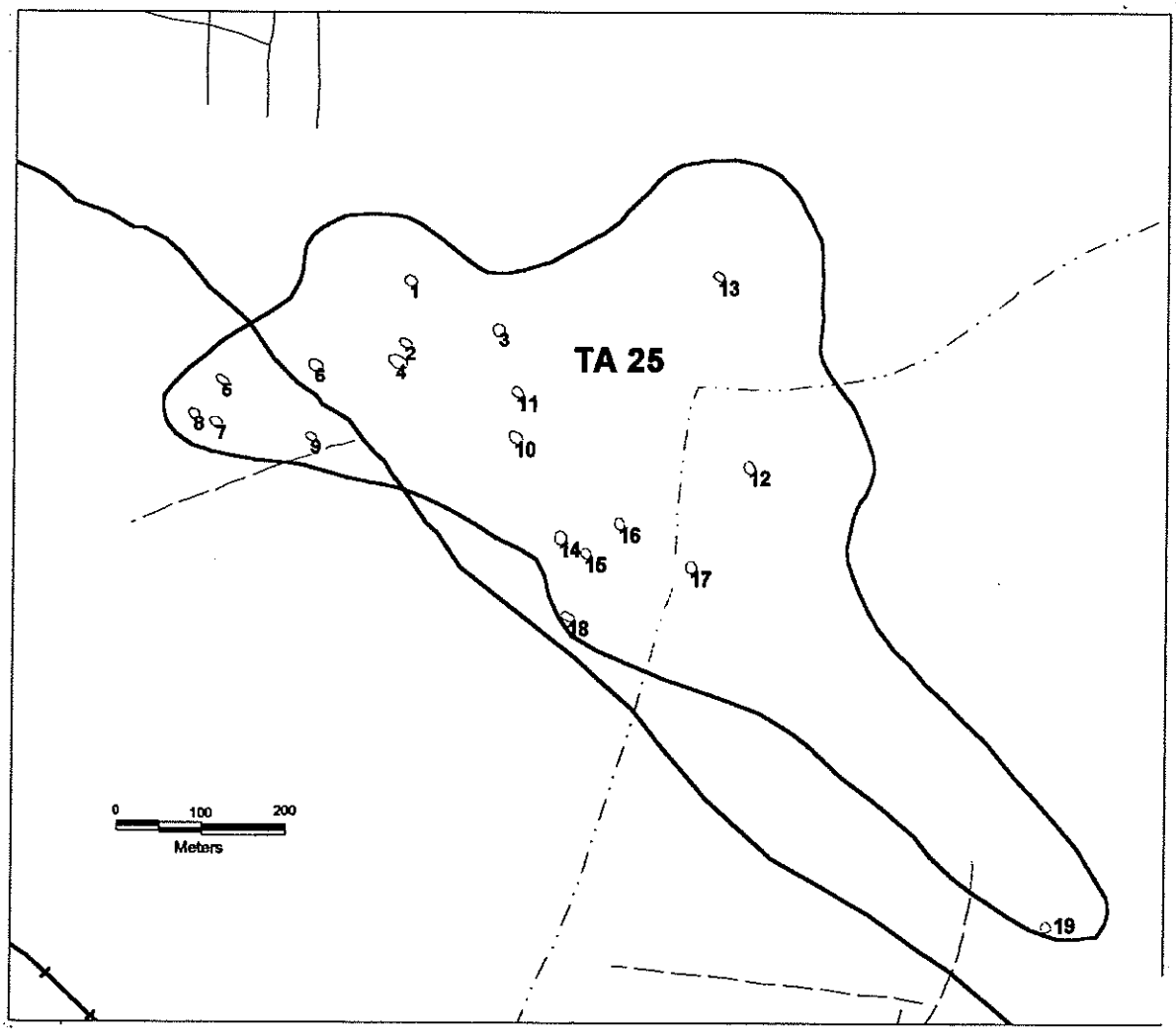
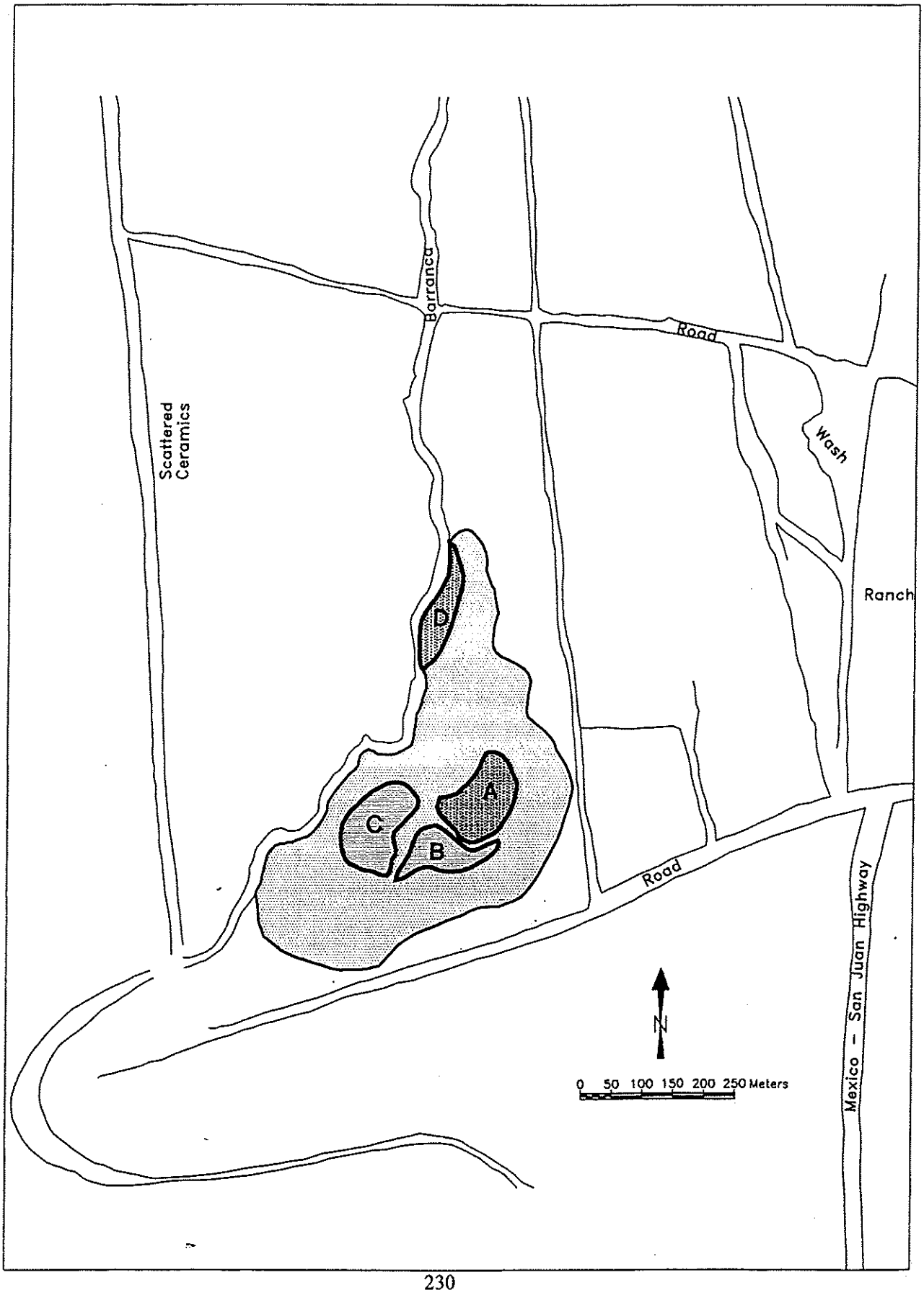


Figure 60


Barranca
Road
Scattered
Ceramics
Wash
Ranch
D
A
C
B
Road
N
0 50 100 150 200 250 Meters
Mexico - San Juan Highway

covers much of the eastern site area (T.C. 5).

Extensive remnants of abandoned stone-faced terraces cover the adjacent hillslopes. These appear to be prehispanic, and most probably date to the Aztec period.

Ethnohistoric Information: See T.A. 17.

T.A. 157 (Fig. 60)

Classification: This site, also known as Ejido de Atlatongo or Rancho Aleman, was surveyed by Kolb as the leader of the Teotihuacan Period Survey Team in 1963 and resurveyed by him in 1970. The artifact collections from the Teotihuacan Period Survey Team were processed by Kolb in 1963 and 1964 and consisted of four samples. It was not resurveyed by the Aztec period Survey Team and the following analysis is based on the site description by Kolb. Probably a hamlet in Aztec times.

Natural Setting: Site T.A. 157 is located in the Lower Valley, North Piedmont Ecological Zone, between 2,265 and 2,300 m. Soils in the site area have a sandy to loamy texture and are tan to light brown in color with depths ranging from 0 to at least 150 cm. There was moderate erosion in the northern area and tepetate was exposed in the northern and northwestern area of the site. Moderate concentrations of rock and tezontle fragments are found in the area. Vegetation in the vicinity includes pirul and various types of grasses. Other natural features include washes to the north, south, and east of the site and a major barranca, up to 6 m in depth to the west of the site.

Modern Land Use: Cultural features include no structures. The site area is used for agricultural purposes including the cultivation of maize and beans and also for grazing. There is a maguey plantation to the south and west of the site. Both nopal and maguey are moderately abundant.

Archaeological Remains: The total multicomponent site occupies an area of 11.5 ha. Five mounds or areas of heavy rock and artifact concentration were identified. Three of them form a dense, almost continuous zone and probably are the remains of more than three structures. Most of the architectural remains are probably of Teotihuacan age and the Aztec occupation occurs as a light distribution on these mounds. The site has two phases of pre-Teotihuacan, three phases of Teotihuacan, and four phases of post Teotihuacan represented for a total of 9. Associated non-Aztec sites include T.F. 136 (Tzacualli phase), T.F. 138 (Patlachique phase), T.T. 14 (Late Toltec phase), T.C. 6.

The site has a sparse distribution of lithic materials including a few broken obsidian blades, scrapers, and knives. No ground stone tools were noted.

Ethnohistoric Information: See T.A. 17.

Figure 61

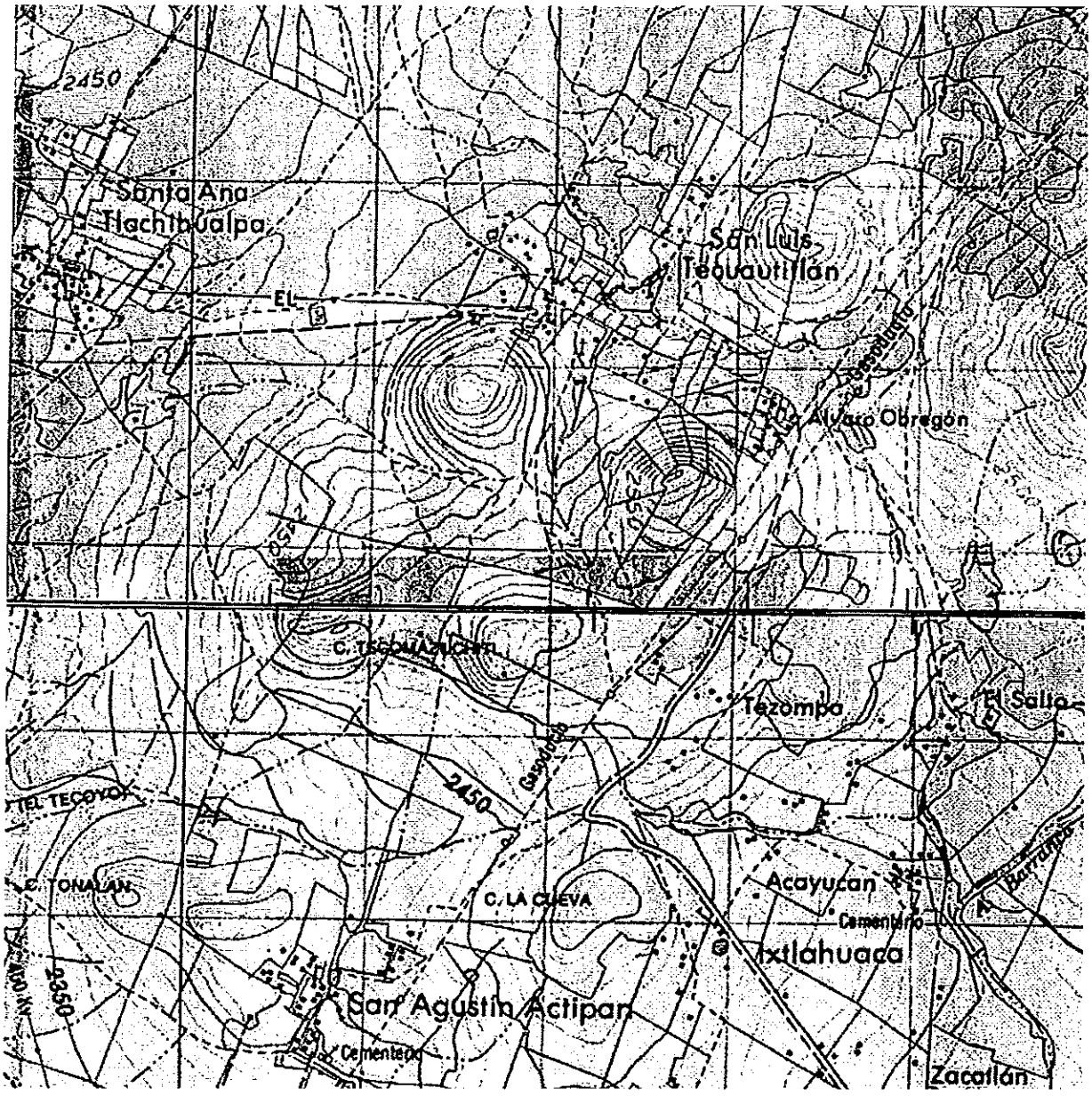

2450
Santa Ana
Tlachihualpa
San Luis
Tequautitlán
EL
Álvaro Obregón
C. TECOMAZUCHIL
Tezompa
El Salto
2450
TEL TECOYOT
C. TONALAN
C. LA CUEVA
Acayucan
Cementerio
Ixtlahuaca
2350
San Agustín Actipan
Cementerio
Zacatlán

Figure 62

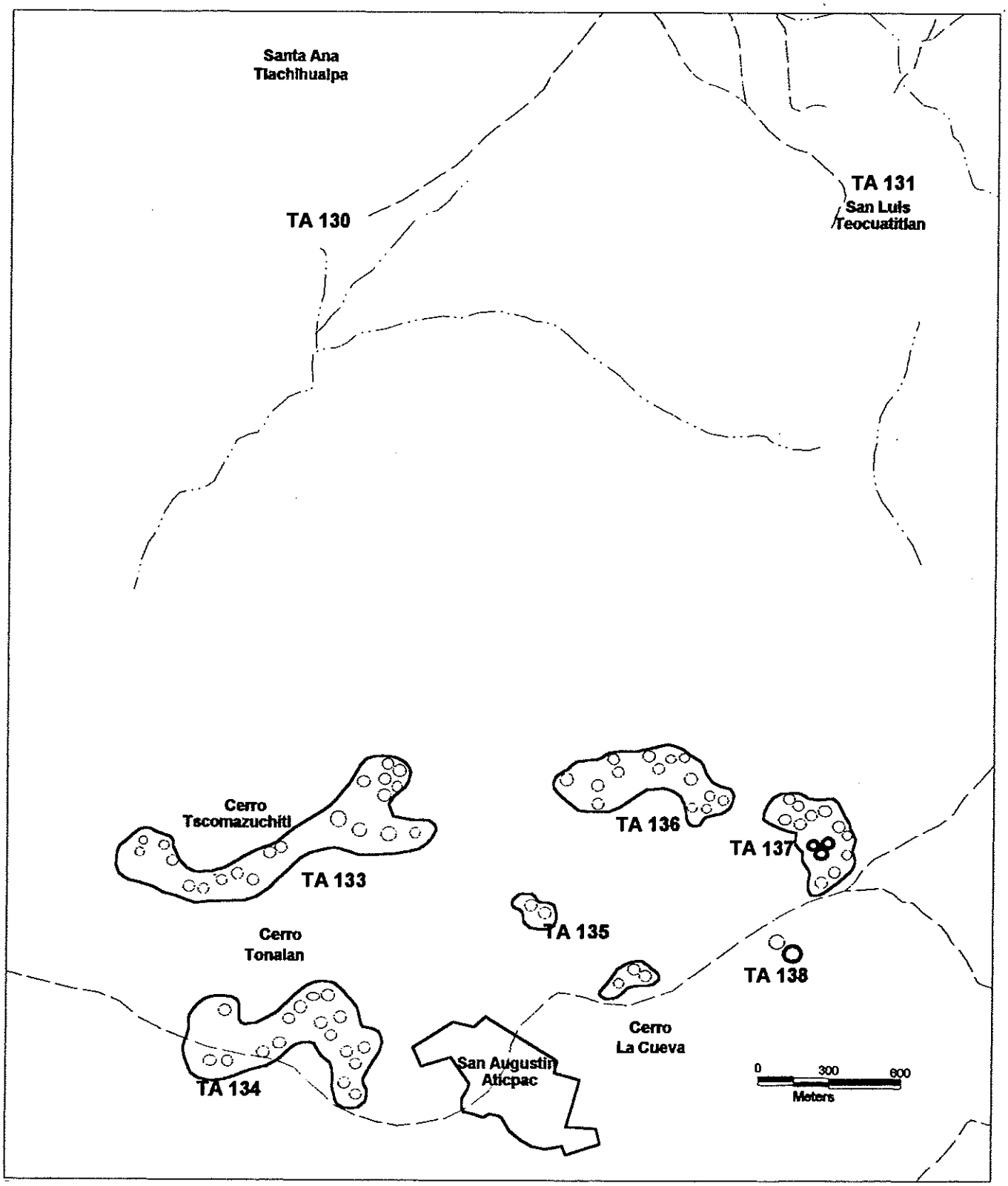
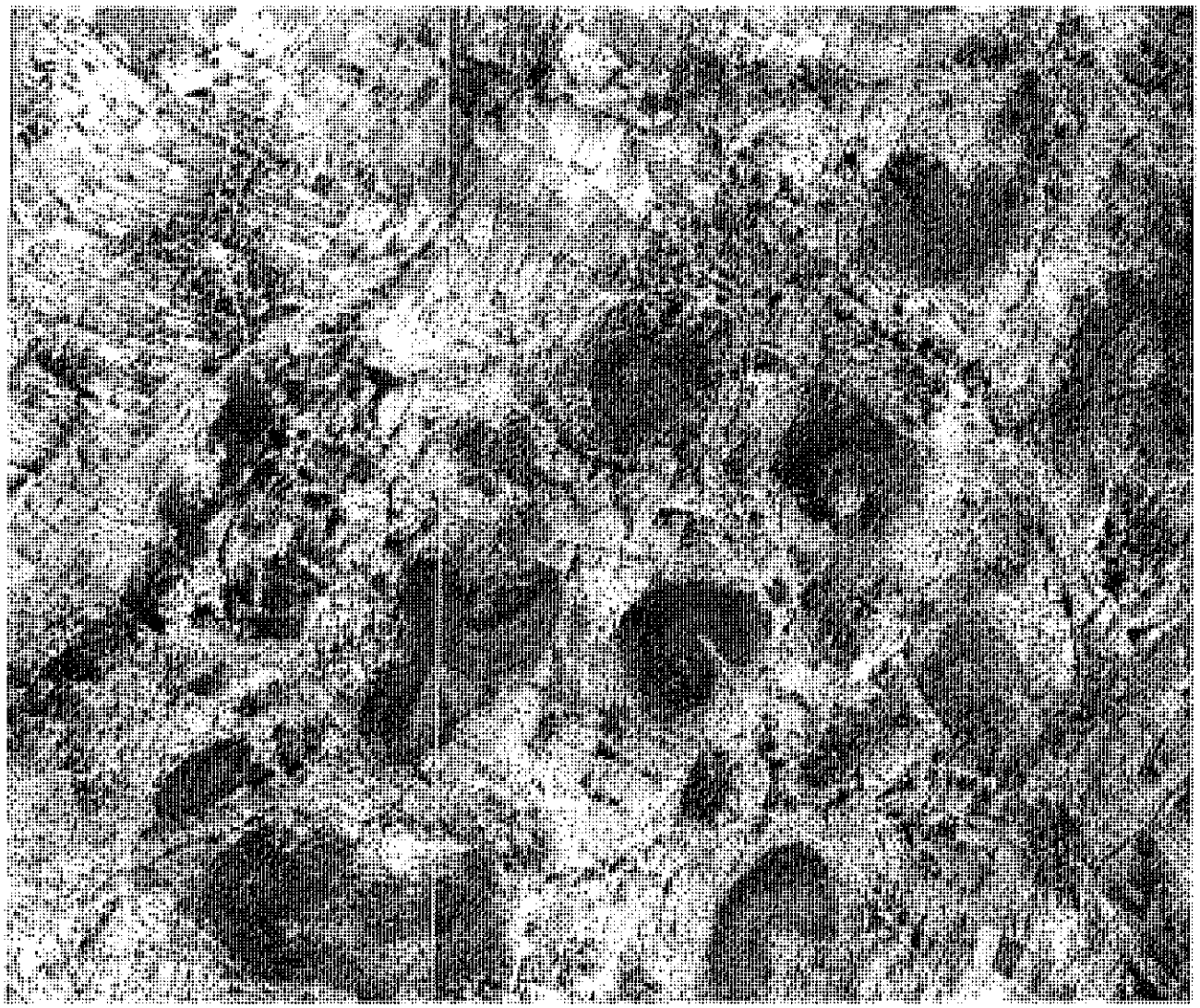

Santa Ana
Tlachihualpa
TA 130
TA 131
San Luis
Teocuatitlan
Cerro
Tscomazuchitl
TA 133
TA 136
TA 137
TA 135
Cerro
Tonalan
TA 138
Cerro
La Cueva
TA 134
San Augustin
Aticpac
0
300
600
Meters

Plate 52



8. ZONES 7-8: MIDDLE VALLEY: THE TEOTIHUACAN CONURBATION AND ADJACENT NORTH PIEDMONT (Figs. 61, 62; Plate 52)

An area of approximately 20 km^2 of piedmont adjacent to the alluvial plain of the Middle Valley was occupied by the giant Teotihuacan period city we have designated as site T.C. 1. This area is defined as Zone 8. The two high volcanoes; Cerro Malinalco, and its detached smaller cone Cerro Colorado; and Cerro Gordo define the northern edge of this zone. Between the two volcanoes is a broad tributary valley traversed by an extensive network of seasonal streams, all of which are partially canalized, particularly where they enter the ancient city of Teotihuacan. This intermontane valley is defined as Zone 7, an area of severe sheet erosion and of marginal agricultural value today. At the northern edge of the intermontane valley is a cluster of small volcanic cones closely linked topographically and geologically to Cerros Gordo and Malinalco. The Aztec sites are primarily dispersed settlements on the 2350-2550 m contour.

During general survey eight Aztec period sites were located within and around this cluster, typically in the form of dispersed line villages, following the lower contours of the range. The general survey also revealed a virtually continuous band of similar sites on the lower west flank of Cerro Gordo, from the small settlement of El Salto on the northwest to the Hacienda Cerro Gordo on the southeast where it merges with a comparable band of settlement on the south flank of the mountain. These latter sites, designated T.A. 60 to T.A. 70 are described in the following section on Zone 9. Additionally several small sites were noted in the general survey on the west, north, and east slopes of Cerro Malinalco.

Unfortunately, none of the sites in Zone 7 was intensively surveyed by the Aztec Survey Teams and the information we have on most of them is that derived from the general survey. All of our statements on these sites, therefore, should be taken as very preliminary data. In three cases, T.A. 140, 142, and 143 there are Formative and Teotihuacan Period occupations on them as well, and these sites were surveyed intensively by the other survey teams. In two of these cases, T.A. 140 and 142 the pre-Aztec settlement consists of a much smaller, more compact site within a larger, more dispersed, linear Aztec settlement. Since the observations were focused primarily on the non-Aztec sectors of the site, our data on these sites are, therefore, not complete. In the case of T.C. 30-31-32 cluster (T.A. 143), Aztec occupation occurs in the same areas as the Teotihuacan period. Furthermore, we took a considerable number of surface samples from this cluster of sites and hence our Aztec data is comparable to that obtained from T.C. 119 (T.C. 8) where a similar situation occurred. We have reproduced the site maps of these sites, along with modified version of the accompanying texts here.

A series of highly dispersed villages is located in the area today, including Palapa, San Antonio, Acayucan, Ixtlahuaca, Zacatlan, and Tlachinolpa. In 1580 the following settlements, subject to San Juan Teotihuacan, were located in this area: San Antonio Tlaxomalco, San Luis Xiuhquemecan, Los Reyes Aticpac, and San Andres Oztocpachocan.

On the 1580 Relación map the town of San Juan Teotihuacan is located, with its detached barrios of Maquixco to the west and San Lorenzo to the south; and four villages to the east, San Sebastian Xolalpan, Santa Maria Coatlan, San Francisco Mazapan, and San Martin Teacal. All are within the area occupied by the Teotihuacan period city, our Zone 8. All of these are settlements today and all, with the exception of San Martin, which is a separate municipio, are part of the municipio of San Juan. This area was intensively surveyed by the Teotihuacan Mapping Project and all occupations, including Aztec, were recorded by the project. It is clear from our own general surveys that Aztec occupation over this area is very extensive and is very comparable to the Modern and Early Colonial settlements noted above. We have only intensive

survey data, however, from the 20th century town of San Juan Teotihuacan and do not have the results of the Teotihuacan Mapping Project survey as yet to corroborate the following reconstruction. We surveyed the town of Teotihuacan itself including La Villa, the center of the town, and its two attached barrios of San Juan Evangelista to the west and Purificacion to the east, and describe the results of that survey here. It should be understood, however, that when the Mapping Project results are published they will supersede any of the conclusions offered here since their survey methodology was much more intensive and included much more sophisticated techniques, including photogrammetric survey with 50 cm contour intervals. We surveyed a portion of the area between San Juan Evangelista and the detached barrio of San Maria Maquixco but not the area within the latter barrio itself. We also intensively surveyed areas to the north of the urban zone of Aztec Teotihuacan on the lower slopes of Cerro Malinalco.

In 1580, virtually all of the subject communities of the town of Teotihuacan that were situated within the Teotihuacan Valley were located in this area, along with a few settlements on the south piedmont of the Middle Valley.

Zone 7: Site Descriptions

T.A. 132

This site was resurveyed during the Temascalapa Regional Survey as Tm-Az-24 and the reader is referred to the description of Tm-Az-24 in Chapter 6.

T.A. 133

Classification: This site is either a large hamlet or small village probable the latter assuming some mound destruction.

Archaeological Remains: This site occurs in a band of linear settlement on the lower pass between Cerros Tlaltepec or Tecomasuchitl and Cerro Tonala and continues along the lower east flank of Cerro Tlaltepec, a band approximately 1000 m long and 200 m wide. Below the hills is severely eroded terrain. Much of the drainage here flows westward into Lake Xaltocan, by means of the Barranca el Muerto or El Tecoyo. The general survey located 20 mounds, rather evenly distributed throughout the site. The total site area is approximately 20 hectares. Xometla phase occupation also occurs (T.A. 114)

T.A. 134

Classification: Either a large hamlet or small village.

Archaeological Remains: This site appeared in general survey as a band of settlement on the south slope of Cerro Tonala, in the intervening valley between it and a small attached volcanic cone north of Cerro Malinalco. It extends for a distance of 700 m in a band 100-200 m wide, an area of 7 hectares. Within this

band of settlement is a relatively even distribution of 17 residential mounds that were recorded in the general survey. The 20th century village of San Agustin Aticpac borders the site to the east. Xometla phase also occurs (T.T. 113).

T.A. 135

Classification: Hamlet

Archaeological Remains: This is a small site located northeast of San Agustin Aticpac within which the survey recorded three residential mounds. If the site is limited to the area indicated in the general survey, it would be classifiable as a small hamlet. If it runs underneath the modern community it would be somewhat larger in size; in fact on one of the general survey maps it is shown extending underneath the village. Some Middle and Late Formative sherds were found as well (T.F. 106, 105).

T.A. 137 (T.C. 19)

Classification: Small dispersed village

Archaeological Remains: Site T.C. 19 was intensively surveyed by the Teotihuacan Period Survey Team. T.C. 19 is located approximately in the middle of an almost continuous band of Aztec settlement along the intermontone valley between Cerro Tzemolo and Cerro de la Cueva. The area of the Teotihuacan Period site is referred to locally as El Bosque. On some of the general survey maps, the Aztec site is divided into two sites, T.A. 136 to the west and T.A. 137 to the east; on another map three sites are shown, with the El Bosque area defined as a separate site. The total site area extends for a distance of 1,200 meters east-west along a band 200 meters wide, on the average, or approximately 24 hectares. Within it the general survey team located thirty mounds, two of which were identified as possible temple platforms. The El Bosque section is reported as covering 8.5 hectares and in the site description for the Teotihuacan Period, seven mounds are located, but only one of these had Teotihuacan occupation. The total area with Teotihuacan ceramics was only 1.5 hectares. We have included the following description of the Teotihuacan Period site in this volume for additional information. Also found in this site were a number of Formative sherds dating from the Cuanalan phase (T.F. 212), the Patlachique phase (T.F. 85), and Tzacualli phase (T.F. 29). Toltec occupation occurs both of the Xometla and Mazapan phases (T.T. 217 and 192).

T.A. 136 (T.C. 19)

Background: This site, also known as El Bosque, was surveyed by the Teotihuacan Survey Team in 1963 and has not been resurveyed. The artifact collection from the Teotihuacan Period survey team was processed by Kolb in 1963 and 1964 and consisted of one sample.

Natural Setting: Site T.C. 19 is located in the North Tributary Valleys, between 2,460-2,480 m. Soils in the site area have a sandy to loamy texture and are tan to light brown in color, with depths ranging from 9 to at least 100 cm. There is substantial erosion in most of the site area, and tepetate is exposed in numerous sections of the site. Moderate concentrations of rock and tezontle fragments are found. Vegetation in the vicinity includes pirul, nopal, and various grasses. Other natural features include several washes to the north and south of the site.

Modern Land Use: Cultural features include no structures and no jagüeys. This site area is used primarily for grazing purposes, but also includes the cultivation of maguey and nopal which are accompanied by terracing.

Archaeological Remains: The total multicomponent site occupies 8.5 ha. The Aztec occupation occurs throughout the entire site; seven mounds were identified of which only one had Teotihuacan occupation. The site has two phases of the pre-Teotihuacan, one phase of Teotihuacan, and one of the post-Teotihuacan represented for a total of four. Associated non-Aztec sites include T.F. 29 (Tzacualli phase), T.F. 85 (Patlachique phase), and T.C. 19. The following mound was sampled:

> T.C. 19-A, 320 m^2, heavily damaged and eroded. This is the Teotihuacan mound on the site. Artifactual remains indicated light Patlachique, light to medium Tzacualli, traces of Early Teotihuacan, and substantial Aztec components.

The site has a discontinuous and sparse distribution of lithic materials including obsidian blades, projectile points, and scrapers. Ground stone tools, especially manos and metates, were also noted.

T.A. 138

Classification: This site is located on the west slope of Cerro de la Cueva and consists of a single temple platform. Toltec sherds of both phases were found and coded as T.T. 218 and 193.

T.A. 140, 141 (T.C. 108)

Classification: This site was surveyed by the Teotihuacan Period Team as T.C. 108 and we have presented below a modification of the description of the Teotihuacan Period site from Volume 3. It was probably a hamlet in Aztec times.

Background: Las Palomillas de Cerro Tompiate was surveyed by the Teotihuacan Period Survey Team in 1963 and was not resurveyed by the Aztec Team. No Teotihuacan artifact collections were made nor were collections made by any other survey teams. The chronological data for this site are derived from the field notes of that team.

Natural Setting: Site T.A. 140-141 is located in the North Tributary Valleys, between 2,420-2,440 m. Soils in the site area have a sandy to loamy texture and are tan to medium brown in color, with unknown depths. There is moderate erosion in most of the site area, and tepetate is exposed in the southern and western sections of the site. Sparse to moderate concentrations of rock and tezontle fragments are found in the area. Vegetation in the vicinity includes pirul, nopal, maguey, and various grasses. A barranca is located to the south of the site.

Modern Land Use: Cultural features include no structures and no jagüeys. The site area is apparently used for grazing purposes, although nopal and maguey may be cultivated.

Archaeological Remains: The predominant occupation of this site is apparently Aztec. The information is primarily from a brief initial survey. The total multicomponent site occupies 6.8 ha. Three mounds were identified of which one has Teotihuacan occupation. The site has two phases of the pre-Teotihuacan, two

phases of the Teotihuacan, and two phases of the post-Teotihuacan represented for a total of six. The Cuanalan occupation was coded ast T.F. 213, Mazapan, as T.T. 116 and 117. A few sherds of Xometla phase were also found

T.A. 142 (T.C. 35)

Classification: This site was surveyed by the Teotihuacan Period Survey Team as T.C. 35 and we abstracted from Volume 3 a modified description of the Teotihuacan Period component on this site. It was probably a hamlet in Aztec times.

Background: This site, also known as Santa Maria Palapa-Cerro Tompiate, was surveyed by the Teotihuacan Period Survey Team and has not been resurveyed by an Aztec Team. The artifact collection from this survey was processed by Fletcher and Kolb in 1963 and 1964 and consisted of one sample.

Natural Setting: Site T.A. 142 is located in the North Tributary Valleys, between 2,470-2,480 m. Soils in the site area have a sandy to clayey texture and are tan to light brown in color, with depths ranging up to 200 cm. There is substantial erosion in most areas of the site. Slight concentrations of rock and tezontle fragments are found in the area. Vegetation in the vicinity includes pirul, nopal, huizache, and various grasses. Other natural features include a wash in the site area.

Modern Land Use: Cultural features include one structure located to the east and one jagüey to the west. The site area is used primarily for agricultural purposes including the cultivation of maize. Stone terraces largely destroyed are found within the vicinity, and two check dams are located in a nearby wash.

Archaeological Remains: The total multicomponent site occupies 4.7 ha, most of which is Aztec. The site has three phases of the pre-Teotihuacan, two phases of the Teotihuacan, and one of the post-Teotihuacan represented for a total of six. Associated non-Aztec sites include T.F. 32 (Cuanalan phase), T.F. 123 (Tzacualli phase), T.C. 35 and T.T. 118 (Mazapan). There were no definite mounds described in the site report. The one sample collected indicated possible traces of Cuanalan, light Patlachique, light Tzacualli, traces of Early Teotihuacan, traces of Middle Teotihuacan, and light Aztec components. The Patlachique component was not recognized in the general survey and is, as yet, unnumbered. The site has a discontinuous and sparse distribution of lithic materials including obsidian blades. Ground stone tools, including one mano, were noted.

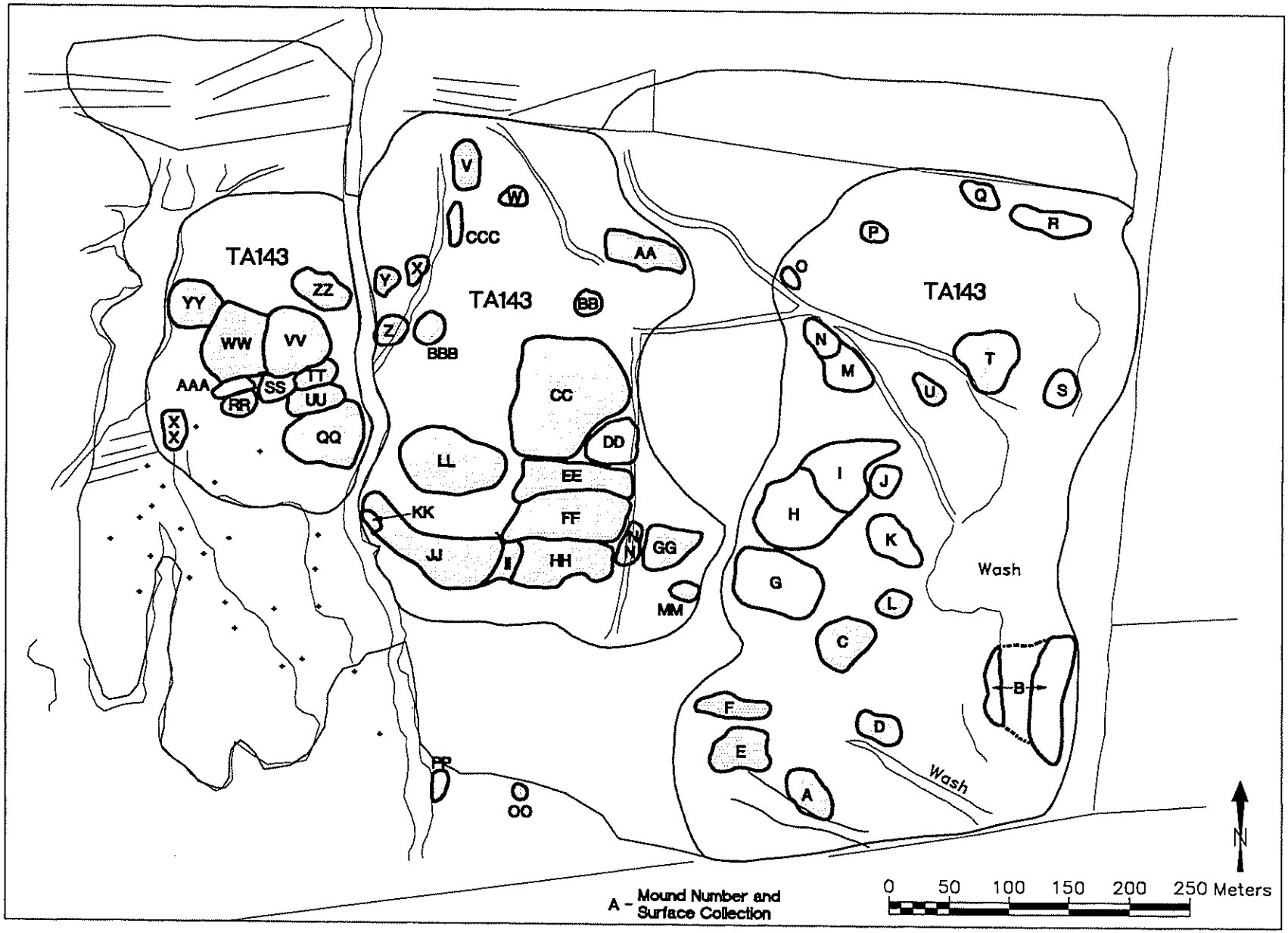
T.A. 143 (T.C. 30-31-32) (Fig. 63)

Classification: Probably a small dispersed village.

Background: This site was not surveyed by the Aztec survey team but was surveyed by the Teotihuacan survey team directed by Charles Kolb in 1963 and resurveyed by him in 1970. The multi-component site covers 23.9 hectares. Kolb surveyed it as three separate sites which he gave the designations T.C. 30, T.C. 31, and T.C. 32. All together 55 surface samples were taken from the three sites. The following is a modification of the description previously published in Volume 3.

Natural Setting: Site T.A. 143 is located in the Middle Valley, North Piedmont Ecological Zone, between 2,340-2,360 m. Soils in the site area have a sandy to loamy texture and are tan to dark brown in color with

Figure 63


TA143
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KK
LL
MM
NN
YY
ZZ
WW
VV
AAA
SS
TT
RR
UU
QQ
XX
PP
OO
P
Q
R
N
M
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U
S
I
J
H
K
G
L
C
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F
D
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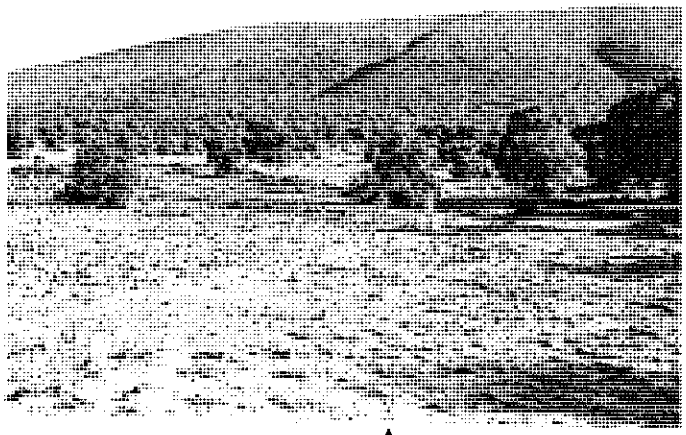
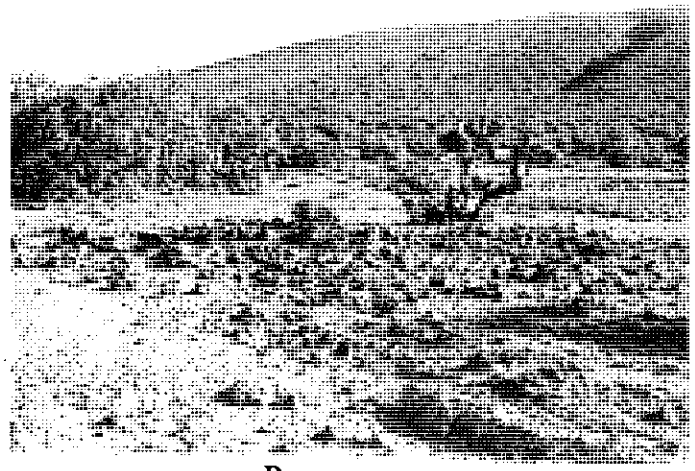
A
Wash
Wash
N
0 50 100 150 200 250 Meters
A - Mound Number and Surface Collection

Plate 53

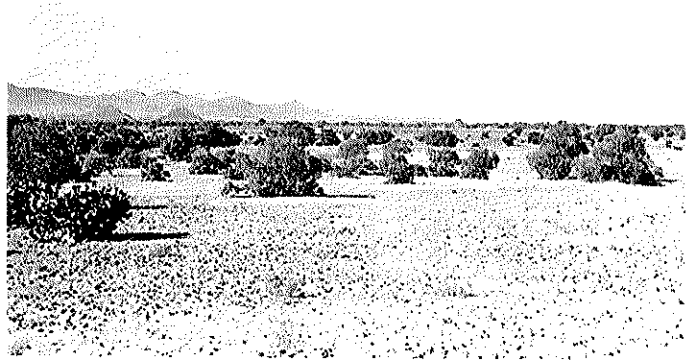


A



B

C



D

Figure 64

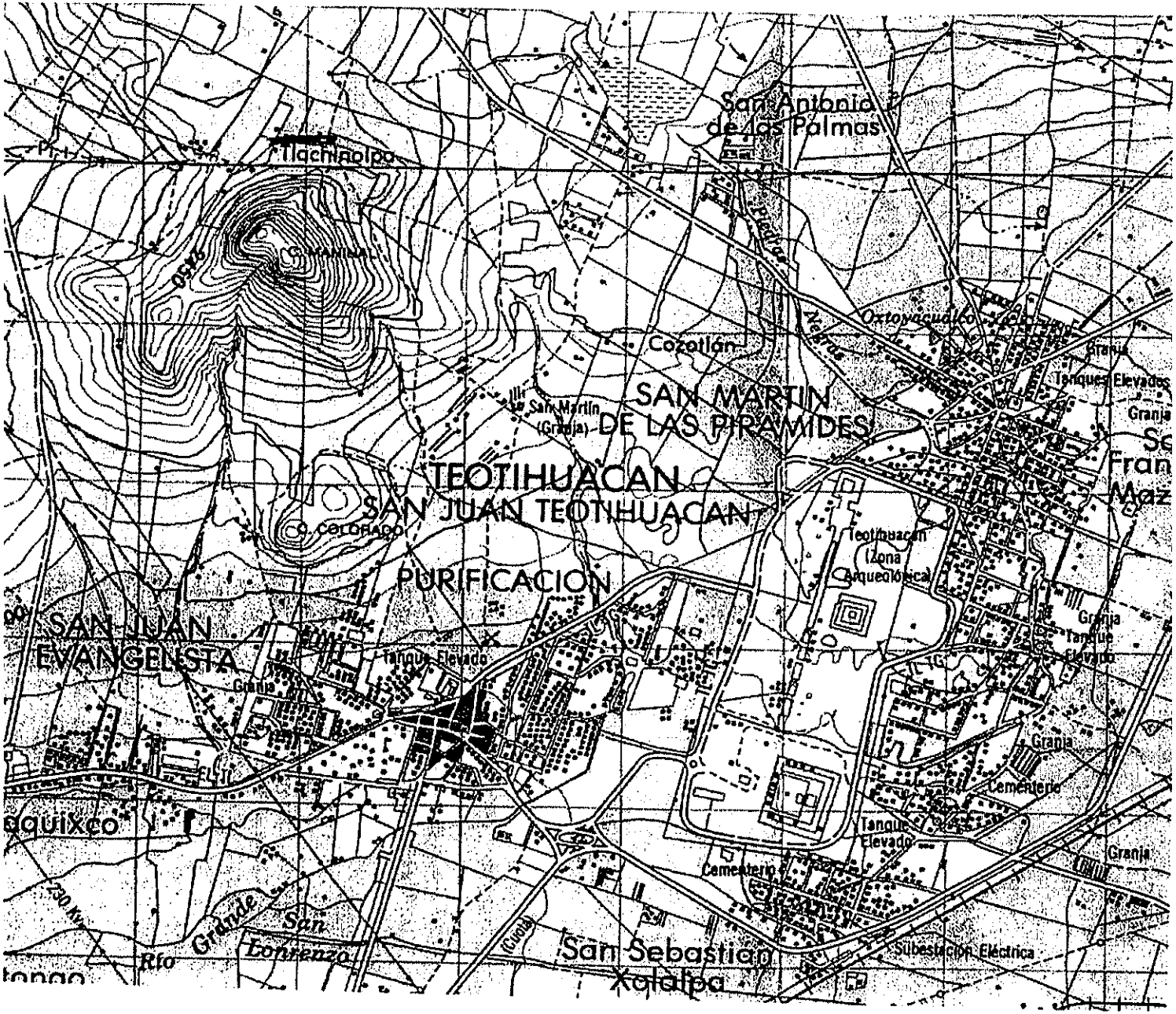

San Antonio de las Palmas
Tlachinolpa
Cerro Mantinal
Oxtoyacuáco
Cozotlán
Granja
Tanques Elevados
San Martín (Granja)
SAN MARTIN DE LAS PIRAMIDES
TEOTIHUACAN
SAN JUAN TEOTIHUACAN
Cerro Colorado
Teotihuacan (Zona Arqueológica)
PURIFICACION
SAN JUAN EVANGELISTA
Tanque Elevado
Granja
Cementerio
Río Grande San Lorenzo
San Sebastián Xolalpa
Subestación Eléctrica

Figure 65

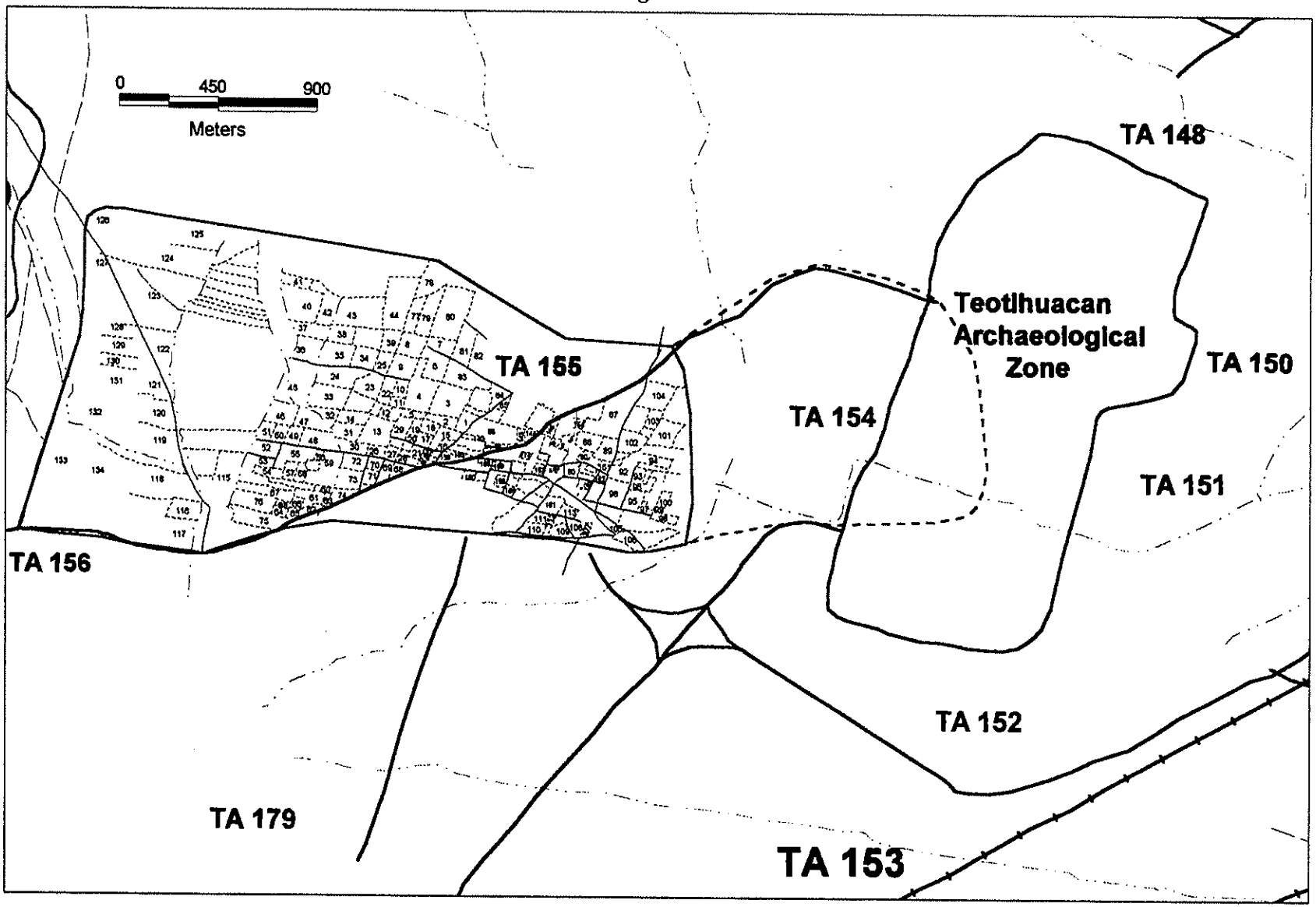
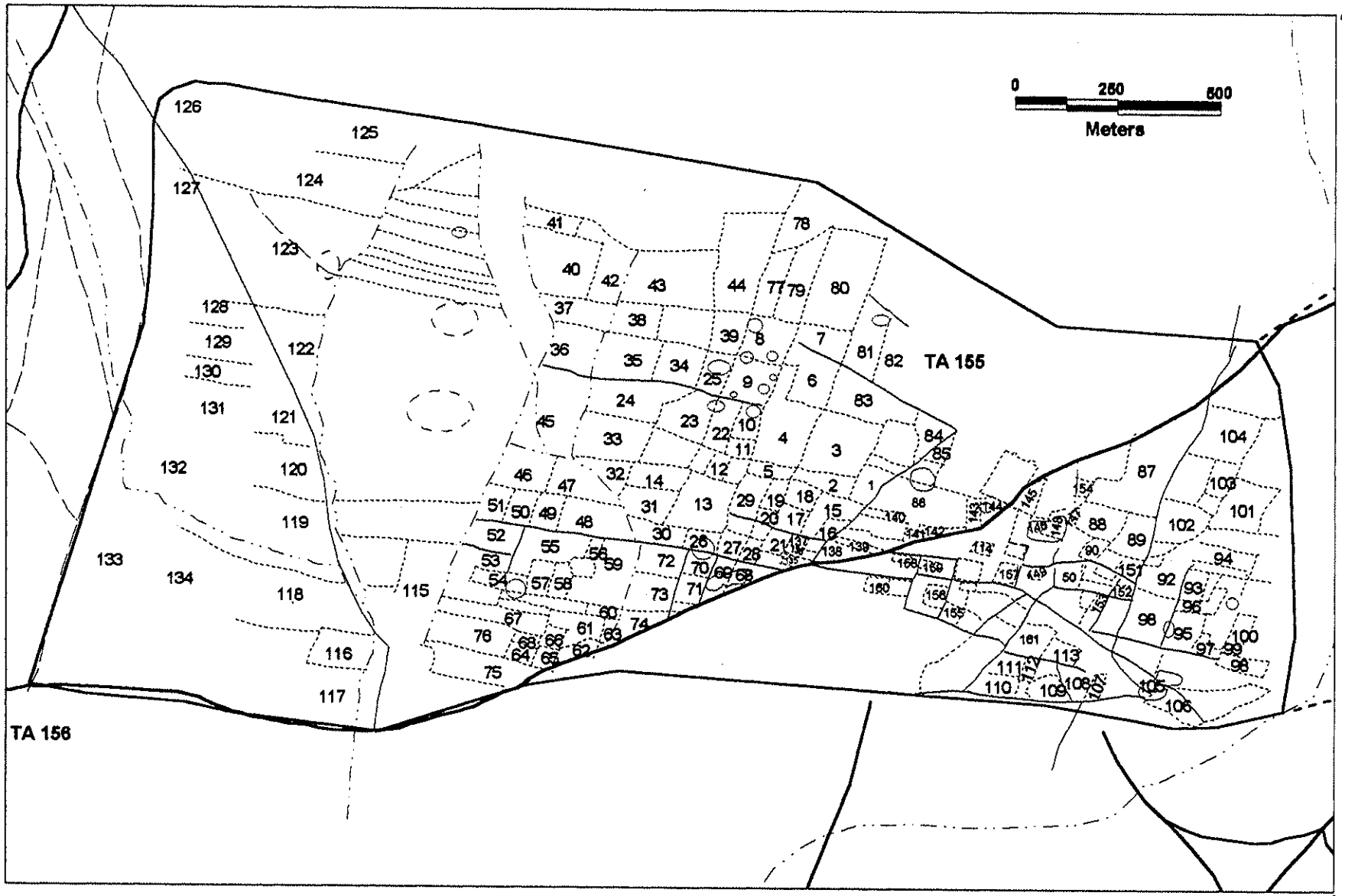

0
450
900
Meters
TA 148
Teotihuacan
Archaeological
Zone
TA 150
TA 155
TA 154
TA 151
TA 156
TA 152
TA 179
TA 153

Plate 54

Figure 66



medium brown colors predominating. Soil depths range up to 70 cm, and in one small locality in the area of T.C. 31 there are pockets of soils as deep as 220 cm. There is slight erosion in the southern area of T.C. 30, and tepetate is exposed along the western edge and southwestern corner of T.C. 30. There is moderate erosion in the southern portion in the area of T.C. 31 and erosion is extensive along the southwestern and southern corners of T.C. 32. Moderate to heavy concentrations of rock and tezontle fragments are found in the area. Vegetation in the vicinity includes pirul, nopal, maguey, various cacti (especially adrojo cactus), and wild grasses, all of which are sparse. Other natural features include a wash along the eastern side of the site, an incipient wash in the southern section of the site, and a major wash eroding into a barranca along the western margin of the site.

Modern Land Use: Cultural features include no structures and no jagüeys. The site area is used primarily for agricultural purposes including the cultivation of maize and barley. There are some bancals and stone terraces in the site area associated with maguey planting. Grazing is also conducted in this area.

Archaeological Remains: The total multicomponent site covers 23.9 ha. On the three sites fifty-five mounds were located of which nineteen are within the range of the size of Aztec residential mounds. The others all very large mounds comparable to the Teotihuacan type house compounds that we excavated at T.C. 8 and that are found in the urban center. Fifty-seven samples were collected from the three Teotihuacan sites. Twenty-one samples were collected from site T.C. 30 of which seven had substantial Aztec occupation; all twenty-three of the samples collected by the Teotihuacan survey team from T.C. 31 and all of the eleven samples collected by that team from T.C. 32 had substantial Aztec occupation. In summary, forty-one of the fifty-five samples collected by the Teotihuacan survey team had significant Aztec occupations on them. On Mounds U, V, W, X, BBB, and CCC, Aztec was the only significant component and these mounds undoubtedly are Aztec period constructions. As at T.C. 8, almost all of the large Teotihuacan apartment house type compounds on the site appeared to have had smaller Aztec residences on their summits. This site probably appeared very much like the Aztec sites surveyed on the South Slope of Cerro Gordo, i.e. T.A. 60-70. See Figure 63 for the distribution of Aztec occupation on T.C. 30, 31, and 32. Mazapan occupation occurs and was coded as T.T. 119-120 along with some Xometla phase sherds, coded as T.T. 219.

T.A. 144

Classification: Located on general survey, and not resurveyed. This site is probably the 16th century village of San Antonio Tlaxomalco previously mentioned.

T.A. 145

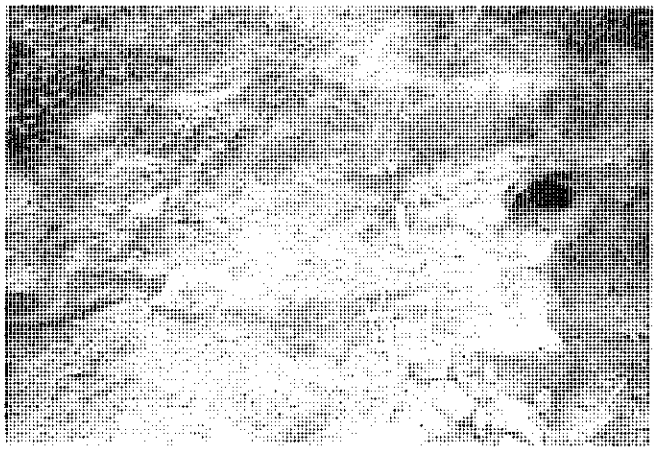
Classification: This site was located during the preliminary 1960 survey but was not intensively resurveyed.

T.A. 146

Classification: Located in general survey on the west slope of Cerro Malinalco and probably of hamlet category.

Plate 55

A



B

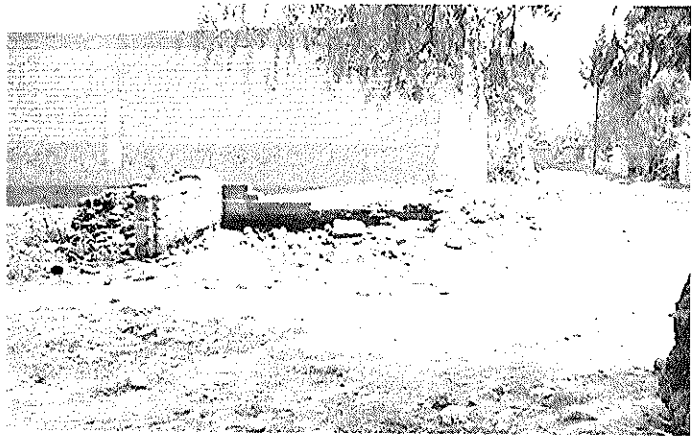
C

D

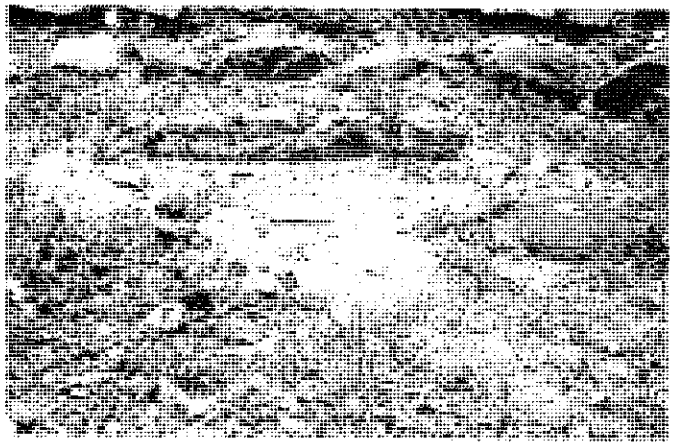
Plate 56

A

B

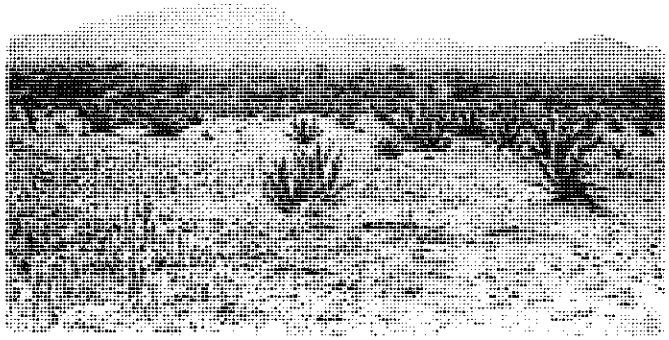


C

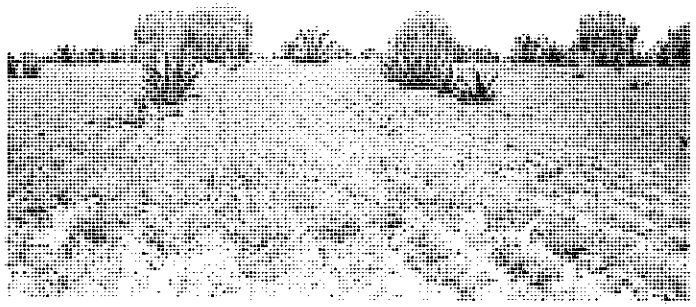


D

Plate 57



A



B

C

D

Plate 58

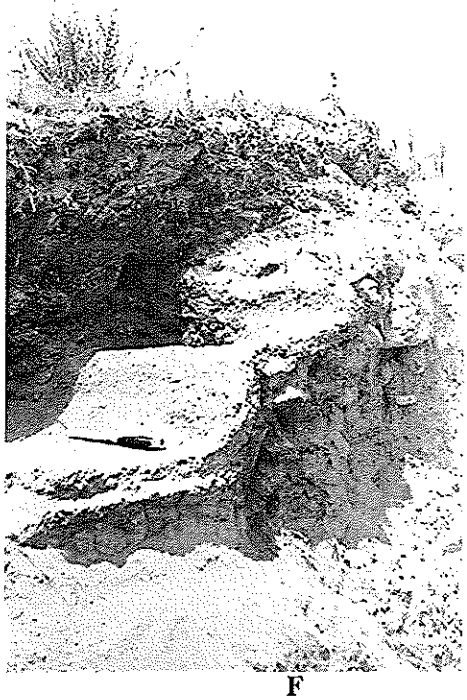
A

B

C

D

E



F

T.A. 147

Classification: Located in general survey on the west slope of Cerro Malinalco and probably of hamlet category.

Zone 8: Site Descriptions (Figs. 64, 65)

T.A. 155-22 (Fig. 66; Plates 55-58)

Classification: Regional and provincial center or town.

Modern Land Use: Aztec period Teotihuacan has been the most difficult of the Aztec-Colonial centers to evaluate archaeologically. From the documentary sources, it is clear that it was located within the 20th century compound municipal center and town of San Juan Teotihuacan. The town consists of several components, La Villa, the town itself, where the municipal office. central plaza or park, central market, and the parochial church are located; two attached wards or barrios, Purificación to the east and San Juan Evangelista to the west; three detached barrios, Maquixco to the west, San Lorenzo to the southeast, and Puxtla to the southwest. The modern compound community, excluding the detached barrios, occupies a band varying from 500-750 m north-south along the lower edge of the piedmont for a total east-west extension of 2,250 m, and includes some small areas in the adjacent alluvial plain. If we include Maquixco to the west, this string of settlement has a total east-west extension of 3,500 m. The barrio of Puxtla is located within the alluvial plain with houses dispersed among chinampas.

A strip 2,200 meters long, running from a point approximately 500 meters west of the barrio San Juan Evangelista on the west, to the church of Purficación on the east, varying in width from 450-1,600 meters was surveyed by Sanders using the field by field technique. The total area is approximately 250 hectares and includes the present town or Villa of San Juan Teotihuacan, and its two physically attached barrios of San Juan Evangelista and Purficación. The surveyed area lies on the gentle to medium sloping south piedmont of Cerro Colorado, along with a small areas of the adjacent alluvial plain. The highway from Mexico City to the center of Teotihuacan forms its southern boundary over most of this distance. An extension of the highway becomes a town street, which runs along the south side of the town plaza, and forms the border further east. The occupation occurs on gently sloping piedmont varying in elevation between 2240-2300 m.

The Villa is a densely occupied area and the problem of obtaining good archaeological data from this area was acute. Most urban blocks are compact areas, almost entirely occupied by houses, or paved courtyards. In the center of the Villa is a densely built up area of residences, a plaza, a market, shops, municipal buildings and a high school. In contrast, the two attached barrios generally have much less dense settlement and large open spaces around the houses are used primarily for crops or for orchards and hence were available for survey. Small areas within the barrio, however, are as densely built up as the Villa. The survey extended to the north and west of the modern settlement where agricultural fields form the dominant landscape. In general we terminated the survey when we encountered the deep soils of the alluvial plain, some of which were either in chinampas, or had been at one time. The other attached barrio of the town, Puxtla, located within the chinampa area was not surveyed. Because of the variable density of modern settlement, our survey of the ancient Aztec town of Teotihuacan is obviously incomplete. We know from

ethnohistoric accounts that the Sun Temple functioned as the central temple of the Aztec town, and the Aztec town, therefore, almost certainly extended east of our survey strip and the 20th century community into the archaeological zone. This area was surveyed by the Teotihuacan Mapping Project and we will have more data on the Aztec occupation when their results are fully published.

Furthermore, we know, from 16th century documents, that the villages of San Sebastián, San Francisco, Santa Maria, and San Martin, all located within and along the edges of the Teotihuacan period city, were barrios or subject settlements of Aztec and Colonial Teotihuacan. Undoubtedly these areas have prehispanic Aztec occupation. These communities are all nucleated settlements, comparable to Purficación and San Juan Evangelista but of relatively low density, with mostly large house lots, occupied primarily by nopal. Their borders almost merge, as the entire cluster does with the town of Teotihuacan itself. In 1519, considering these facts, the Aztec town of Teotihuacan probably appeared as a single gigantic settlement of varying density extending from Maquixco to the west to San Martin to the east. Virtually all of the 20th century settlement is located at the lower end of the piedmont of Cerros Colorado and Malinalco, but extends for several blocks into the alluvial plain.

Archaeological Remains: Prehispanic occupation occurs throughout the same area but extends less into the alluvial plain and furthermore, includes substantial settlement higher up to the north, on the medium to gently sloping terrain of the piedmont. This area varies considerably in soil depth and includes areas of exposed tepetate. All of it is in use today, most of it under cultivation with maize as the dominant crop, along with maguey. It is covered by the typical bancal type terracing in varies stages of maintenance. A portion of this section northwest of San Juan Evangelista was designated as a separate site on general survey and given the number T.A. 22.

This survey of this site is a case where we worked from the outside in, at the same time that the Teotihuacan Mapping Project was working from the inside out, and our two surveys overlapped. Sanders did his survey of the Aztec town in 1962 at a time when the size and extent of the Teotihuacan period city was still being determined. Armillas's initial survey of the urban zone had defined its western boundary roughly at a point east of the barrio of Purficación. The Mapping Project ultimately defined a western extension of the city, that included most of the area surveyed by Sanders in 1962. Their survey, however, was a much more intensive one, using more sophisticated mapping techniques, including a 50 m contour map and much more extensive sampling.

Aside from the availability and observability of survey due to 20th century use, Sanders's original 1962 survey results, with respect to the characteristics of the Aztec period town are further complicated by an additional problem - i.e. sorting out the Teotihuacan (T.C. 1) from the Aztec occupation. Complicating this problem even further, his survey indicated the presence of a large Toltec period town T.T. 25, 27, 73 (Xometla phase) and T.T. 133, 163, 165 (Mazapan phase), covering much of the survey area. A Cuanalan phase hamlet, or small village (T.F. 35) is found in one portion of the site, along with traces of Chiconauhtla and Patlachique phase occupations, coded as T.F. 108 and T.F. 306 respectively.

Sanders applied the field by field, house lot by house lot technique to the area, the same method applied to the town sites of Chiconauhtla, Tepexpan and Acolman. One hundred and sixty-two survey units were defined, of which all but a dozen or so yielded some information on the prehispanic occupation. Because of the problems of evaluating the Aztec settlement in this site we have appended a chart which includes a summary of all of our survey data (see Table 8). It should be understood that when the Aztec and Teotihuacan occupations of the area evaluated by the Mapping Project are published, their data should supersede any of the conclusions presented here.

Because of the condition of T.A. 155 we cannot easily evaluate its plan and density as we attempted to do for the other Aztec town sites. We suspect that there was, in fact, a series of concentric bands like those we found in the other sites. Occupying much of the Villa and parts of San Juan Evangelista and Purificacion was an area comparable to Zones 1 and 2 at the Acolman town site. This band underlies most of the compound community of Teotihuacan today. If we accept the evaluation that the site extends to the Sun Pyramid, within the archaeological zone, then this densely settled urban area should extend between the eastern edge of Purificacion and the Sun Pyramid. The Aztec period population of the urban core lying within the modern compound community would have numbered somewhere between 4-5,000 people. If we add the proposed extension of this densely nucleated zone to the east and the peripheral, less densely settled suburban areas to the north, on the upper part of the piedmont, the total population of the Aztec town would increase to perhaps 7 or 8,000. If we included the villages lying within the archaeological zone and Maquixco as part of a single urban-suburban band then the total population would probably been even higher, perhaps 12-15,000 people, even larger than the Tepexpan-Acolman urban-suburban zone.

Table 8 - T.A. 155 Field Unit Information

Field	20TH Cen. Use	Crop	Soil Depth	Rock Debris	Mounds	Sherd Density	Chronology
1	AF	Fal.	Th-M	Gen-H	None	Gen-H	Az, Mod, Teo
2-3	AF	M	Th-Tep	Gen-M	None	Gen-M	Az, Mod, Coy, Teo
At the Junction of the two fields 2-3 is a visible mounded area							
4	AF	Al	M-D	Sc-L	None	Sc-M	Az, Mod, Coy
5	Not	Entered					
6	AF	M	Th-Tep	Sc-L	None	M-H	Teo, Az
7	Not	Entered					
8	AF	Fal	Th-Tep	Gen-H	1 30x30, md. 2 smaller mds	H	Teo, Az
9	AF	Fal	?	Gen-H	1. 15m, 20cm 2. 15m, 20cm 3. 30m, 1.5m	Gen M-H	Az, Teo
10	AF	M-My	M-D	M-VH	1. Part of 9-3	Sc-H(md)	Az, Teo
11	AF	Fal	Th-Tep	Sc-L	None	L	Az
12A	AF	Al	D	Sc-L	None	L-M	Az, Teo
12B	AF	M,	D	Sc-L	None	Sc-M	Az
13	AF	M, My	D	Sc-L	None	L-M	Az, Teo, Cua, Mod
14	AF	M, B	D	Sc-L	None	L-M	Az, Teo
15	AF	M	M-D	Sc-L	None	M-H	Mod, Az, Cua, Teo

16	HL	Not Surveyed					
17	HL	Nop	?	H	Poss. Md on edge with 18	M-H	Mod, Az, Teo, Cua, Tol
18	HL	Not Surveyed - It seems that a Md extends into this lot from 17					
19	HL	Not Surveyed					
20	HL	None	?	Sc-L	Poss Earth Md	H	Mod, Az, Teo, Cua
Street between 17-20, deep soil profile, soil full of pottery, possible adobe Md							
21	HL + AF	M	?	Sc-L	None	M-H	Cu, Az, Teo
22	AF	M-My	D	Sc-L	Md Shoulder NW Corner	Gen L-M Sc-VH on Md	Teo, Az
23	AF	My	Md at Upper Section, Tep Lower	Upper Section Same Md as 25		H-VH	Teo, Az
Corner of 23-24 erosion has exposed plaster floors							
24	AF	M-My	Th-Tep	Sc-L	None	Sc-M	Az, Teo
In the road above 24 walls and plaster floors are exposed							
25	AF	M-My	M	1 Large Md Occupies Most of the Unit		L-H	Az
26	HL + AF	Alf	D	Sc-L	Levelled Adobe Md, Exp. Wall Bases	M-H	Teo, Az
27	HL + AF	M	M-D	Sc-L	None	M	Cua, Az, Teo
28	HL	Orc	D	Sc-L	Possible	?	?
29	HL + AF	M, B	Th-M	Sc-L	None	?	Az, Cua, Teo
30	HL + AF	M, My	D	Sc-L	None	L-M	Mod, Az, Tol
31	AF	M, My	D	Sc-L	None	Sc	Az
32	AF	B	Th	Sc-L	None	Sc-M	Mod, Az
33	AF	M, My	M	Sc-L	None	Sc	Az
34	Af	M, My	Th-Tep	Sc-L	Poss. Mound -SW Corner		Teo
35	AF	My, Fal	Th-Tep	Sc-L	None	V.Sc	
36	AF	Fal	Th-H	Sc-L	None	Sc	Az, Teo
37	AF	Fal	Th-H	Sc-L	None	Sc	Az, Teo
38	AF	M, B	Th-Tep	Sc-L	1 or 2 Remains	M-H	Az, Teo

39	AF	Fal	Th	H	None	M-H	Teo, Az
40	AF	My, Fal	Th-Tep	SC-L	None	M	Az, Teo
41	Past	My	Sc-Tep	M Loc	None	Sc-M(Loc)	Az
42	Past	My	Sc-Tep	M Loc	None	Sc-H(Loc)	Az, Teo
43	Past.	My	Th-Tep	L	Large Md Occupies Unit	H-Loc, Gen Sc-M	Teo, Az
44	Past	My	Th-Tep	H	Destroyed Md	M-H	Teo, Az
45	AF	My-M	Th-D	Sc-L	None	Sc-M	Az
46	AF	My-Fal	Th-Tep	Sc-L	None	M Gen, H (Loc)	Az, Coy, Teo, Cua, Mod
47 Upper	AF	My-Fal	Th-Tep	Sc-L	None	M Gen, H (Loc)	Az, Coy, Teo, Cua, Mod
47 Lower	AF	My, M	D	None	None	Sc	Az
48	AF	My, M	M	Sc-L	None	Gen Sc, Loc M	Az, Coy, Mod
49	AF	My, M	D	Sc-L	None	Gen L, Loc M	Coy, Az, Cua
50	AF	My, M	D	Sc-L	None	Gen L, Loc M	Coy, Az, Cua
51	AF	My, M	D	Sc-L	None	Gen L, Loc M	Coy, Az, Cua
52	AF	M	D	Sc-L	None	Sc Upper, M-H Lower	Az Coy, Teo, Cua
53	AF	M	D	Sc-L	None	M-H	Az, Teo, Tol Cua
54	Church and cemetery are located on a large Teotihuacan Md						
55	AF	M, My	?	Sc-L	None	Gen Sc, M Loc	Az, Coy, Teo, Maz
56	AF	M, My	?	Sc-L	None	Gen Sc, M Loc	Az, Coy, Teo, Maz
57	AF	M, My	?	Sc-L	None	Gen M, Loc H	Az, Tol, Teo
58	AF	M, My	?	Sc-L	None	Gen M, Loc H	Az, Tol, Teo
59	Set of congested HL, in small open areas occupation H						Az, Tol, Teo, Mod, Cua
60	HL + AF	M, B, Sq	?	Sc-L	None	M-H	Tol, Az, Teo, Mod
61	AF	My, Fal	?	H	Probably Several Mds	M-VH	Coy, Mod, Teo, Az

62	AF	M	?	Destroyed Mds - much overburden, Sc occupation			
63	HL + AF	Fal	?	Destroyed mound with exposed plaster floors, Occupied Lot			
64-65	Heavily remodeled area for alfalfa cultivation, much rock debris from the former mounds along edges, heavy occupation						Az, Coy, Teo
66	Heavily remodeled area, with heavy occupation						Az, Mod, Coy, Teo
67	AF	My, Alf	?	Sc-L	None	H	Teo, Tol, Az
68-69	Heavy remodeled area occupied today by house lots with dense natural weed growth. Areas of exposed tezontle floors and wall lines of stone or adobe are noted. M-H occupation, H particular in areas where there is concentrated rock debris						Az, Tol, Teo, Cua
70	Area similar to 68-69 but occupation medium						Cua, Az, Teo, Coy
71	Area like 68-69, M-H occupation, one part is old chinampas						Cua, Az, Teo, Coy
72-74	House lots + Chinampas, this is an area of deep soil with a heavy weed growth, observation is difficult						
75	AF	Alfalfa field in which the entire area has been artificially lowered, occupation recorded as scanty					
76	AF	M, B, My	?	Sc-L	None	Sc-M	Tol, Az, Teo
77	AF	My, Fal	Th-Tep	H	Destroyed Mds	M-VH	Teo, Az, Tzac
78	AF	My, Fal	Th-Tep	H	Destroyed Mds	H	Teo, Tol, Az
79	AF	M	Th-Tep	Sc-L	None	M-H	Teo, Az, Tol
80	Past	Past	Th-Tep	H	None	M-H	Teo, Az, Coy
81	Past	Past	Th-Tep	H	One	H	Teo, Coy, Az
82	Not Entered						
83	AF	M	M	Sc-L	None	M	Teo, Az, Coy
84	AF	M	VTh-Tep	Sc-L	None	M	Az, Teo, Coy, Mod
85	HL	Not Entered					
86	AF	M, Al, Veg	D	Sc-L	Large Md at North End	M-H(Md)	Az, Mod, Teo, Coy
87	AF	M	Th-D	Sc-L	None	Sc-M	Az, A few Coy, Mod
88	AF	M	D	Sc-L	?	M	Az, Mod
89	Af	M, Weeds	D	Sc-L	?	M	Az, Mod

90	HL	Weeds	D	Sc-L	?	L-M	Az
91	AF	Alf	D	H(Edge)	Levelled Mound	H(Edge)	Teo, Az
92	AF	Alf, M	D	H(Edge)	Levelled Mound	M(Edge)	Az, Teo
93	AF	M	D	Sc-L	None	M-H	Teo, Az, Coy
94	AF	Alf	D	Sc-L	None	M-H	Teo, Az, Coy
95	AF	M	D	Sc-L	Recently Cultivated, See Below		
96	HL-Orc	M	D	See Below			
Little visible remains in Units 95 and 96 but in the intervening street has exposed profiles of a large mound with generally heavy occupation along the profile, the main component seems to be Teo, Az, Coy							
96A	Tree Grove	None	D	H	1 Large Md	H	Az, Teo
97	School and playground of Purficación. Medium Teo, Az in Yard						
98	Church of Purificacion						
99	HL	Not Surveyed					
100	AF	M	D	Sc-L	None	M-H	Az, Teo, Mod
101	Irr Past	Past	D	H	Altered Area	M-H	Az, Teo
102	AF	M	D	Sc-L	None	Dense Crop, Non Obser	
103	HL	M	D	Sc-L	None	M	Az, Teo
104	Af	My, M	D	Sc-L	None	Sc	
105	HL	None	D	H	None	M	Az, Teo, Mod
106	HL	Grass	D	Sc-L	None	SC	
107	HL	M, Alf	D	M	None	M	Mod, Az, Teo
108	AF	Fal	D	M	None	M-H	Az, Mod
109	AF	M	Crops too dense and high for observation				
110	Chinampas, occupation not observable						
111	Chicken ranch, informant says area once had much occupation, saw a few Aztec sherds						
112	Large dairy farm + maize, probably once a chinampa area and hence not observable. The Streets along side of 111, 112, however, have medium to heavy Aztec on their edges						
113	HL + Past	Grass	Row of houses seem to be on ancient mounds, medium Aztec and Teotihuacan				
114	Is a partly paved lot behind the Cantina, saw some Aztec sherds						
115	AF	M	M	H	None	M, H (Loc)	Az, Tol, Teo

116	AF	Grass Sod	?	Sc-L	None	Sc	
117	Not Entered						
118	AF	ABC in M, B	D	See Below			
A	Occ. medium generally, heavy on the edges						Az, Tol
B	Occ. generally scanty, medium on the edges						Az, Tol
C	M-H generally, heavy on the edges						Coy, Az
D	Dense barley crop and weeds, not observable						
119	AF	My, Fal	M	See Below			
A						L-M?	Az, Mod, a few Maz
B						M-H?	Maz, some Az
120	AF	My, M	M	Sc-L	None	Gen Sc, L-M Loc	Az, Maz
121	AF	My, Fal	?	Sc-L	None	H-Sc upslope	Az, Maz
122	AF	B	Sc-Tep	Sc-L	None	Sc	
123	AF	Fal	Th	Sc-L	None	L (Gen) M (Loc)	Maz, Az
124	AF	Fal	Th-Tep	Sc-L	None	Sc	
125	AF	Fal	Th	Sc-L	None	Gen Sc, (Loc M)	Az
126	Rocky knoll covered with nopal and half moon terraces, no occupation noted						
127	Mostly Tepetate			Sc-L	None	M	Az, Tzac, Pat
128	Past	My	Th	Sc-L	None	M	Az, Maz
129	AF	M	?	Sc-L	None	Sc(Gen), M(Edges)	Az, Maz
130	Past	Grass	?	Sc-L	None	H-East Half	Az, Maz
131	AF	M	Th-Tep	Sc-L	None	Sc	
132	AF	M	Th-Tep	Sc-L	None	L-M	Az, Maz
133	AF	M, My	D	Sc-L	None	Sc-M	Az, Maz
134	AF	M, My	D	Sc-L	None	M	Az, Maz
135	HL+Past	Grass	?	Sc-L	Possible Md under wall	Poss. H near Md	Mod, Az, Cua
136	HL	Much overburden, very heavy modern debris					

137	HL	Not entered, along the street soil profile has H Az, + some Cua					
138	HL	Not entered, but could see medium occupation, mostly modern, some Aztec					
139	String of small house lots, not entered						
140	HL + AF	Fal	D	M	None	M-H	Az, Mod
141	HL	Grass	M-D	Sc-L	None	M-H	Mod, Az, Teo
142	HL	Nopal orch, some areas swept clean, other areas have heavy modern garbage, saw light Aztec, observation difficult					
143	HL + AF	M	?	Sc-L	None	See Below	
This is the colonel's house, and where ever observation was possible it was medium to M-H Aztec, did not note any Teo							
144	Soldana's Gas Station, grass over in some areas, but much modern trash, where noticeable medium Az, and little Teo, Tol						
145	Plaza de la Reforma, much rock and brick debris, medium Aztec						
146	This is a line of house lots with small fields behind, either in maize or heavily overgrown with weeds. Observation very limited, where visible saw, M Aztec, M-H Mod, Sc Teo and Xom						
147	Small plaza like area, partly swept, partly covered with gravel, L Az, H Mod						
148	HL	Past	D	Large Md occ. half of lot, 1.5 m high, VH Occ, Mod, Az, Teo, Maz			
149	Two open areas in the middle of a block that includes the market, shops,, and houses. No floors or walls noted, area of deep soil with water table at 1 meter based on a well profile, scanty occupation						
150	Modified chinampa area with dense maize cover, noted light Az, and Mod.						
151	HL	Veg	D	Sc-L	None	M	Az, Teo
152	HL	M	D	Sc-L	None	L	Az
153	Row of houses with a few small open areas. Scanty Aztec and Teotihuacan						
154	Open area bordering the main drain of Teotihuacan. An area of much rock rubble with heavy occupation including Modern, Aztec, some Teotihuacan						
155	High school and yard, heavily vegetated in part, probably once part of the chinampa area, noted scanty Aztec						
156	Municipal pool, once part of the chinampa area, heavily vegetated, recorded scanty occupation						
157	Soldana's house. Owner states that the area once had occupation in areas where the house was expanded						
158	Not Entered						

159	HL	About half unoccupied but much overburden from collapsed adobe walls makes observation difficult, the water table, based on a well, is only 1 m below the surface so the area was probably once in chinampas. Noted scanty occupation
160		Open lot near the Casa de los Arcos, this was once part of the chinampa area and is now occupied by huge huehuetl trees, noted Modern occupation and scanty Aztec
161		Large courtyard and agricultural field behind the seminay, this is an area of damp, spongy soil and densely planted in maize. Where observable noted L-M Aztec.
162		Very large mound in an open area, among houses with Teotihuacan and Aztec occupation. Street to the south also has substantial occupation.

Key

AF = Agricultural Field
Alf = Alfalfa
Az = Aztec
B = Beans
Coy = Coyotlatelco
Cua = Cuanalan
D = Deep
Exp = Exposed
Fal = Fallow
Gen-Generally
H = Heavy
HL = House Lot
Irr Past = Irrigated Pasture
Loc = Localized
M = Maize
M = Medium
Maz-Mazapan
Md = Mound
Mod-Modern
My = Maguey
Nop = Nopal
Occ = Occupation
Orch = Orchard
Past-Pasture
Sq = Squash
Teo = Teotihuacan
Tep = Tepetate
Th = Thin
Tzac = Tzacualli
Veg = Garden Vegetable
VH = Very Heavy

Ethnohistoric Information: The 20th century multicomponent community of San Juan Teotihuacan with its detached barrios was the cabecera of a small kingdom in 1519, of an administrative district in 1580, and was the largest town in the valley in both centuries. All of Zones 7, 8, 9 and part of 10 were tributary to San Juan in 1580.

T.A. 156

Classification: This is the detached barrio of Maquixco west of San Juan Teotihuacan. It was a barrio of the town of Teotihuacan in 1580 according to the Relación. This site was not surveyed by the Teotihuacan survey project.

T.A. 148

Classification: PNE. This is the locus of the 1580 Relación community of San Martin Teacal and the present day village of San Martin de las Piramides.

T.A. 149

Classification: This site was located by general survey and not resurveyed.

T.A. 150

Classification: PNE. This is the site of the community which was a subject community to San Juan Teotihuacan in 1580 called San Francisco Mazatlan. This community exists today but is called San Francisco Mazapan and is located within the Teotihuacan archaeological zone.

T.A. 151

Classification: PNE. This is the site of the community which was a subject community to San Juan Teotihuacan in 1580 called Santa Maria Coatlan. This community exists today and is located within the Teotihuacan archaeological zone.

T.A. 152

Classification: PNE. This is the site of the community which was a subject community to San Juan Teotihuacan in 1580, called San Sebastian Chimalpa.

T.A. 153

Classification: This is a band of settlements south of the Rio San Lorenzo where we noted Aztec occupation in general survey. It was not resurveyed but it was intensively surveyed by the Teotihuacan Mapping Project.

T.A. 154

Classification: In the Relación of Tequisistlan it is stated that the Pyramid of the Sun, constructed during the Teotihuacan period as a main temple in the Teotihuacan period city, continued in use as the main temple of the Aztec town of Teotihuacan. We have assigned it this tentative site number T.A. 154, although it is very likely that a continuous band of urban occupation extended from T.A. 155 to this location and hence it would be part of the T.A. 155 town site.

T.A. 183

Classification: This is a ceremonial precinct located in general survey on the summit of Cerro Malinalco.

Figure 67

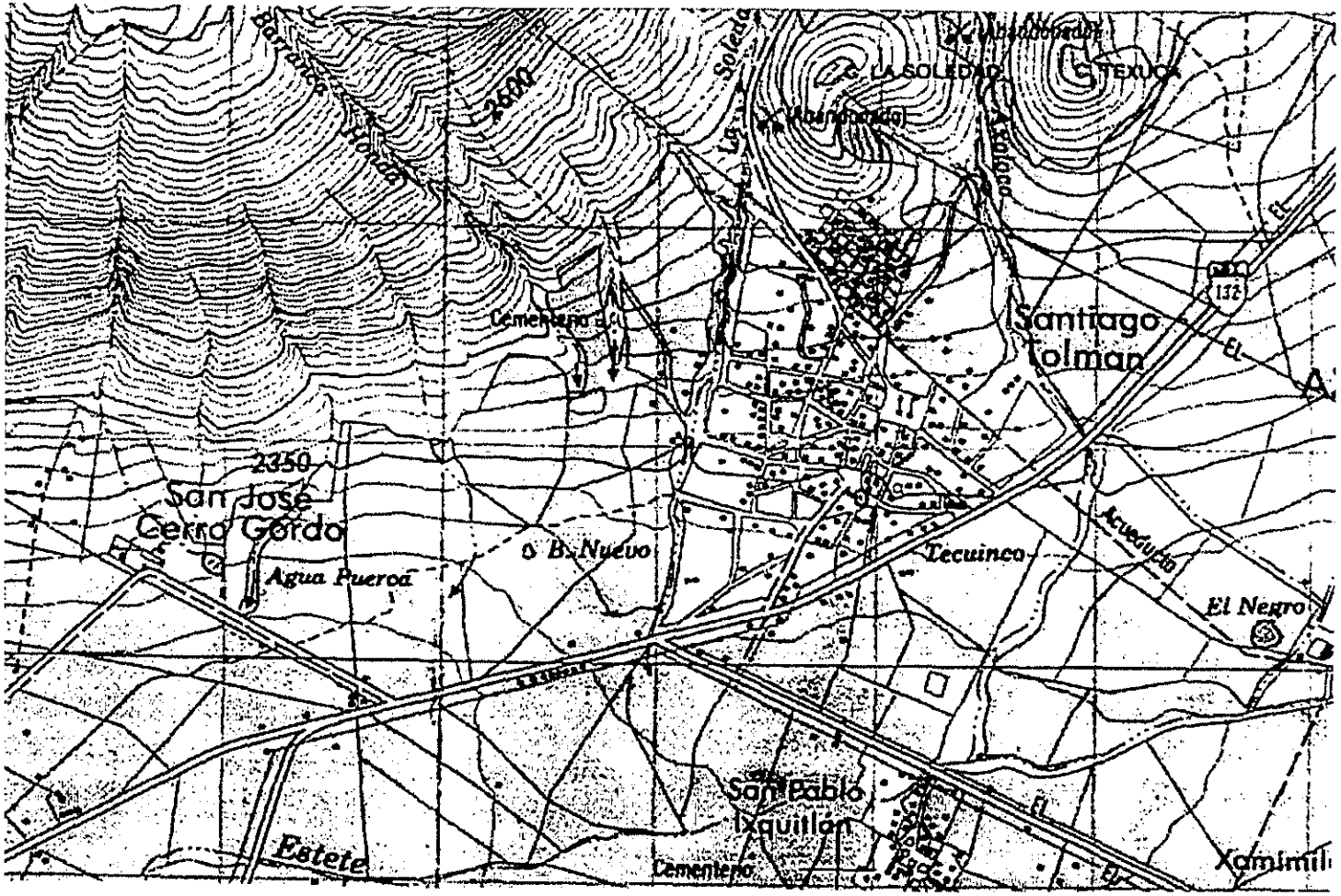
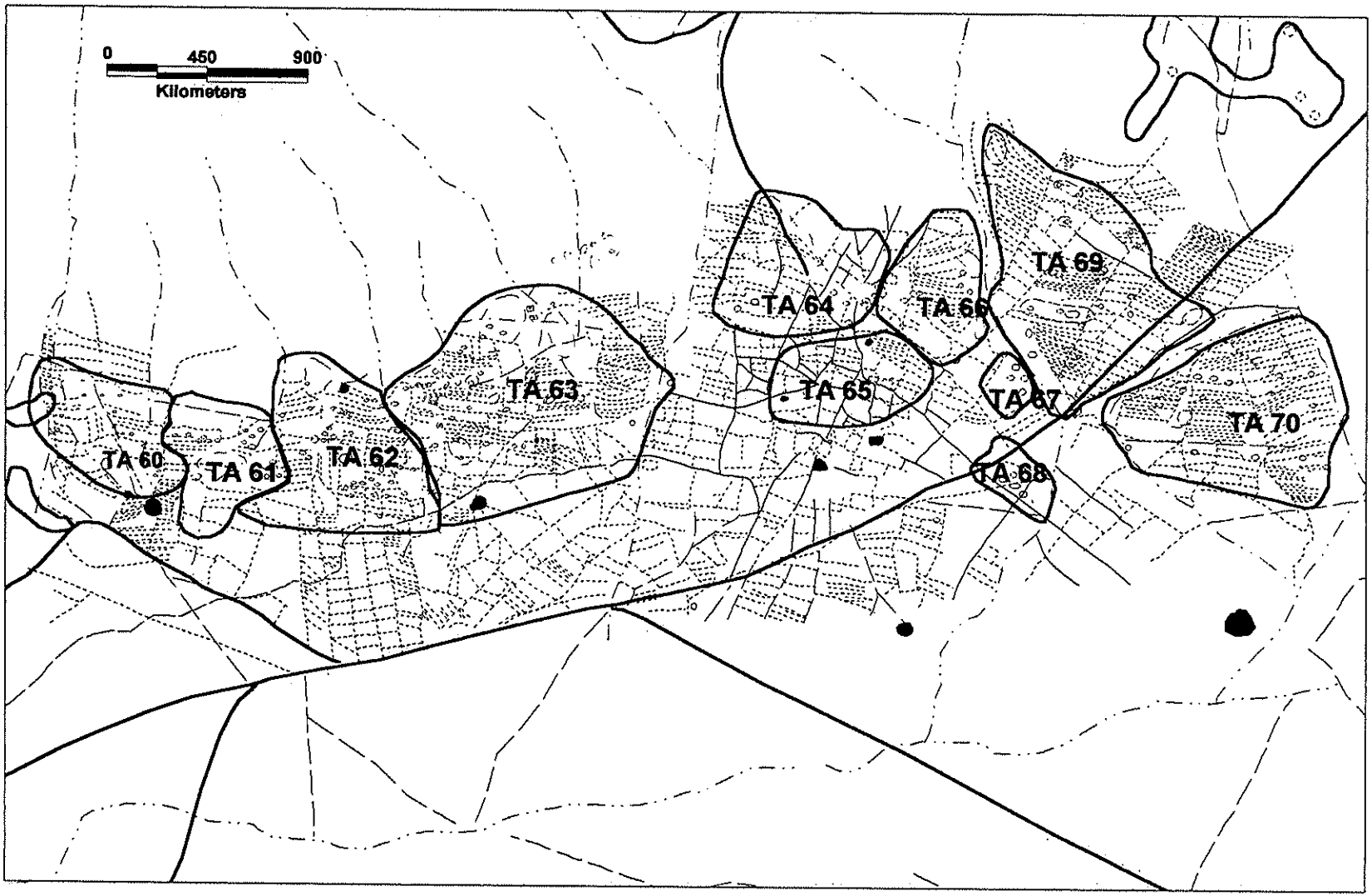

Soledad
LA SOLEDAD
TEXUCA
Cementerio
Santiago
Tolman
132
2350
San José
Cerro Gordo
Agua Pueroa
B. Nuevo
Tecuinco
Acueducto
El Negro
San Pablo
Ixquitlan
Estete
Cementerio
Xamimil

Figure 68


0
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Kilometers
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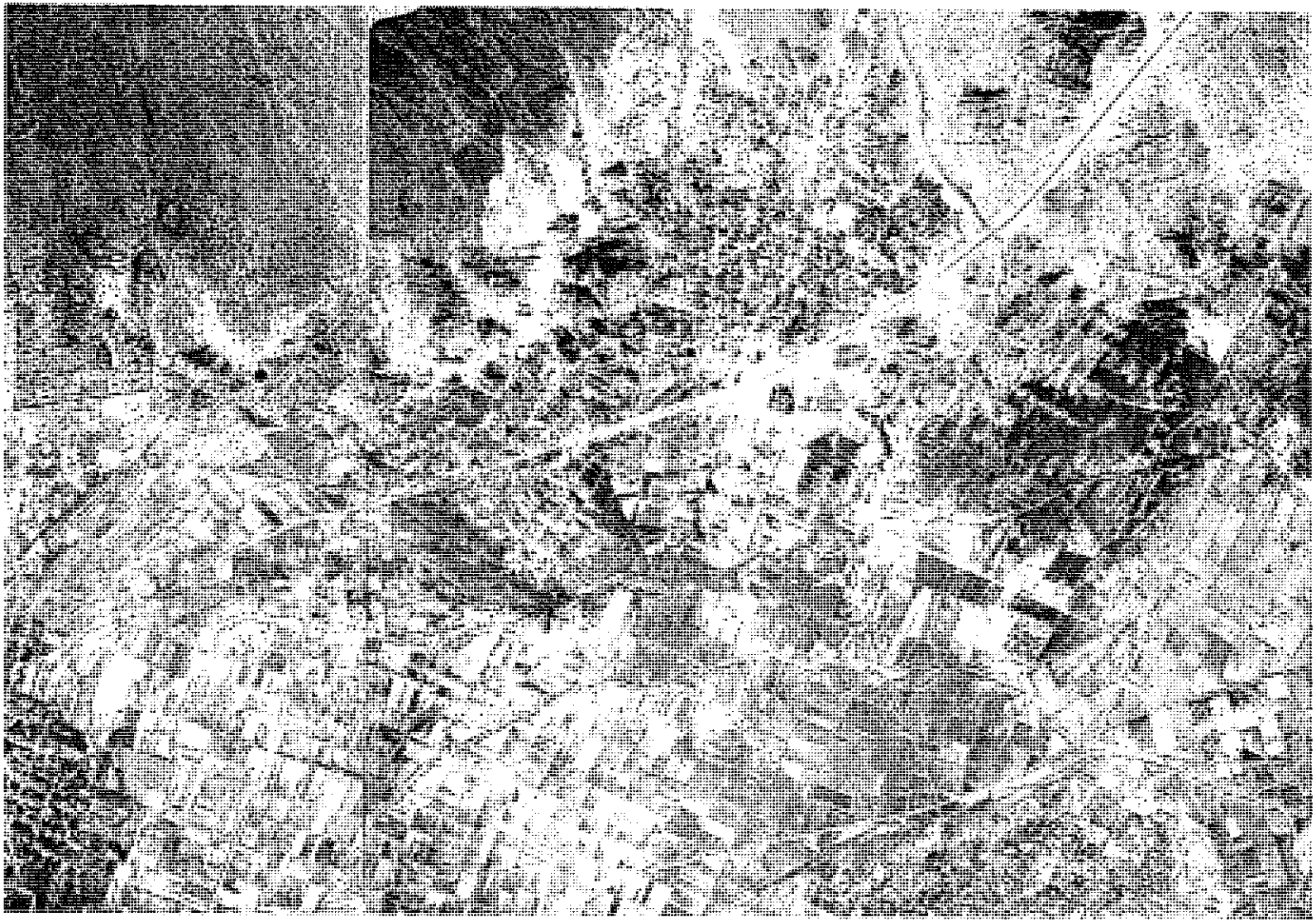
TA 69
TA 70

Plate 59



9. ZONE 9: MIDDLE VALLEY: CERRO GORDO SOUTH PIEDMONT AND ADJACENT ALLUVIAL PLAIN (Figs. 67, 68; Plate 59)

A band of gentle to medium sloping piedmont, five kilometers long, and varying in width from 600 meters at the western and eastern ends, expanding to 2,000 meters in the center, (where the dispersed modern village of Santiago Tolman is located), was intensively surveyed by Sanders in 1963, using the field by field technique, first attempted in the intensive survey in the Cerro Gordo: North Slope area, on the northern slope of the same mountain. The piedmont here varies in elevation from 2320-2400 m. The area was surveyed as a series of parallel strips, starting from the old highway from Teotihuacan to Otumba, to the south, to the edge of the steep rocky slopes of the mountain to the north. At the lower end of the survey, fields generally had medium to deep soils, always exceeding 50 cm and often over a meter, and had either level or gradually sloping surfaces. As each survey strip proceeded up-slope it entered an area of moderate slope and thinner soils, often including numerous severely eroded areas with exposed tepetate. The survey, as it approached this portion of the strips, uncovered an almost continuous band of dispersed Aztec settlements, but with a occasional breaks in that settlement. These minor interruptions were used to define site borders and ten sites were defined, T.A. 60 - T.A. 70.

Dispersed throughout the area of Aztec settlement were a number of well-spaced isolated Mazapan phase hamlets, three larger and more densely nucleated Formative period hamlets and four dispersed, well spaced Tzacualli hamlets. A number of the Mazapan sites also had light Coyotlatelco phase occupations. No Teotihuacan period settlements were found in the band.

In 1977, Susan Evans, then a graduate student at Pennsylvania State University, resurveyed an area of 150 hectares within the band (roughly equivalent to T.A. 61 - T.A. 63), to map the abundant terrace remains, many of which were thought to be of Aztec date, and to collect more quantitative data on the residential mounds. This survey was intended as the first phase of a planned series of excavations of residences for her Ph.D. dissertation. Unfortunately much of this occupation was obliterated or significantly rearranged by chisel plowing during the late 70's or early 80's and she shifted her excavation plans to a site at Cihuatepec (T.A. 81) located in the Upper Valley (see Chapter 3 and Evans 1985 and Chapter 6 for reports on the results of these surveys and summary of the excavations).

The entire piedmont and adjacent alluvial plain north of the highway was, at one time, covered with a complex set of bancals varying in width from 20-30 meters at the lower elevations to a minimum width of 5-6 meters in some areas in the upper. Five linear strips, appearing as eroded tepetate surfaces, but much shallower and narrower than barrancas, descend the slopes and may be the remains of floodwater canals like those observed on the north slope. These could have provided water for the terrace systems.

The wider, lower bancals, with deeper soils, were primarily planted in maize at the time of the survey, often intercropped with barley or wheat, occasionally entirely in wheat, and virtually none of them had prehispanic occupation. Along the medium slope piedmont soils were shallow and terraces narrower. Only some of them were in use in 1963, because of the severe erosion. Those that were still well preserved have soil depths varying from 20-50 cm and were planted in barley. The more eroded areas, where soil was thinner, were either unused or used as marginal pasture. In these areas only maguey was found as a productive crop and occurred often in closely spaced rows marking former or partially preserved bancal edges.

Figure 69

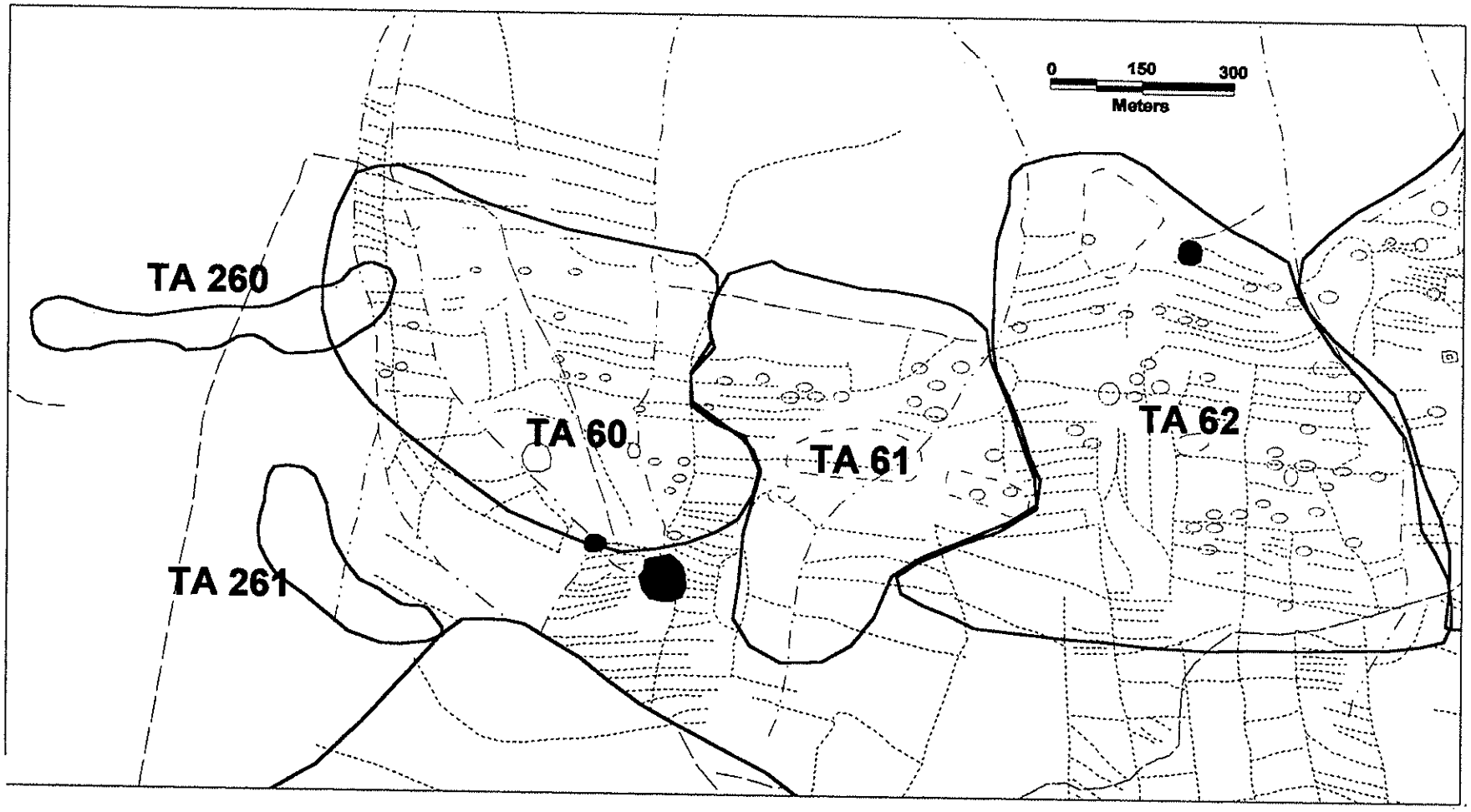


Plate 60

A

B

C

D

Four barrancas descend the slope, one on each side of Santiago Tolman, and one on each end of the survey strip. These are all very wide, deeply incised channels.

Two large jagüeys are located near the two haciendas of Cerro Gordo and Hueyapan. Several more are found within the village of Tolman, and a number are located in the areas between the three modern settlements. Santiago Tolman is a large scattered village with a 1940 population of 1,000 people. Between that date and 1960 the population increased 50%, resulting in a physical expansion of the community to the north, up-slope (referred to by the local inhabitants as the Colonia), and some increase in the internal density of the older settlement. The overall surface area covered by the village is approximately 165 hectares. Most house lots have small orchards of fruit trees, nopal or maguey, and approximately 80% of the residential area was surveyable to some degree. Because of the height (summit 3,050 masl) and vast bulk of Cerro Gordo, and the narrow width of the piedmont, this zone is an ideal location for a agricultural system based on a combination of bancals of varying width and floodwater irrigation.

The Aztec occupation occurs in the form of a discontinuous band of settlement running the entire length of and well beyond the survey strip, primarily concentrated on the medium sloping piedmont. A series of relatively well defined spatial clusters of mounds and concentrations of ceramics were tentatively defined as separate sites (but even within them clustering of occupation was evident) but the borders were not easily defined. Occasionally settlements would extend below the band, and occasionally upslope to the steeper portions of the mountain, usually along the banks of the four barrancas.

Ten Aztec period sites were defined, T.A. 60-63 west of Santiago Tolman, five within the village T.A. 64-68, and two sites T.A. 69, 70 were defined in the area between Tolman and Hacienda Hueyapan.

Ethnohistoric Information: In 1580 only one community Santiago Tolman, a sujeto of San Juan Teotihuacan, was located here. Presumably all or most of the defined sites were segments of this community with T.A. 62-63 serving as its center.

T.A. 60 (Fig. 69; Plate 60)

Classification: Small dispersed village.

Natural Setting and Present Day Land Use: T.A. 60 is at the western end of the survey strip, located immediately above i.e. to the north, northwest, and northeast and up-slope from the buildings and jagüey of the now abandoned Hacienda de Cerro Gordo. One of the major barrancas defines the site to the west (actually the decision to end the survey at this point was because of this natural boundary definition). To the east, one of the washes, possibly an ancient floodwater canal, partially defines it. At the lower end the wash runs through the center of one of the three clusters defined within the site. In general, this site is located in an area of medium slope and scanty soil cover, with large areas of exposed tepetate. Traces of terracing, recent or ancient, can be seen throughout the site area. At one time these areas must have resembled the well preserved bancal terracing still surviving around the hacienda buildings and jagüey.

Archaeological Remains: Erosion has almost certainly destroyed much of this site, and the surviving residential mounds found in 1963 represent only a fraction of the original number. One of these mounds is large enough to identify it as a possible special function structure. We believe such structures are either temple platforms, multiroom elite residences or telpochcalli, i.e. calpulli, schools. In the rest of these site descriptions we will simply refer to these as special structures, unless we have a more specific definition.

The balance of the mounds are typical Aztec residential mounds, either smaller, somewhat larger, or similar in size to the one we excavated at T.A. 40 (see Chapter 4 in this volume).

Above the settlement area we located what appears to be remains of an ancient floodwater dam within the barranca. We also located a diversionary canal leading from it and paralleling the barranca to the west. It is possible that the wash canal which partially defines T.A. 61 on the east began also at this point. Approximately 1,000 meters to the west of T.A. 60 is site T.A. 143. T.A. 143 was an Aztec dispersed settlement superimposed on a more densely nucleated Teotihuacan period settlement that we defined as T.C. 30-31-32. We located two additional sites, typical Aztec line villages, on general survey in the intervening area, sites designated T.A. 260, T.A. 261 (see Figures 63, 69 and pages 239, 240).

The mounds and areas of substantial sherd and rock debris occur in three closely spaced clusters. Three definite mounds and from three to five areas of concentration of refuse were found in the western cluster; in the central cluster we detected nine mounds, but refuse distribution suggests the former presence of several others. This is the most severely eroded portion of the site. Further to the southeast is the third cluster, approximately two hectares of almost continuous concentration of medium plus occupation. At least five, possibly seven, mounds were defined, including the unusually large one noted previously.

The total site area is approximately twenty-nine hectares and we estimated that at one time there were 40-50 residential structures on this site, perhaps double the number visible in 1963.

T.A. 61 (Fig. 69)

Classification: Small dispersed village.

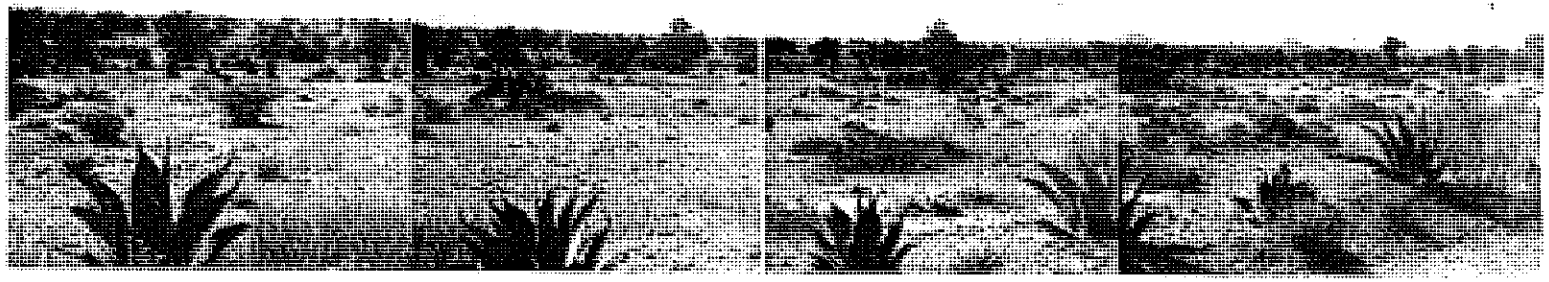
Archaeological Remains: Northeast of T.A. 60, and located between two of the wash/canal features is an area of approximately ten hectares, within which are three clusters of mounds and substantial occupation. Two are located at the upper section of the site and are closely spaced. The spatial situation with respect to this site is a good example of the problem of site definition in these linear strip; or "line villages". We could have defined the site using the two wash areas for site definition and included the southern portion of site T.A. 62 and the southeastern cluster of T.A. 60 as part of one site.

The upper part of the site, as defined here, consists of a relatively well preserved set of terraces and eleven recorded residential mounds. These mounds possibly represent a complete sample. Occupational debris in this area was minimally light, often medium, occasionally medium plus. One mound was significantly larger and may have been a special function structure. The southeast cluster is much smaller, has two regular size mounds, and a third larger mound that may have had special functions. The central and southwestern portions of the site are heavily eroded but also have much lighter occupation, usually recorded as only scanty. On the basis of the surveyed architecture and condition of the site, we estimate that there may have been as many as twenty-five residential structures originally on the site. The site covers an over of 24 ha. Two hamlet size sites. T.F. 64 (Tzacualli phase) and T.T. 41 (Mazapan phase) are located within the Aztec site area.

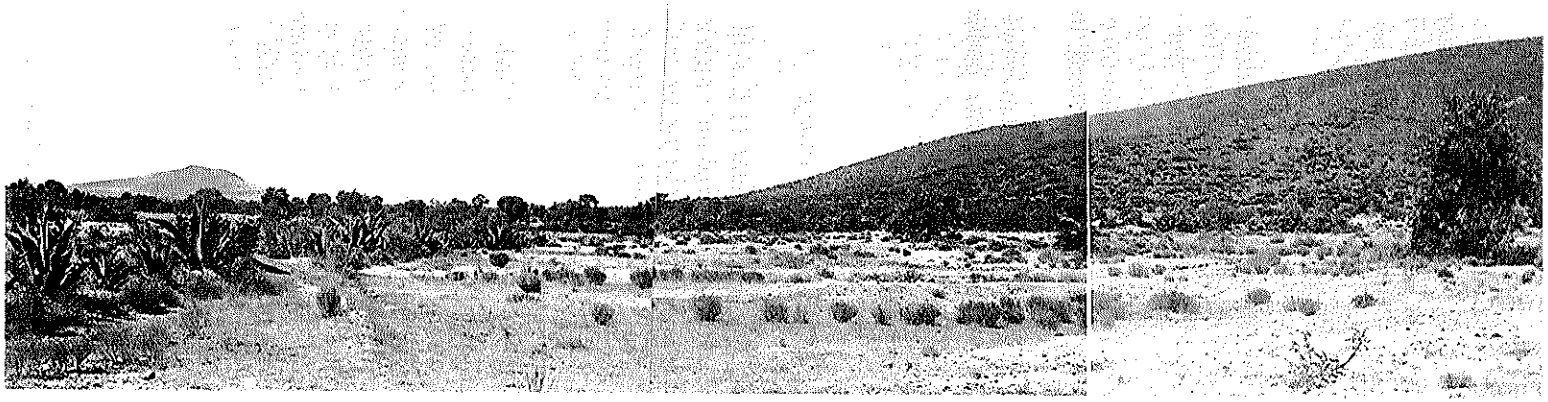
T.A. 62 (Fig. 69; Plates 61-63)

Classification: Small dispersed village.

Plate 61

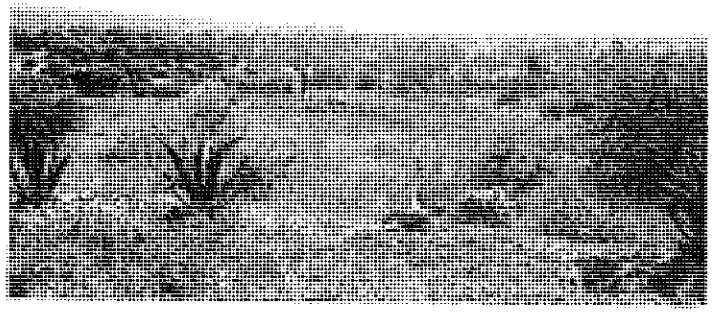


A

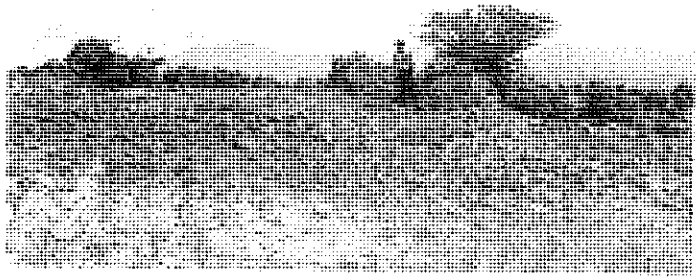


B

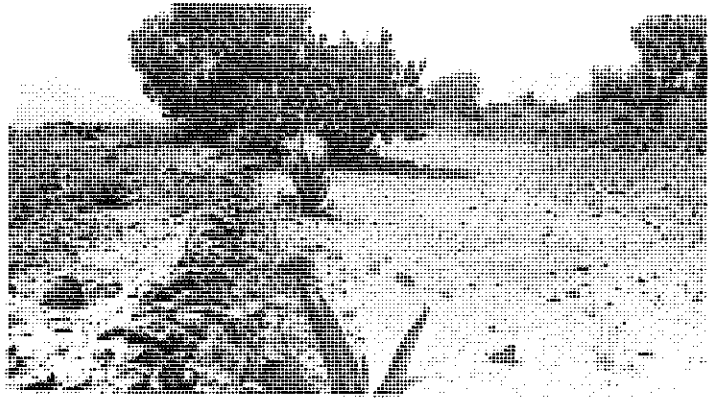
Plate 62



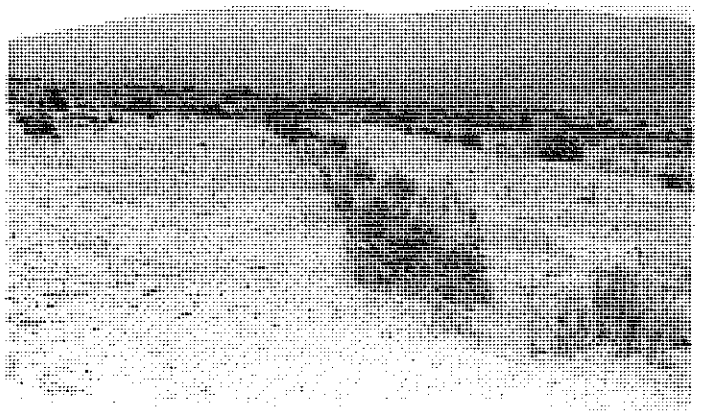
A



B



C



D

Plate 63

A

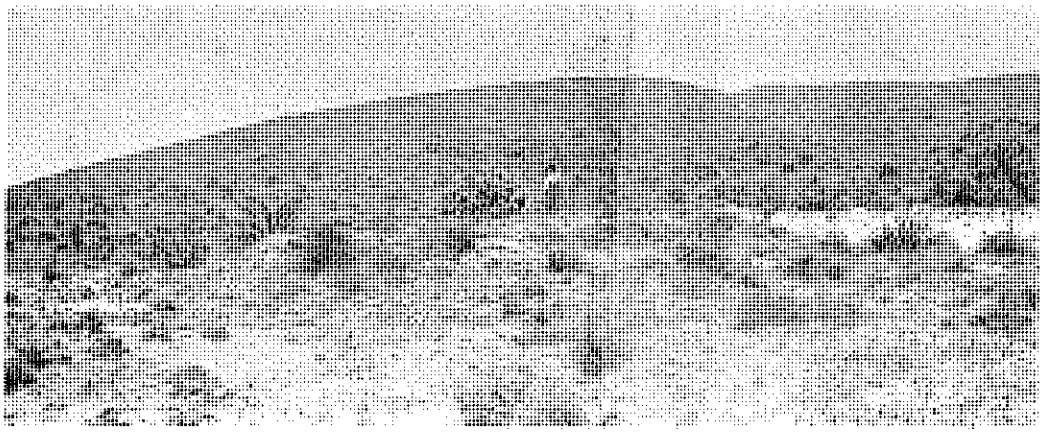
B

C

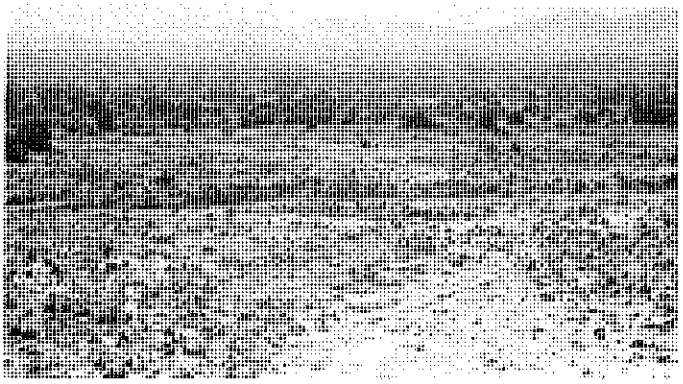
Figure 70

Plate 64

A



B



C

Natural Setting and Present Day Land Use: This is one of the largest of the defined sites, and lies between two wash/canals. Its center is traversed by third wash/canal. The eastern third is occupied by a series of well preserved functional bancals. Approximately 1/3 of the this site, its center, is severely eroded, and the western third is occupied by a series of severely eroded, only partially preserved bancals.

Archaeological Remains: The total site area is approximately 47 hectares. At least thirty-five typical residential mounds were detected and several additional mounds of unusually large size are identified as special function structures. In these cases the form and remnants of wall patterns suggest residential functions. A number of additional areas of light to medium, or medium plus concentration of sherds and rock were found. On the basis of these and the defined mounds, and considering the condition of the site, we estimate that there were probably fifty to sixty structures within the site area. A large modern jagüey is at the upper edge of the site. In Evans's resurvey of the site (see Chapter 4), she extended the survey north and east of the jagüey, outside the area covered by Sanders's original survey, and found several very large mounds, all assumed to have special functions, along with a number of smaller typical residential mounds. Within the area encompassed by T.A. 62 and 63 are a number of earlier sites, a Tzacualli hamlet (T.F. 119) and three Mazapan hamlets (T.T. 40-44).

T.A. 63 (Fig. 70; Plate 64)

Classification: Small dispersed village.

Natural Setting and Present Day Land Use: T.A. 63 is an area measuring approximately 1000 meters east-west and 600 meters north-south covering an area of 60 ha. It extends from the wash canal that defines T.A. 62 to its east, and the large barranca that defines the western edge of Santiago Tolman. A second wash crosses the site in its center running north-south. Most of the site area is severely eroded with only small areas of surviving bancals in its center and along the western bank of the barranca. Remains of abandoned bancals, however, are found throughout the eroded areas of the site.

Archaeological Remains: Four mounds are identified as special function buildings, three almost certainly the remains of temple platforms, based on their unusual height and the ratio of height to surface area. T.A. 63, therefore, most probably is the center of the strip settlement on Cerro Gordo's south slope. Remains of at least twenty-four smaller, typical residential structures were preserved, but the original number of residences was probably at least double this. This assessment is based on the presence of many small, localized areas of substantial occupation, and two larger areas of continuous heavy rock debris with medium plus occupation on them, measuring 6 and 3 hectares in size, each undoubtfully representing the remains of clusters of residences. This conclusion, however, is somewhat affected by the presence of substantial Late Formative occupation, the remains of two nucleated hamlets (T.F. 115, 116). On the same sites is some evidence of Chiconauhtla (T.F. 117) and Patlachique (T.F. 120) occupations.

T.A. 64-68 (Figs. 71, 72)

Classification: Small or large dispersed village. Four sites could be classified as one small dispersed village, and four dispersed hamlets.

Archaeological Remains: These sites are relatively discrete areas of occupation found within the scattered village of Santiago Tolman. The original pattern of settlement here is somewhat obscure because of the presence of numerous intervening areas unavailable to survey, either because of physical factors, i.e. the

Figure 71

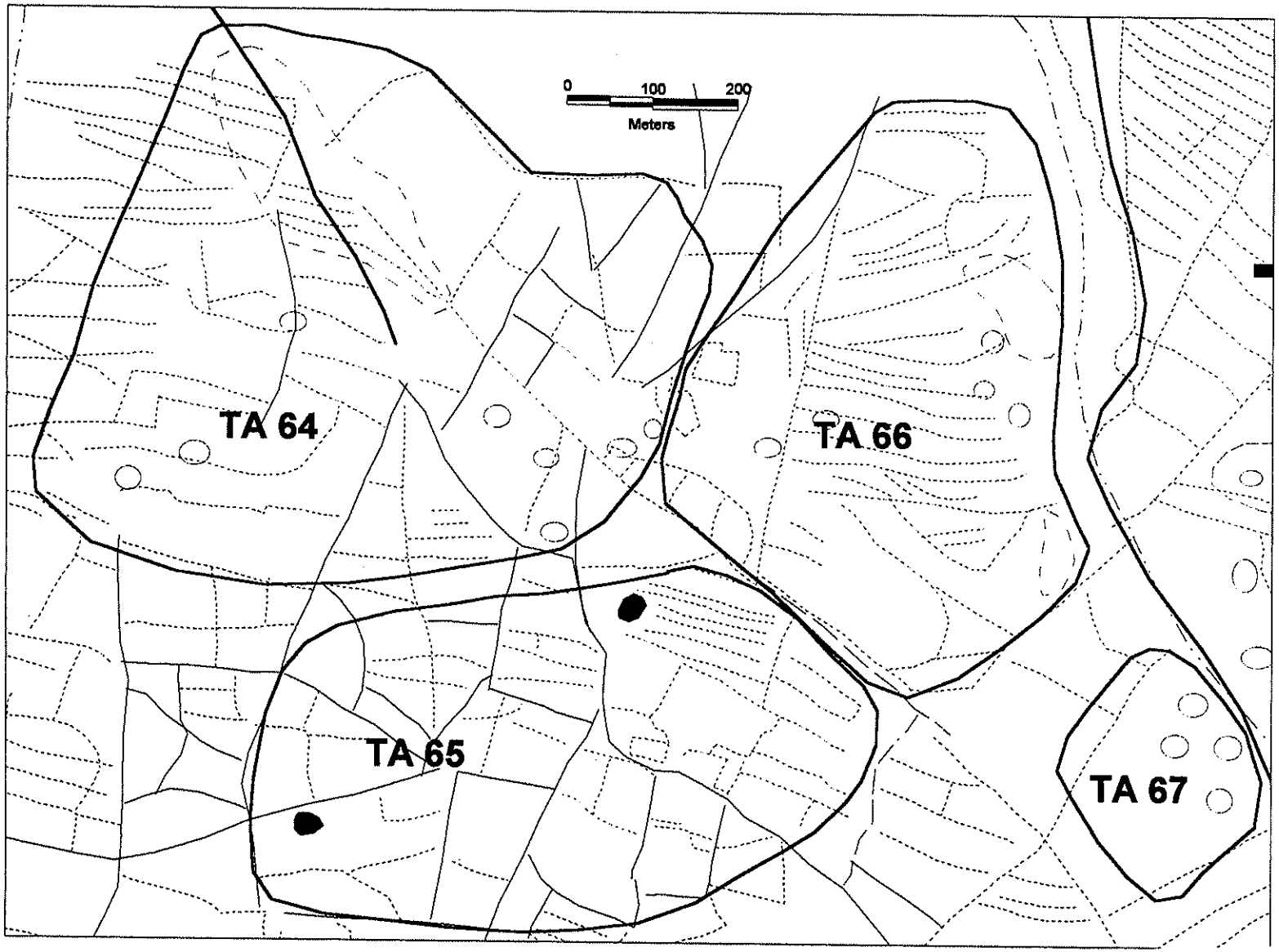


Figure 72

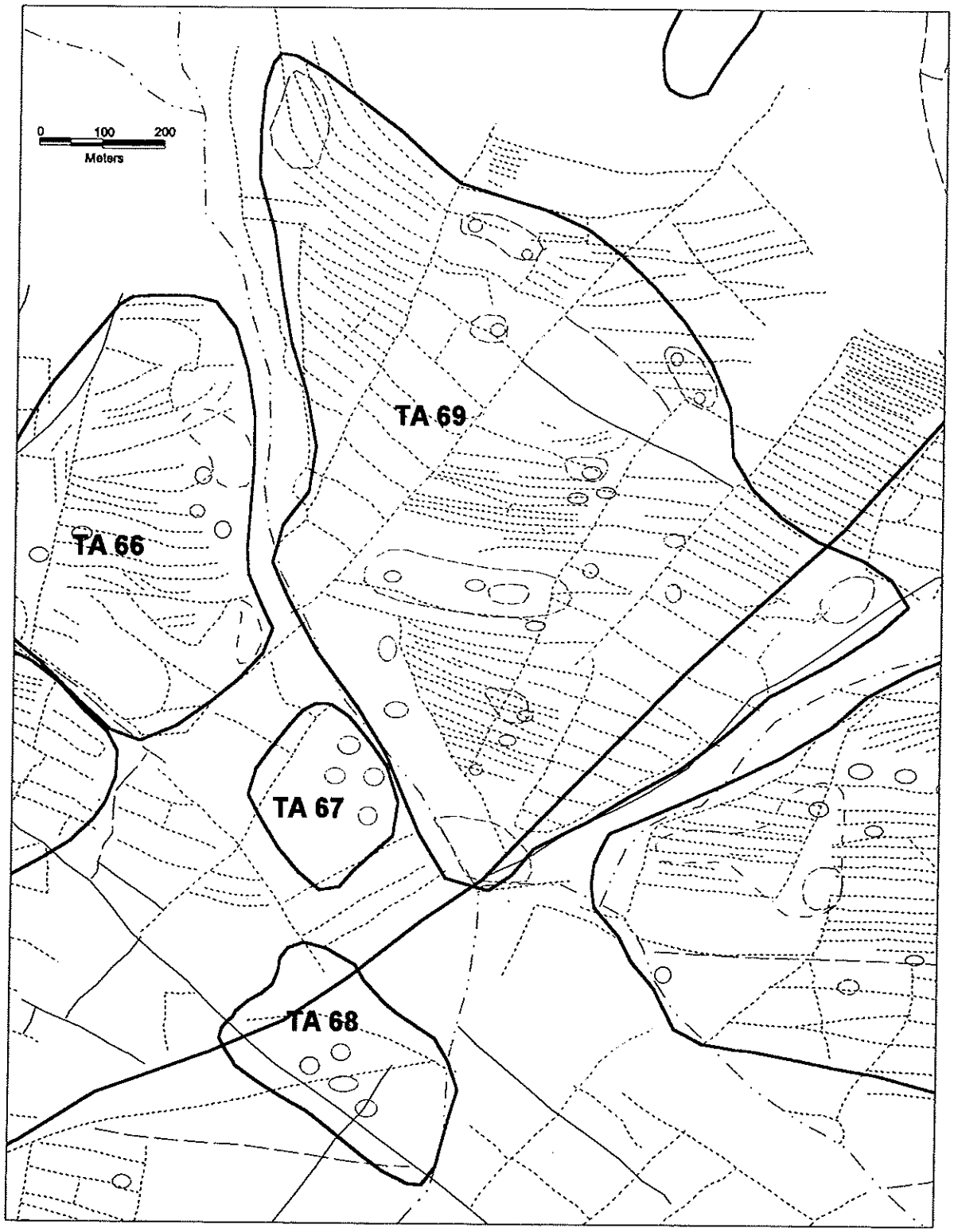
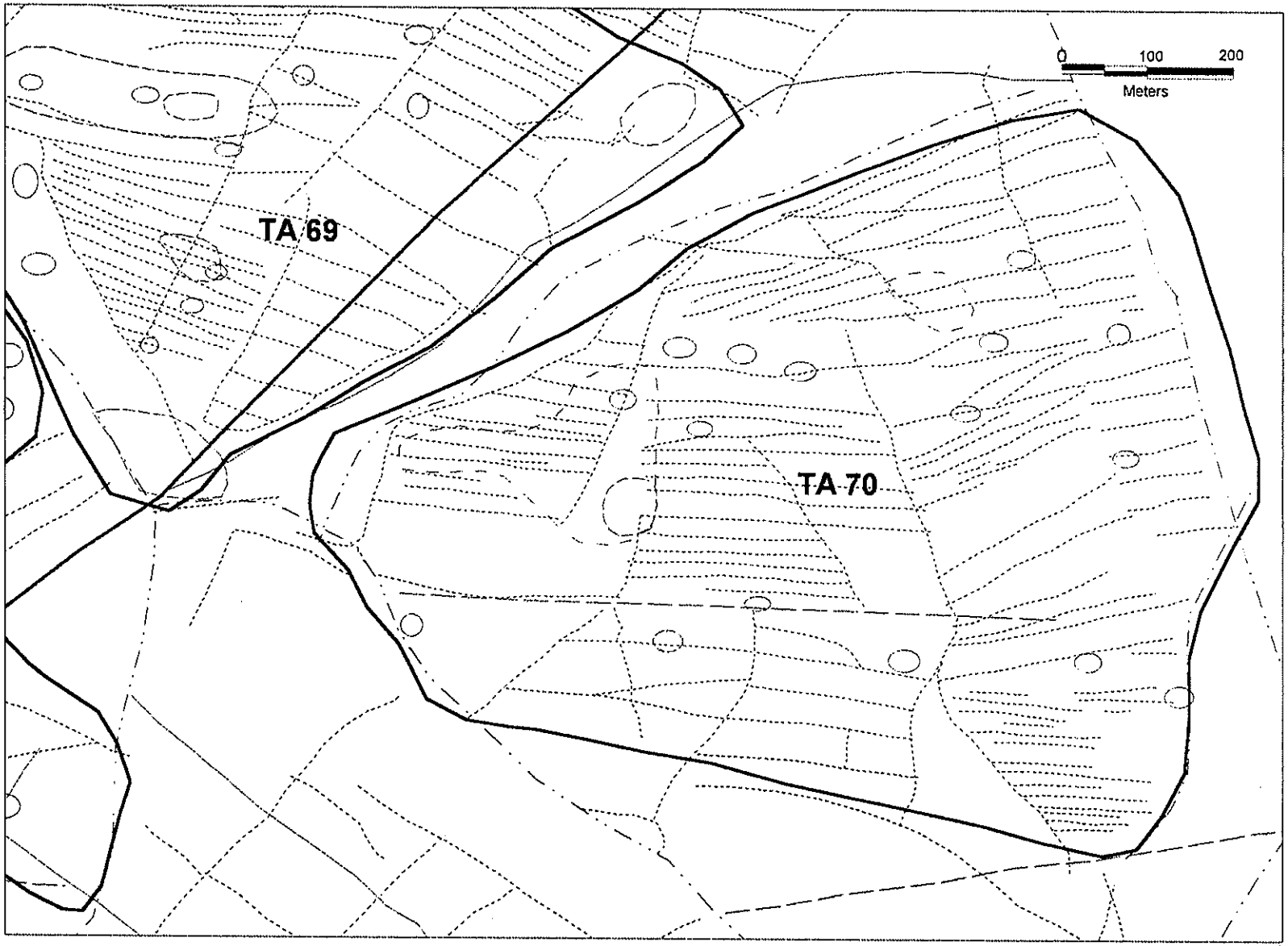


Figure 73



presence of more nucleated modern settlement areas, or social, i.e. the refusal of householders to allow survey. The distribution of occupational remains in the survey areas, however, are enough to demonstrate that the original settlement density and spacing of mound clusters was comparable to those sites found east and west of the village. The area of main occupation, based on these considerations, was clearly at the upper half of the village i.e. the northern portion. Much of this area is occupied by the Colonia. The most significant evidence of occupation south of this area was found in the center of Tolman, an occupation defined as site T.A. 65, within and around the village plaza. An additional area, fairly well defined, is T.A. 67 lying along the east bank of the west barranca. Three more or less clearly defined areas of occupation are found along the west bank of the east barranca, but here the occupation is lighter and less clear. Approximately twelve mounds were defined in the Colonia section of the village, but there were numerous traces of substantial occupation in this region. We estimate that there were originally at least forty to fifty residential sites within the T.A. 64-68 cluster of sites, approximately half of which were within the area we defined as T.A. 64. The total area occupied by the Tolman sites is approximately 108 ha. Within the area occupied by these sites are four Mazapan phase hamlets (T.T. 45-48) and two Tzacualli phase hamlets (T.F. 108, 118).

T.A. 69-70 (Figs. 72, 73)

Classification: One or two small dispersed villages.

Natural Setting and Present Day Land Use: T.A. 69-70 lie between two barrancas and are located east of Santiago Tolman. With the exception of areas of tepetate wash along the east bank of the west barranca, this is an area of well preserved, functional bancals. The old road that connected Santiago Tolman with the village of Axapusco to the east, runs diagonally across this site providing an arbitrary boundary between T.A. 69 to the north and T.A. 70 to the south.

Archaeological Remains: Most of the occupation occurs in a band 400 to 600 meters wide on both sides of this road. This band includes approximately 1/3 of the total area defined as T.A. 69 and 2/3 of the area defined as T.A. 70. Within this band occupation ranges from at least to light, is often medium, and occasionally medium plus; we could have defined a single site with more dispersed outlying settlement to the north and south. Within the band of dense settlement, twenty-four residential mounds were located; to the north and south of the band are an additional seven. No structures of unusual size, and hence special function, were located. Based on the distribution of refuse within the band we estimate that probably all of the original structures on T.A. 70 have survived and perhaps 50% of those originally found in T.A. 69. This means that there were probably 50-55 residential structures within the two site areas. The total area occupied by the two sites is approximately 136 hectares. Within the area of the two sites there are eight Mazapan phase hamlets (T.T. 51-58) and one Tzacualli (T.F. 120).

Figure 74

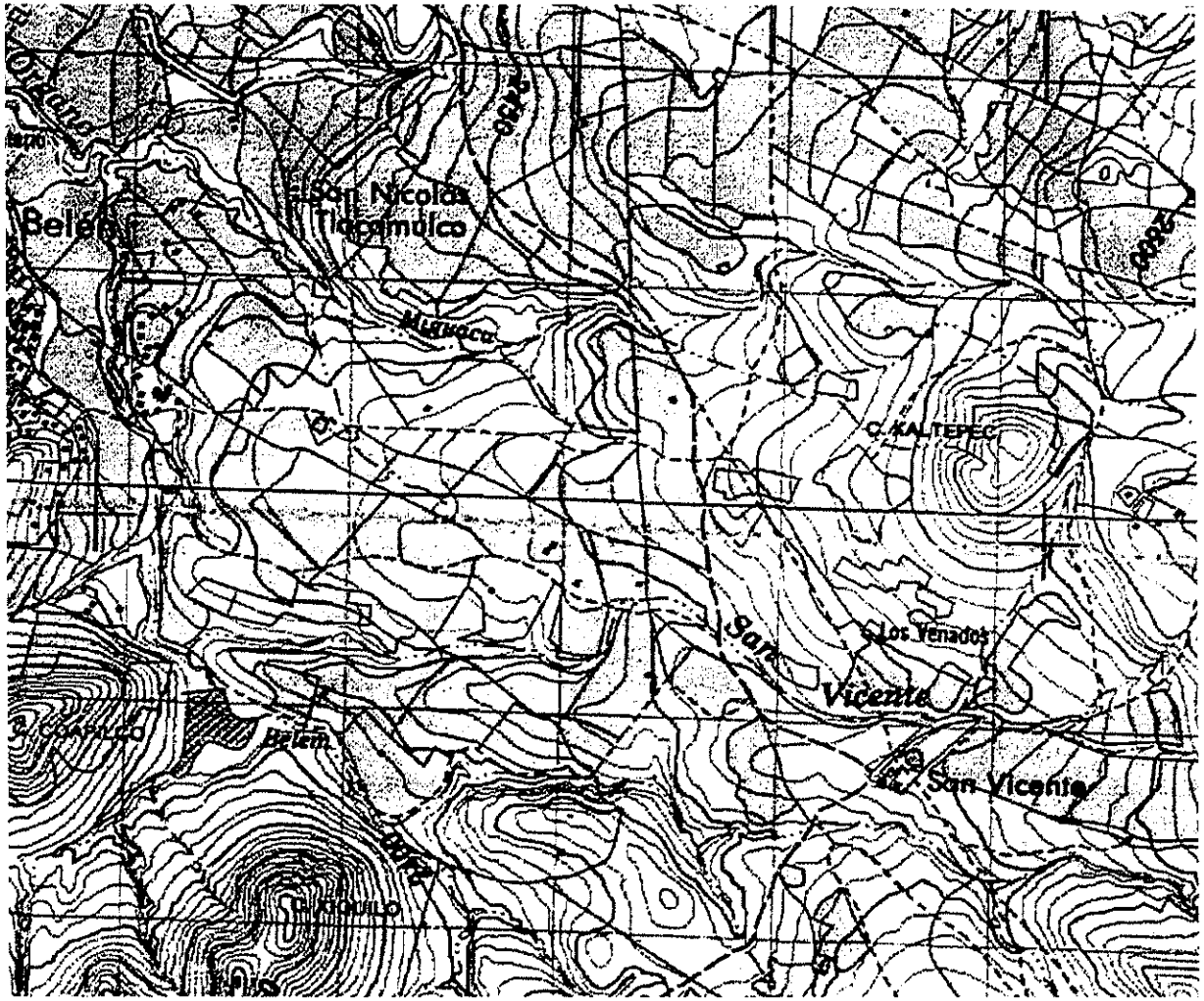
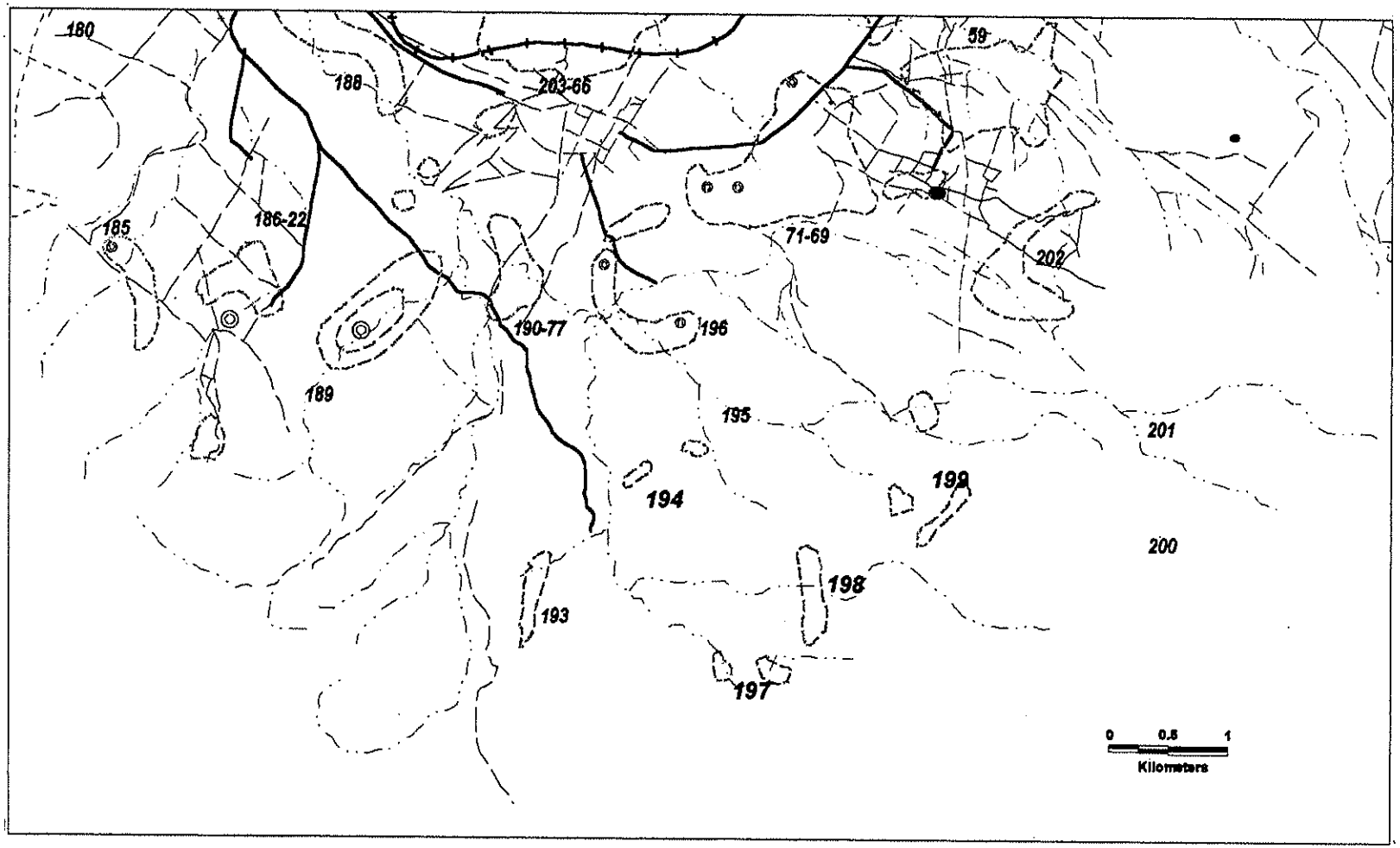

Belén
San Nicolás Tlaxomulco
C. KALTEPEC
Los Venados
San Vicente
San Vicente
Belén

Figure 75


180
188
203-66
59
185
186-22
71-69
202
190-77
196
189
195
201
194
199
200
198
193
197
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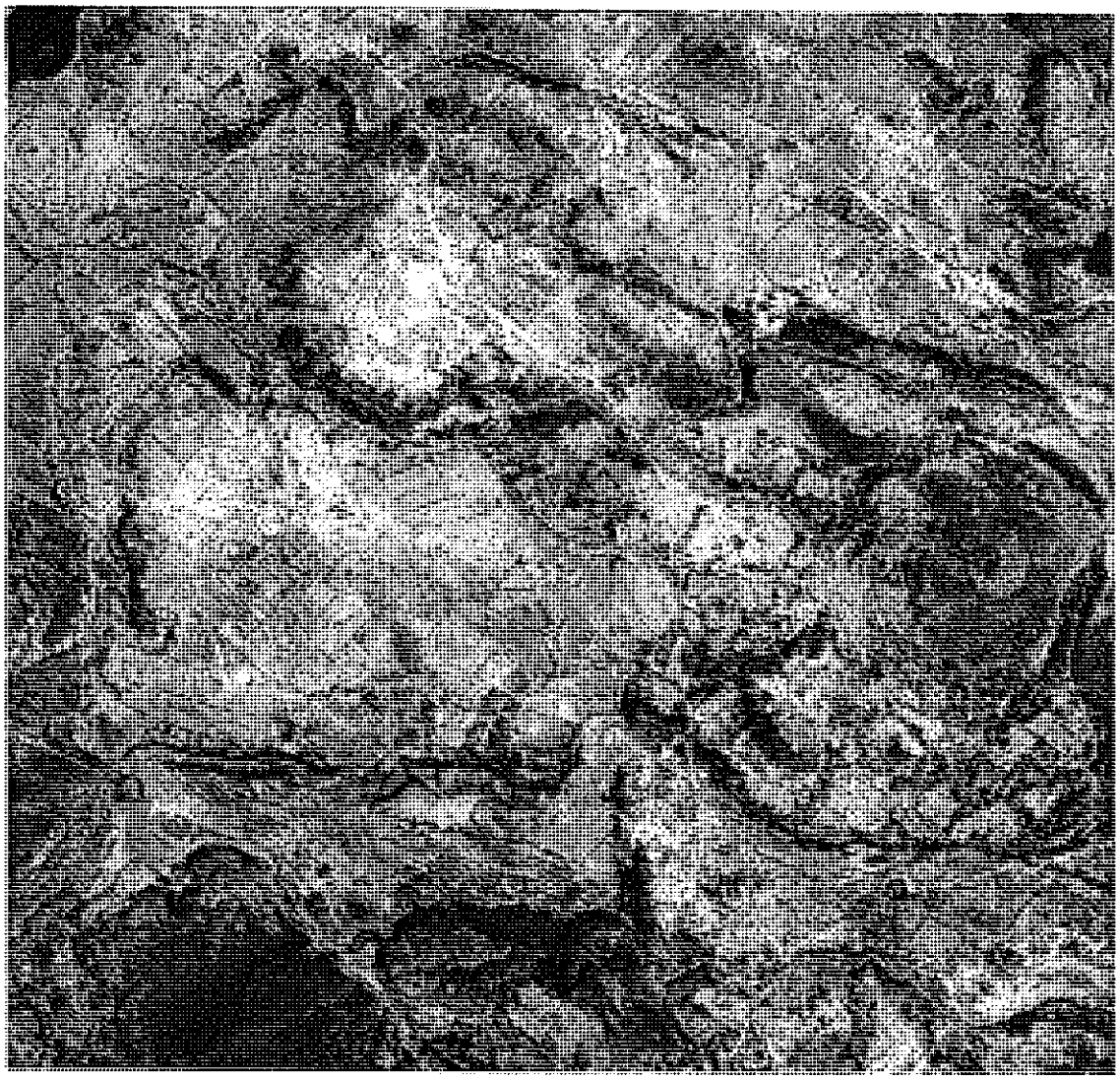
0.5
1
Kilometers

Plate 65



10. ZONE 11: PATLACHIQUE UPLANDS (see Plate 1)

Zone 11 consists of the high peaks of the Patlachique Range and an extensive intermontane plateau, relatively level, and today dedicated primarily to pasture with some maguey cultivation. Much of it is the property of a single large commercial holding called the Rancho San Jose de Moral. Much of the drainage of this plain flows south to the Papalotla River outside of the Teotihuacan Valley.

The only significant prehispanic occupations in the area were Teotihuacan and Aztec and both seem to occur on sites of two types, linked to two special functions. One set are small ceremonial precincts placed on the summits of the peaks in the range and includes T.C. 100, and T.A. 181 (located on the highest peak in the area, Cerro Patlachique). Similar sites of this type are found on the summit of Cerro Malinalco (T.A. 99 - T.C. 99), and Cerro Gordo (T.C. 59 - T.A. 182). In each of these cases both occupations were noted in the surface samples, suggesting that some of the structures were built in Teotihuacan times and then possibly reused in the later Aztec period. T.A. 100 was previously described in Volume 3 as T.C. 100. T.A. 185 was surveyed in 1966 as part of T.A. 235 and is written up here as an appendix (Appendix B). At the time we published Volume 3 the Teotihuacan period presence on this site had not been noted by the general survey team; it was identified only as an Aztec shrine. Sites of this type have generally been identified as Tlaloc Shrines.

The second class of sites was surveyed only by the Teotihuacan Period Team and includes the following: T.C. 39, 101, 102, and 103. T.C. 39 does not have an Aztec component on it but T.C. 101, 102, and 103 all have Aztec occupation and we have designated these T.A. 95 and 96. We have included here the descriptions of T.C. 101, 102, and 103 from Volume 3. These sites seem to be clustered around a huge gravel quarry, some of which is probably prehispanic in origin, suggesting that these residential sites may pertain to its exploitation. The majority of the zone was within the Hacienda of Tlajinga in the 18th century, a palace estate of the cacique of Teotihuacan. The small Aztec period population we located on survey may have been serfs living on his estate.

T.A. 95 (T.C. 103)

Background and Classification: This site, also known as Cuevas de Amicidad Norte, Rancho San Jose de Moral, was surveyed by Marino in the general survey and has not been intensively resurveyed by any subsequent team. No artifact collections were made nor were collections made by any other survey team; therefore, the chronological data presented are derived from Marino's field observation probably a hamlet in Aztec period.

Natural Setting: Site T.A. 95 is located between 2,400-2,430 m. Soils in the site area have a sandy to loamy texture and are light to medium brown in color, with unknown depths. There is slight erosion in the site area, and moderate concentrations of rock and tezontle fragments are found. Vegetation in the vicinity includes pirul, nopal, maguey, and various grasses.

Modern Land Use: Cultural features include no structures and no jagüeys. The site area is used primarily for grazing, although maguey is cultivated.

Archaeological Remains: The total multicomponent site occupies an unknown area. One possible mound was identified which has Teotihuacan occupation. The site has two phases of pre-Teotihuacan, three phases of the Teotihuacan, and one phase of the post-Teotihuacan represented for a total of six. Associated non-

Aztec sites include T.C. 103. The following possible mound was sampled.

> T.C. 103-1, less than 100 m^2, moderately to heavily eroded. Artifactual remains indicated traces of Patlachique, traces of Tzacualli, traces of Early Teotihuacan, light Middle Teotihuacan, traces of Late Teotihuacan, and medium Aztec components.

The site has an unknown distribution of lithic materials.

T.A. 96 (T.C. 101)

Background and Classification: This site, also known as Cuevas de Amicidad, Rancho San Jose de Moral, was surveyed by the general survey team in 1963 and has not been intensively resurveyed. The artifact collection consisted of one sample. It was probably a hamlet in the Aztec period.

Natural Setting: Site T.A. 96 is located between 2,400-2,430 m. Soils in the site area are sandy to loamy and are tan to light brown in color, with depths ranging from 0-20 cm. There is moderate erosion in most of the site area, and tepetate is exposed in several sections of the site. Moderate concentrations of rock and tezontle fragments are found in the area. Vegetation in the vicinity includes pirul, maguey, and various grasses.

Modern Land Use: Cultural features include no structures and no jagüeys. The site area is used for herding purposes, especially for goats.

Archaeological Remains: The total multicomponent site occupies 2.2 ha. The site has one phase of the pre-Teotihuacan, three phases of the Teotihuacan, and one phase of the post-Teotihuacan represented for a total of five. Associated non-Aztec sites include T.C. 101. The following sample was collected:

> T.C. 101-1, Artifactual remains indicated traces of Tzacualli (T.F. 262), traces of Early Teotihuacan, light Middle Teotihuacan, traces of Late Teotihuacan, and medium Aztec components.

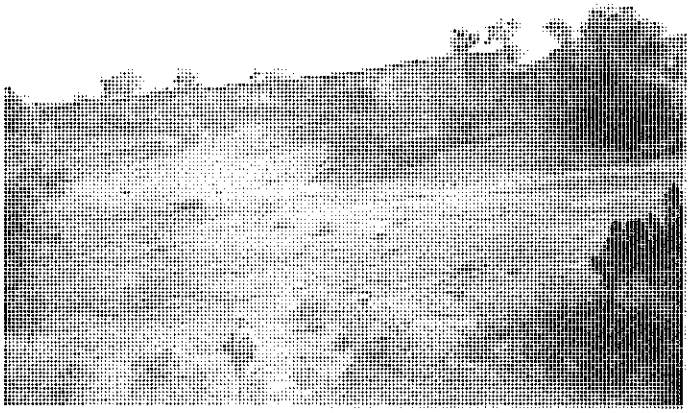
The site has a sparse distribution of lithic materials which apparently do not include obsidian artifacts. Ground stone tools, especially manos and metates, were noted.

T.A. 181 (T.C. 100)

Background and Classification: This site, also known as Cerro Patlachique, Sanctuario de Tlaloc (Piramide), surveyed by Marino in general survey and has not been resurveyed by any of the intensive survey teams. The artifact collections from the general survey were processed by Kolb in 1964 and 1965 and consisted of one sample. It was a ceremonial precinct in Aztec and Teotihuacan times.

Natural Setting: Site T.A. 181 is located on the summit of Cerro Patlachique, approximately 2,750 m. Soils in the site area have a sandy to loamy texture and are tan through medium brown in color, with unknown depths. There is slight erosion in the area. Moderate concentrations of rock and especially heavy concentrations of tezontle fragments are found in the area. Vegetation in the vicinity includes pirul, nopal, what is described as "heavy bush", and various grasses.

Modern Land Use: Cultural features include no structures and no jagüeys. The site area is used primarily for grazing and possibly the cultivation of nopal. A stone wall serving as a boundary is found to the north



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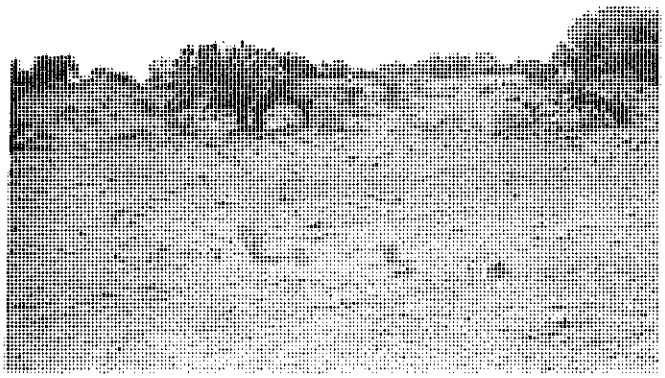

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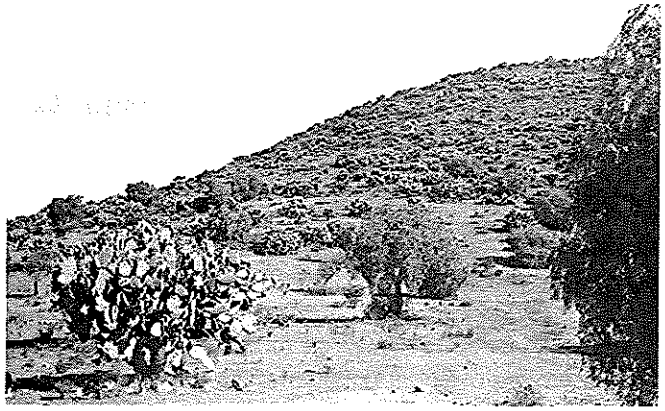

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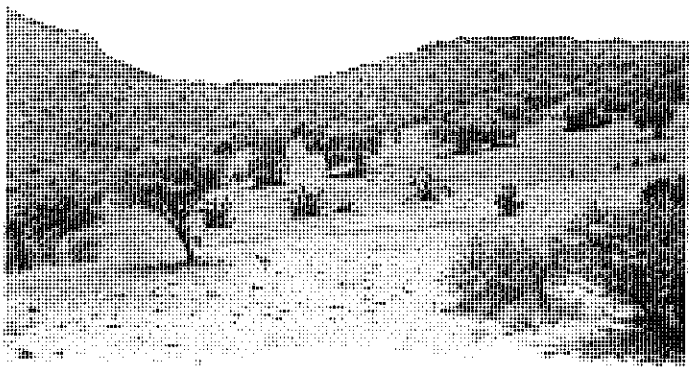

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of the site.

Archaeological Remains: The total multicomponent site occupies 0.3 ha. One mound was identified which has Teotihuacan and Aztec occupation. It appears as the remains of a temple platform placed on a large terrace which itself is located on a knoll. From the level surface below the knoll, the total structure and knoll are 3-4 m. high. The platform has a diameter of 20 m. The site has one phase of the pre-Teotihuacan, one phase of the Teotihuacan, and one phase of the post-Teotihuacan represented for a total of three. Associated non-Aztec sites include T.C. 100. The following mound was sampled.

> T.C. 100-1, 275+ m^2, heavily eroded. Artifactual remains indicated traces of Patlachique (T.F. 302), traces of Tzacualli (T.F. 261), traces of Early Teotihuacan, and medium Aztec components.

The site has a sparse distribution of lithic materials including obsidian blades. Ground stone tools were not reported.

Surveys conducted in 1966 revealed another ceremonial complex on a separate lower knoll north of Cerro Patlachique which is almost entirely of Teotihuacan age and there is a strong possibility, therefore, that the mound on this platform was built during the Teotihuacan and not the Aztec period (see Chapter 4).

11. ZONE 12: THE UPPER SAN LORENZO BASIN (Figs. 74, 75; Plates 65)

In the portion of the San Lorenzo Basin that lies within the Patlachique Range, are two distinct ecological zones. To the west are a number of foothills, Cerros Xiquillo, Cuahpilco and Tlilhua, with steep eroded slopes and separated from each other by deep, wide tributary barrancas. The only relatively level land consists of a series of narrow ledges between the bases of the hills and the edges of the barrancas. The only substantial occupation in this area is Formative in date. We believe that much of the cutting of the barrancas postdates that occupation, and reconstruct the area during the Formative period as a series of small valleys with narrow flood plains and shallow permanent or semi-permanent streams. The area was then virtually abandoned during the Teotihuacan period with consequent severe erosion. Of particular interest is the general sparseness of Aztec settlement. Most of the area today can be considered as marginal land and is owned by the village of Belen. The slopes are covered with stone terraces, many of them abandoned. Those in use are planted primarily in maguey, with much of the area used for grazing. The uncultivated terraces are densely overgrown with wild vegetation (consisting of huixcolote, huixache, cactus - primarily wild nopal, grass and pirul trees). Soil cover is generally thin but present in most of the terraced areas. These lands were probably more intensively utilized prior to the agrarian reform and have reverted to marginal status since the farmers at Belen received their ejidos in the main valley.

An exception to this situation is the upper piedmont around the contemporary village of Santiago Tepetitlan, also a major focus of Formative settlement. The terrain consists primarily of light to moderately sloping topography. This relatively level terrain is interrupted by two small foothills, Cerros Tepetitlan and Xoxoque. Unlike the area previously described it is intensively cultivated for basic foodstuffs. The gentle slopes are covered with stone and maguey terraces planted in maize, barley and beans; the steeper slopes are intensively utilized for maguey. Part of the survey area is occupied by the village of Tepetitlan, with houses closely integrated with a functioning terrace system. The area contrasts with the sites further up the San

Lorenzo Barranca in that Aztec occupation is heavy and abundant. One large Aztec site (T.A. 238) rings and surmounts Cerro Xoxoque. The village of Tepetitlan partly overlies a large Aztec site (T.A. 237) and two small sites occur upslope from them. These sites were previously described in the section treating Zone 10.

In sharp contrast to the western part of the upper San Lorenzo Basin with its rugged foothill topography, the eastern part consists of a relatively level plateau deeply dissected by barrancas, the eastern tributaries of the San Lorenzo river. The plateau grade slopes down from south to north appearing as a series of steps of descending elevation. The base of the plateau consists of a great tongue of basalt. Based on this topography, we have divided it into a series of separate ridges delimited by barrancas; these are recognized by the contemporary population as separate localities. The highest and southernmost part of the plateau we will refer to as the Altica ridge. The ridges decrease in elevation towards the north in succession from San Idelfonso, to Nonoalco, to Oxtotipac, and Cuahutlacingo. In this section we will deal only with the uppermost two ridges i.e. Altica, and San Ildefonso.

The delimiting barrancas are all very deep, wide canyons. An important problem is the antiquity of these barrancas in their present form. Most of them may have been shallow, narrow, semi-permanent streams during the Formative period. The plateau surface between the barrancas is also severely eroded by sheet erosion, particularly the Nonoalco ridge, with much exposed tepetate. Where soil does remain it is generally only 10-20 centimeters in depth, with only occasional patches of soil that reach a depth of 50 centimeters. The ridge is heavily utilized for maguey cultivation, with maize and barley found in the small areas of deep soil. The land can be considered as an area of marginal use by the villagers from Oxtotipac and Belen.

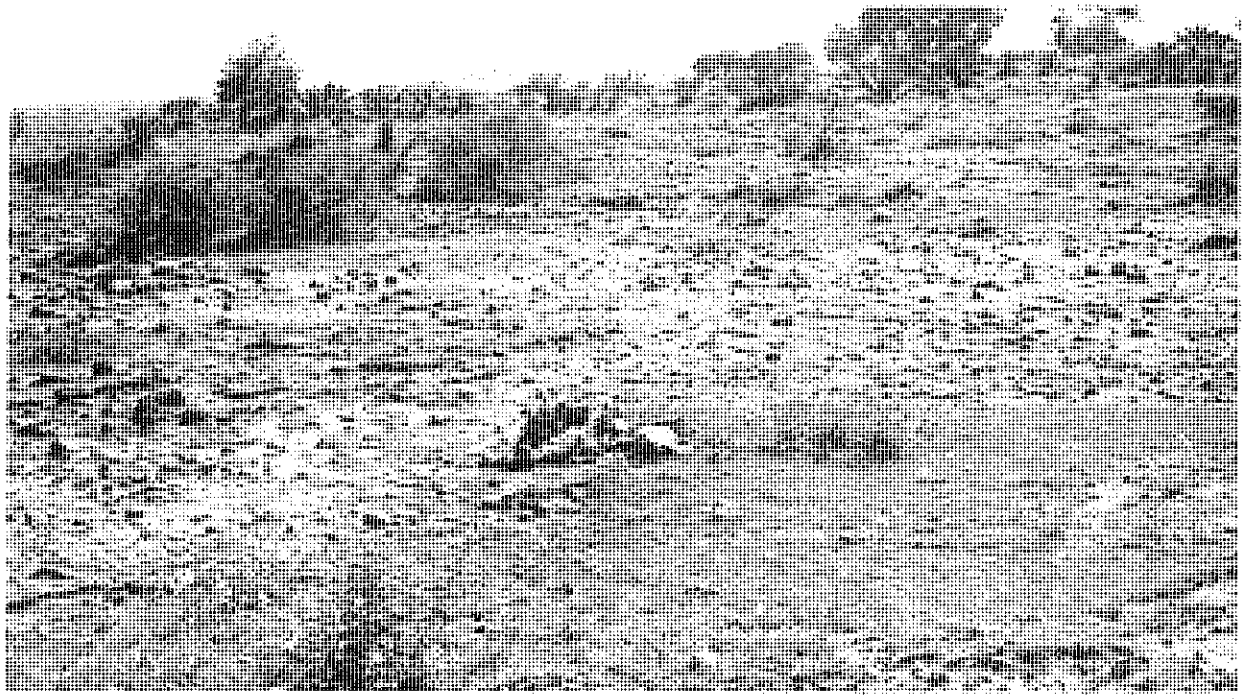
This is an area of major Formative period settlement with little subsequent use as a residential locus until Aztec times. Aztec occupation, in contrast with the western part of the basin, is extensive, occupying virtually the entire surface of the Nonoalco ridge, large portions of San Ildefonso ridge, and occurring as a series of small hamlets on the Altica ridge. It is, on the whole, considerably heavier than the Formative occupation even in the areas where the latter occurs. Small pyramids occur on the ridges which probably date from the Aztec period; where house mounds were observed they seemed to be Aztec rather than Formative in date. Topographically the area is comparable in many ways to the piedmont of the upper valley. Unfortunately none of the sites from the Aztec period were surveyed by the intensive survey team and all our data derive from information from the Formative period survey team. Since the Aztec sites throughout the area inevitably were larger in extent than the Formative sites, this means that we have only partial information.

Ethnohistoric Information: We have found no ethnohistoric reference to communities in this area. Presumably they are all outlying settlements of Santiago Tepetitlan, and Belen and were sujetos of Oxtoticpac in 1580 (see discussion in Chapter 12).

T.A. 199 (Plate 68 A)

Classification: Hamlet

Natural Setting and Modern Land Use: T.A. 223 is located on the highest of the ridges, the Altica ridge, 2550 2600 m. The ridge has generally suffered less erosion than those lying at lower elevations; there is a fairly consistent, 10 cm thick soil cover, with only limited areas of exposed tepetate (located primarily along the edges of the delimiting barrancas). Most of the area is under intensive maguey cultivation, planted in closely spaced lines. Maize, beans and barley are planted in the deeper soil areas.



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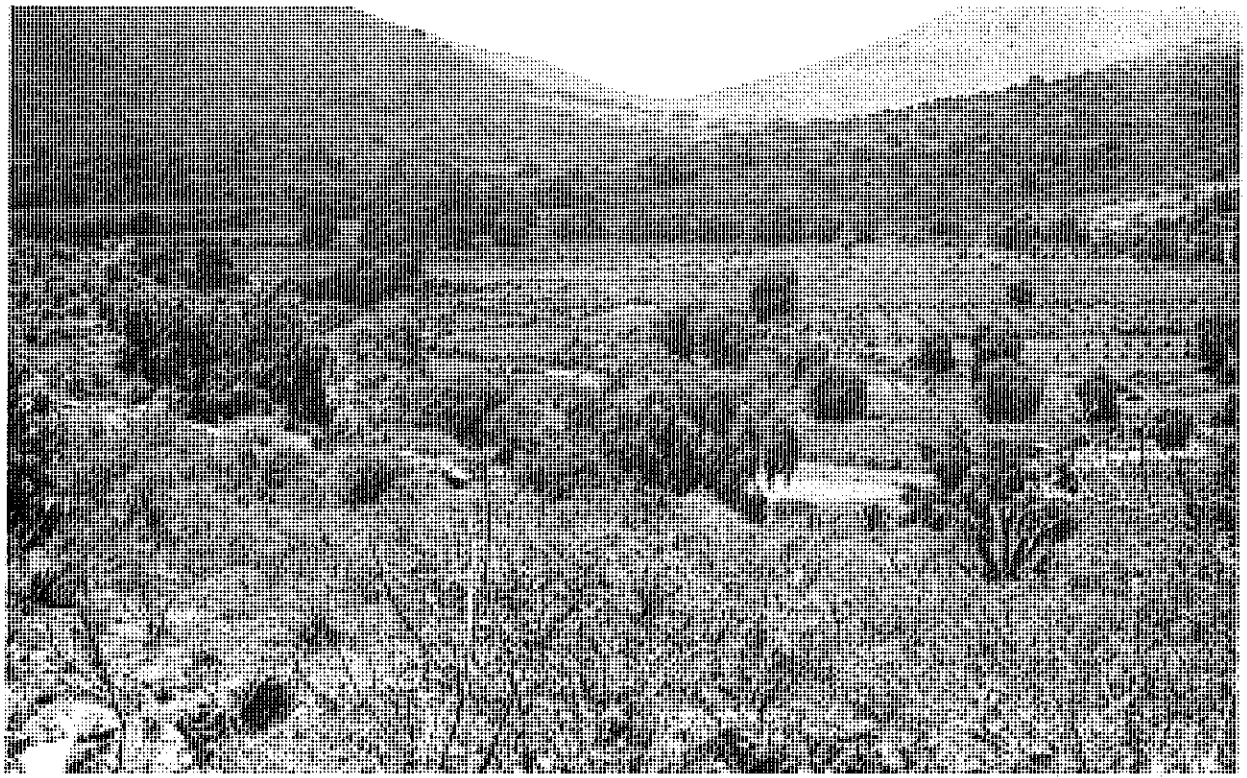

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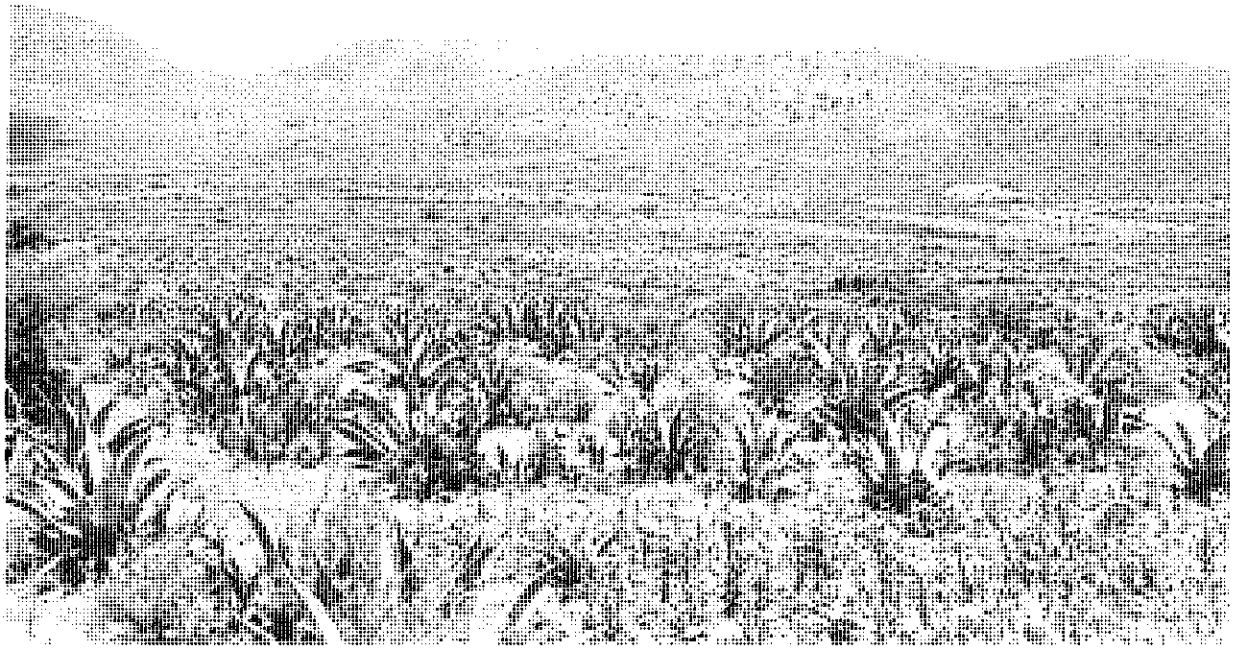
Plate 68



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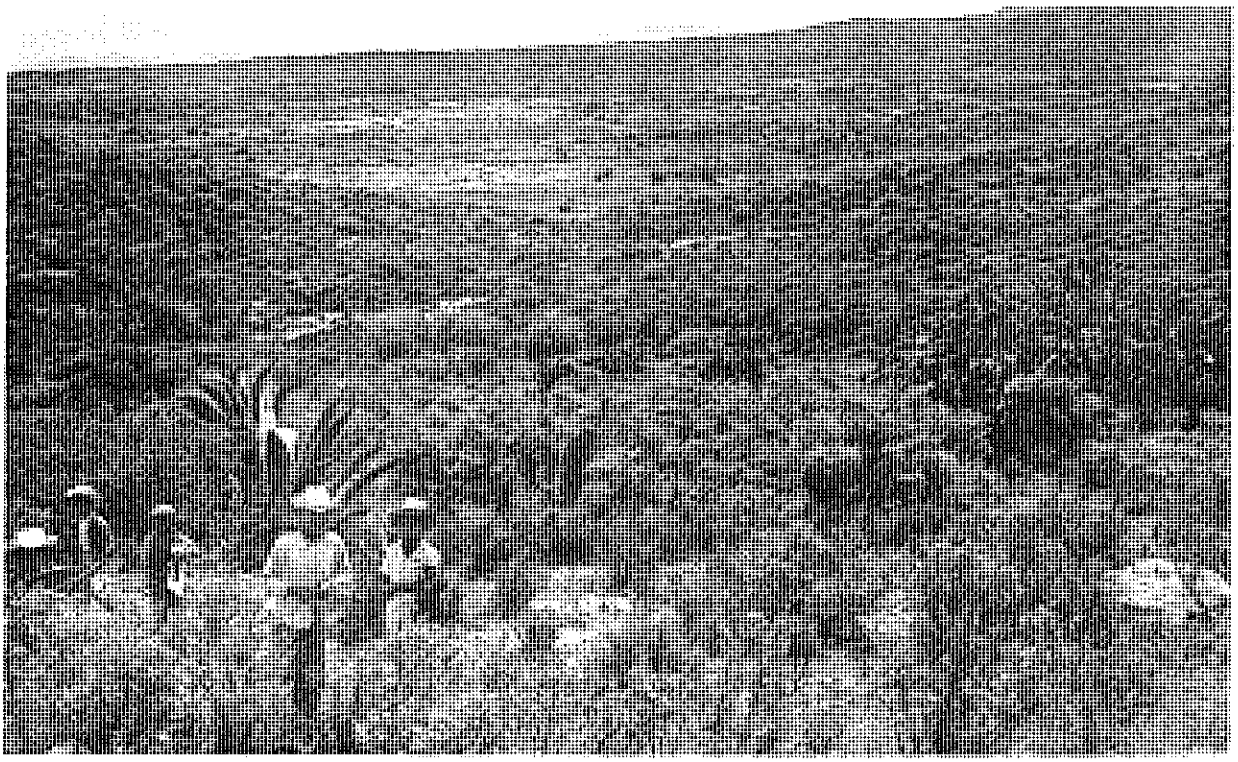

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Archaeological Remains: Within the Aztec site is a smaller compact Formative site T.F. 21. T.F. 21 has a fairly even concentration of sherds of medium density with localized areas of heavier occupation. Many of these areas, however, have Aztec occupation as well which ties in with the specific locations of Aztec house sites. The Formative occupation tends to be generally sparse with localized areas of light to medium concentration. Obsidian tools, manos and metates are all abundantly represented. Figurines are also common, including many from the Formative period. The Aztec occupation extends considerably beyond the limits of the Formative site. The surveyed portion of the site, i.e. T.F. 21, covers 4 hectares. Based on Marino's general survey, the Aztec site is at least double this size. Furthermore, on the same ridge he located four additional sites T.A. 197, T.A. 200, T.A. 198, and T.A. 195. Each of these Aztec site loci was probably of hamlet size, although we have information only on T.F. 21. On the T.F. 21 portion of the site, the Altica phase, we also have occupation of the Chiconauhtla T.F. 193, Cuanalan 229, and the Patlachique phase, T.F. 223, Tzacualli (T.F. 265), but no Teotihuacan or Toltec occupation was recorded.

T.A. 196 (Plate 67 A)

Classification: Hamlet

Natural Setting and Modern Land Use: The San Ildefonso ridge, 2400-2450 m, upon which the site is located, is much more severely eroded than the Altica ridge but otherwise is similar in terrain and contemporary use. There is much exposed tepetate, however. It is generally an area of maguey cultivation with very small areas of grain cropping where the soil is somewhat deeper. The Formative team surveyed a Chiconauhtla phase settlement, T.F. 17. In the course of their survey they noted Aztec occupation on the site recorded as T.A. 196. The Aztec site is a much larger community extending far beyond the Formative occupation and is probably a substantial village. It even includes a pyramid.

Archaeological Remains: Sherd density as a whole varies considerably and tends to occur in localized distributions, varying from light to heavy. It is particularly heavy near the Aztec pyramid or on and around Aztec house mounds. No Formative structures are evident. The Aztec occupation is heavier than the Formative, which probably ranges from sparse to light over the site area. Obsidian artifacts are abundant but manos and metates were not reported. The area of definite Chiconauhtla occupation is approximately 6 hectares. A Patlachique phase settlement (T.F. 79) only partly overlaps this area of settlement and has a total extent of about 4 hectares. The Aztec site, based on the Formative team's observation, and Marino's general survey, covers an area 3-4 times the size of the Formative site, perhaps 18-24 hectares.

Miscellaneous Sites

During the general survey of the area an activity stimulated by the unexpected number of Formative period sites, a large number of small Aztec period sites were also noted. These were not intensively surveyed and the only data we have on them is their location and size (see Figures 9 and 75). On the basis of this limited data we classified these sites as follows:

		Probable Status
1.	T.A. 197	Hamlet
2.	T.A. 198	Hamlet

3.	T.A. 193	Hamlet
4.	T.A. 194	Hamlet
5.	T.A. 195	Hamlet
6.	T.A. 200	Hamlet
7.	T.A. 201	Hamlet
8.	T.A. 202	Small Village
9.	T.A. 191-192	Small Village or Several Hamlets

Sites 189-190 were resurveyed by Parsons as part of his T.A. 238 site; site T.A. 199 is actually a spatial component of site T.A. 223.

THE UPPER VALLEY (Zones 12-16) (Plate 5)

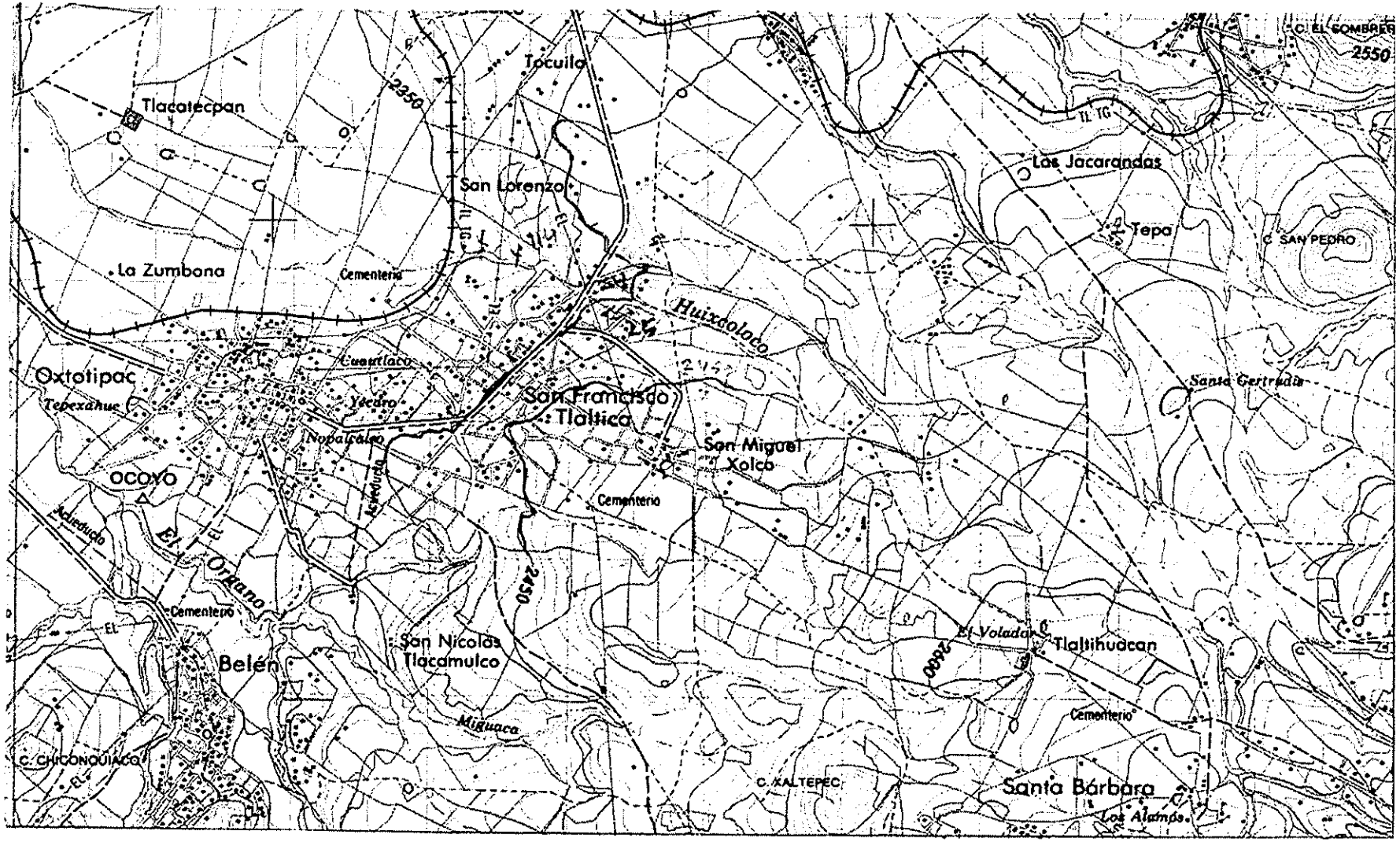
With respect to agricultural potential the Upper Valley is one of the least favorable areas in the Teotihuacan Valley today. The deep soil alluvial plain is extremely small, covering not more than 100 hectares, and is surrounded by a wide, gently sloping piedmont, today characterized by extensive sheet erosion. To the north the valley is defined by a series of small low volcanic cones which provide minimal quantities of floodwater during the rainy season. To the south and southeast it is flanked by the Patlachique and Sierra Nevada ranges (locally referred to as the Sierra Malpais). Locations well upstream near the bases of these ranges offer the best possibility of utilization of floodwater drainage. Today the area is primarily one of maguey cultivation. Although the area was undoubtedly more productive in the past, prior to the extensive sheet erosion of the piedmont and the deepening of the barranca beds, it must always have played a marginal role in the history of the valley. Occupation in Aztec times tended to be distributed along the interfluves in an almost continuous distribution, of varying density, from the foothills down to the edge of the alluvial plain.

In Volumes 3 and 4 we subdivided the Upper Valley into four zones, the North Piedmont (Zone 12), the Alluvial Plain (Zone 13), the East Piedmont (Zone 14), and the Southeast Ridges-South Piedmont (Zone 15). In this volume we have subdivided some of these zones, reordered others and added an additional zone.

Zone 13, the Southeast Ridges, is equivalent to Zone 15 in Volumes 3, 4 and the description given here is reproduced, in part, from those volumes. Zones 12 and 13 of Volumes 3-4, the Alluvial Plain and East Piedmont have been rearranged. Here we have grouped the small deep soil alluvial plain near Otumba with the Cuahutlacingo Ridge, an extension of one of the southeast interfluves along with the lower portion of the East Piedmont, east and southeast of Otumba, into Zone 14, denoted the Otumba Conurbation, in recognition of the unusual degree of urbanization that occurred almost continuously over these areas in Aztec times. The upper portion of the former East Piedmont area is here separated as Zone 15 and designated the Ahuatepec Piedmont.

The North Piedmont zone of Volumes 3-4 is retained here as Zone 16. Finally in this volume we have added Zone 17, the East Piedmont of Cerro Gordo, not treated as a unit in earlier volumes. It was neglected primarily because virtually the only occupation in this zone is Aztec and, furthermore, it was not

Figure 76


Tlacotecpan
Tocuila
2350
San Lorenzo
La Zumbona
Cementerio
Huixdoloco
Cuautlaco
Oxtotipac
Tepexahuc
Yecatro
San Francisco Tlaltica
Nopalcalco
OCOYO
San Miguel Xolco
Cementerio
Acueducto
El Organo
Cementerio
2450
San Nicolás Tlacamulco
Belén
Mixuaca
C. CHICONQUIACO
C. XALTEPEC
Los Jacarandas
Tepa
C. SAN PEDRO
C. EL COMBATE
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Santa Gertrudis
El Volador
2400
Tlaltihuacan
Cementerio
Santa Bárbara
Los Alamos

Figure 77

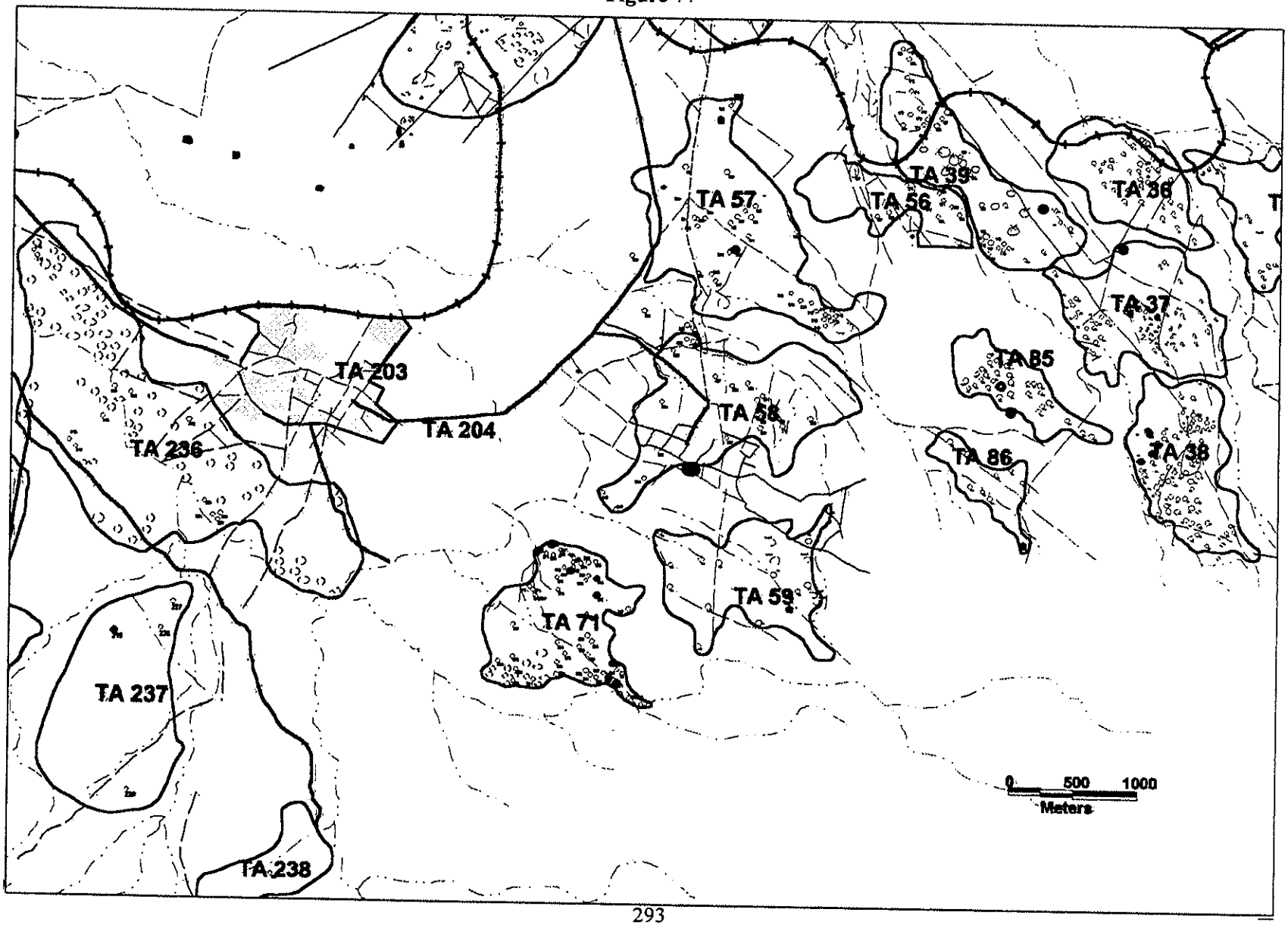
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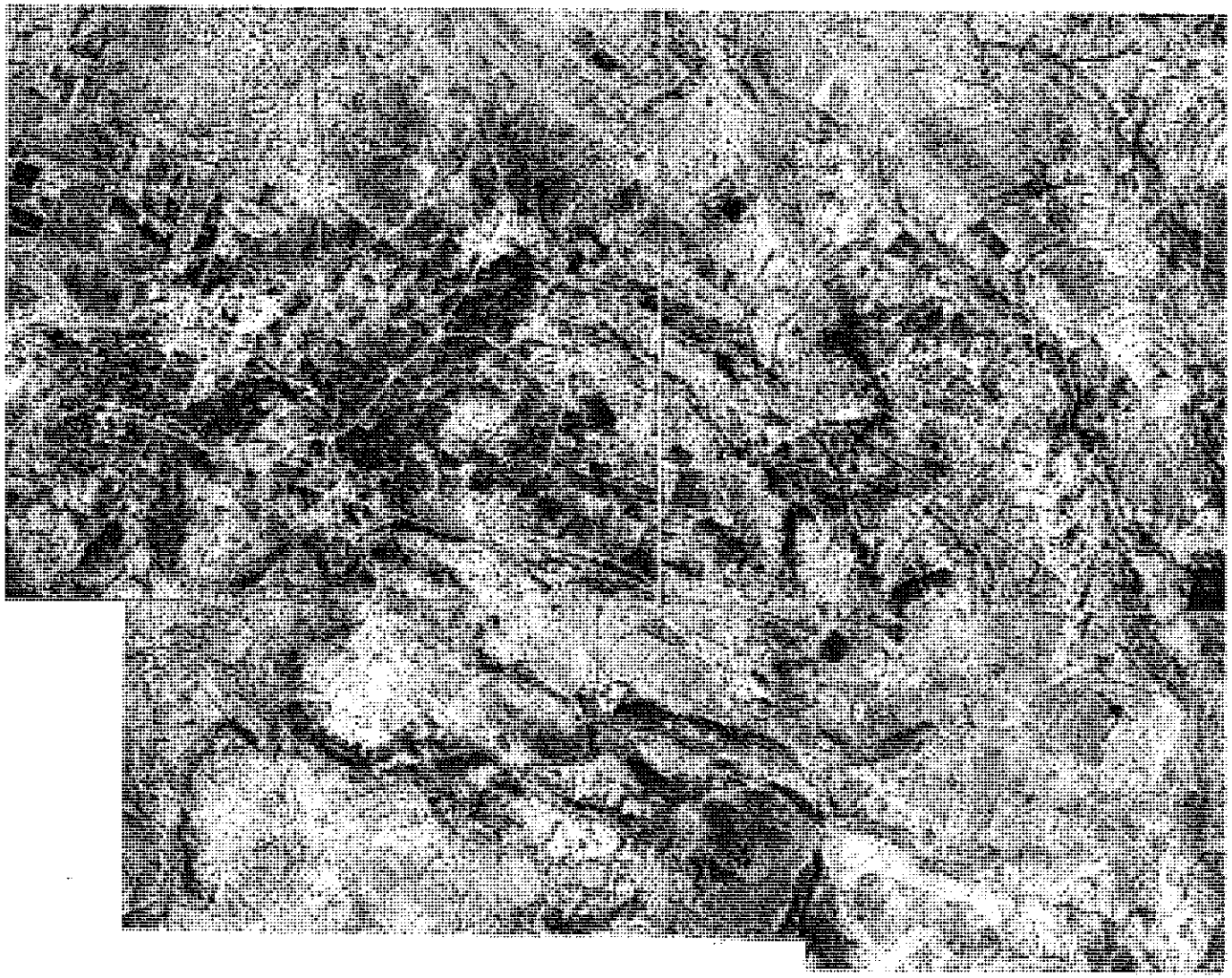
Plate 69



surveyed during the Teotihuacan Valley Project, but rather in 1966 by Jeffrey R. Parsons.

The distinctiveness of the Upper Valley and its subdivisions is well reflected in the geological map reproduced here (from Lorenzo 1968). All of the eastern and southern portions of the area consist of an extensive, east to west, descending, dissected olivine basalt flow of quaternary age, from the main range of the Basin of Mexico, the Sierra Nevada, which defines the Upper Valley here as a solid rampart of mountains. In contrast the North Piedmont is bordered by a series of small ranges and isolated cinder cones, along with basaltic tuff deposits, also of quaternary age, derived from Cerro Gordo.

On the noted geological map, a very extensive area is defined as quaternary age alluvial plain, but the vast majority of this plain is actually gently sloping and, furthermore, has a shallow soil cover, and we have included it either as part of the North or East Piedmonts. The Upper Valley has an extensive network of seasonal streams, today deeply entrenched. At the headwaters of one of these, aptly called the Arroyo de Estetes, are extensive obsidian deposits.

The Upper Valley is well populated today. In the center, within and on the edges of a small deep soil alluvial plain is the town of Otumba, the cabecera of a municipio and the location of a weekly Tuesday market. In 1960, Otumba had a population of approximately 2,000. Within the municipal jurisdiction of Otumba, and also within the Upper Valley were the communities of Ahuatepec (569), Cuahutlacingo (931), Oxtotipac (684), Tlaltica (544), San Marcos Aguatepec (851) and San Miguel Xolco (124), and, in the Middle Valley, the villages of Belen (933), and Santiago Tolman (1567), along with a number of rancherias, ranchos and haciendas. Most of the North Piedmont pertains to the municipio of Axapusco, within which is the cabecera at Axapusco itself (population 1,010). Much of the jurisdiction of this municipio lies outside of the Teotihuacan Valley drainage to the north.

In Chapter 12 we discuss in detail the problems of the political geography of the Upper Valley in Early Colonial times. The possible identification of the sites with known communities in 1519 presented below is based primarily on a study by Jean Francois Genotte, particularly his Maps 5, 6 and Figure 9 and it should be understood as highly tentative. Missing in his work is the identification of communities in the areas subject to Oxtotipac and Axapusco.

12. ZONE 13: THE SOUTHEAST RIDGES (Figs. 76, 77; Plate 69)

Along its eastern and southern edge, the Upper Valley is bordered by the northern terminus of the Sierra Nevada, with a maximum elevation of over 3,000 m. The zone is comprised of a series of extensive triangular shape wedges of gently sloping terrain defined by deeply incised barrancas. Those descending from the east are wider and more level, to the south they have more rugged topography. All have relatively shallow soil cover with numerous extensive areas of exposed tepetate. At the lower ends of these ridges are the present day villages of Oxtotipac, Tlaltica and Xolco.

The piedmont in the southeast is formed by a heavily scoured series of long, gently rising ridges or benches, which culminate at the upper or extreme eastern edge in a low range of hills. Sheet erosion is common and xerophytic plants are the rule in this eastern range. The lower or northwestern areas of these benches have retained some soil due to the industry of the campesinos of Tlamimilolpa, Xolco, and Tlaltica;

here barley, maize, some squash, and frijol as well as the ubiquitous maguey are grown. The upper reaches are largely planted in maguey with some wheat and barley. Very little maize is grown in the upper range of the bench land. The bulky ruins of the great walls of the 17th century colonial foundation of the Hacienda Cuahtenco are in the upper bench land. A few poor families make do here in small adobe and stone houses, which are put up within the broken, crumbling walls of the ruined Casa Grande of the hacienda. Hunting by the tlachiqueros and herders is part of the daily occupation of the sparse population that lives in this desolate region. Great stands of Yucca spp. are found in the northeast corner of the region, covering approximately 90 ha of an area called, characteristically, "Las Palmas."

The settlements of Santa Maria Tlamimilolpa, San Miguel Xolco, and San Franciso Tlaltica are of the dispersed low density (1.06 to 2.90 persons per ha) rancheria type.

Seeming to confirm the impression of agricultural marginality of the eastern and southern piedmont is the near absence of Formative period settlement, the one exception being within the village of Oxtotipac. It should be noted, however, that Oxtotipac occupies the lowest edge of one of the descending ridges and is adjacent to the highly productive Middle Valley plain. While the area was well occupied during the Teotihuacan and Late Toltec periods, in both cases the population was only a small fraction of that during the Late Aztec, at which time virtually all of the interfluves were virtually covered with a settlement so continuous that we had to make very arbitrary decisions as to the limits of sites. The residential density of the 20th century villages of Tlaltica and Xolco provide a very close analogy to Aztec settlement, if we apply these densities to the entire survey area of the Upper Valley Piedmont rather than just the sites occupied by those villages.

T.A. 203 (78)

Classification: This is a multicomponent site, occupied from Terminal Formative times until the Spanish Conquest and beyond. In Terminal Formative, Teotihuacan, and Early Toltec times it was probably a small low density compact village; Late Toltec, small dispersed village; during the Aztec period a large dispersed village.

Natural Setting: The site is located at 2370 to 2380 m on the promontory bench of Oxtotipac and projects into the floodplain of the Middle Valley. It is gently sloping with rocky outcrops. Huizache grows on the steeper areas of the slope. Soil cover is variable from areas stripped to tepetate to 10 to 30 cm in depth. Basalt outcrops and cascajo deposits are found on northern area of the slope. The entire elevation is composed of volcanic ash, pebbles, and gravel and is honeycombed by caves, apparently ancient quarries for construction material.

At 2375 m is a cave located at the base of a cliff of fine tezontle ash or cascajo deposits. The cave site here, on the basis of our excavation, was found to be of artificial origin. Above and below the cave is located the present-day village of Oxtotipac. There are several deep wells at the foot of this slope from which water is drawn by gasoline pump. The rocky cap over the cave slopes gently upward and ultimately levels off. The major east-west ancient Aztec pedestrian road from Teotihuacan to the lands east of the valley passes directly south of this site and through Oxtotipac. It apparently functioned as a road in Teotihuacan times as well.

Modern Land Use: The present-day village of San Nicolas Oxtotipac occupies the site. Maguey is the most important plant. Some maize is grown and there is much nopal and tecojote.

Archaeological Remains: The cave at Oxtotipac was excavated by Obermeyer in 1961 with an initial objective of obtaining pollen samples that might extend as far back as the phase of incipient agriculture, called the Chalco complex by DeTerra. It was hoped that data could be recovered that would aid in reconstructing an important segment of the climatic history of the valley. The excavations found here passed successively through Aztec and Toltec period levels, reaching the bottom in occupations of the Late Teotihuacan phase. It was eventually determined that most, if not all, of the cave area was a result of Prehispanic excavations, undoubtedly for recovery of the volcanic ash material that, from Teotihuacan times to the present has been a material used in building masonry walls, floors, pavements.

The fields beneath, above, and to the sides of the cave itself were all carefully surveyed. A large number of occupations from various phases were recorded. These occupations included traces of Cuanalan, coded as T.F. 230; Patlachique phase in various localities, coded as T.F. 57, T.F. 58, T.F. 92 and T.F. 103; several localities with Tzacualli occupation T.F. 37, T.F. 55, T.F. 93 T.F. 177, the Teotihuacan period sites T.C. 112 and T.C. 113; the Early Toltec T.T. 82, and the Late Toltec sites T.T. 98-102. Charlton's resurvey of the area subsequent to the Teotihuacan Valley Project also added a number of Mazapan localities which were coded as T.T. 326-328. Some of these are probably the same as sites T.T. 98-102. The Late Toltec and Aztec occupation occurs in the form of scattered and localized stone and sherd foci, in widely spaced locations over the 33 ha of this site. The total area covered by these various occupations is approximately 33 ha.

Ethnohistoric Information: Oxtotipac, prior to the Nezahualcoyotl's reign at Texcoco was a cabecera with its own tlatoani. It was demoted to direct sujeto status to Texcoco by him. We have limited information on the Early Colonial political status of this community except that it was a cabecera separate from Otumba.

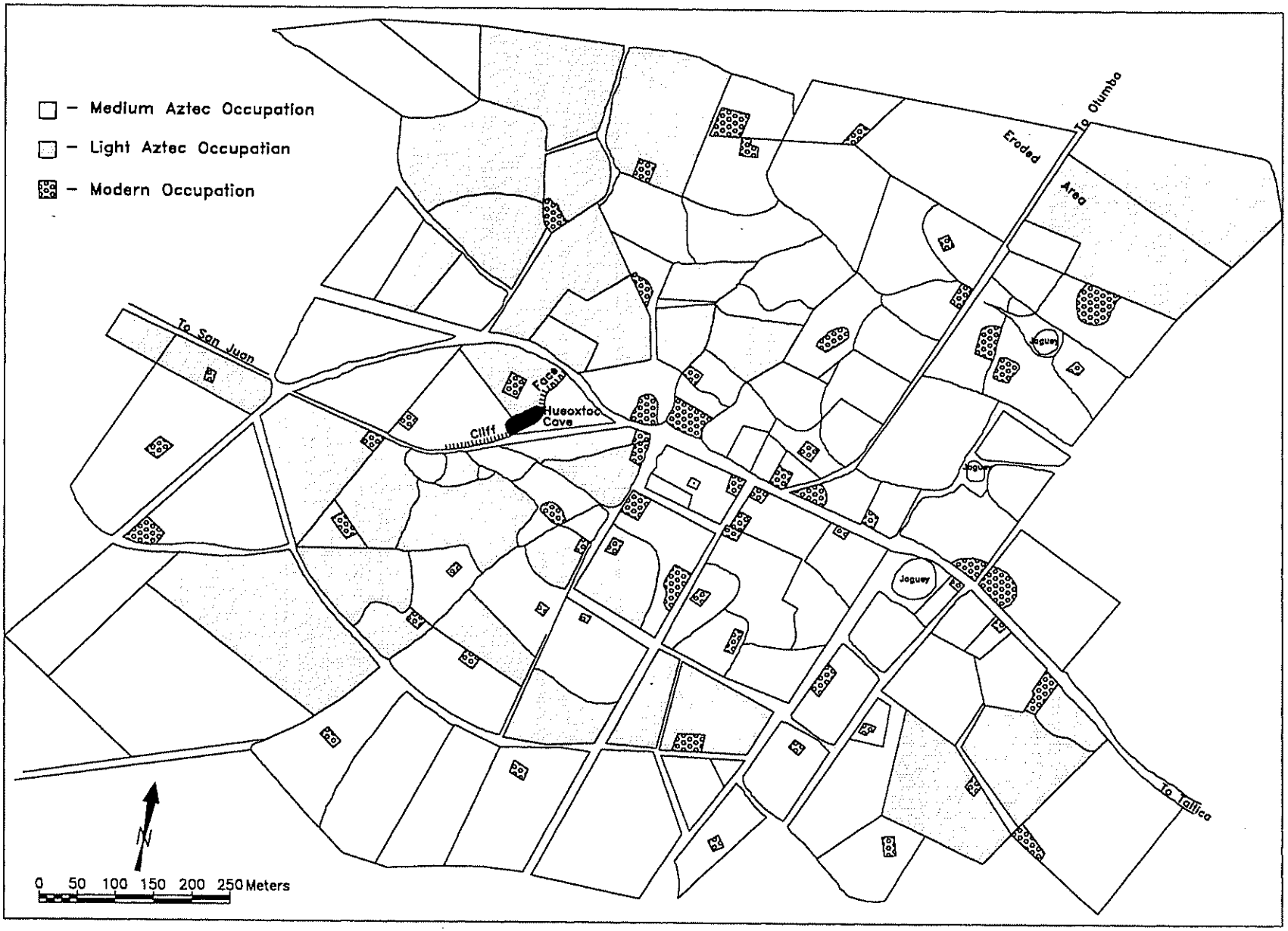
T.A. 204 (T.C. 24, 25, 27, 28)

Background and Classification: This site, also known San Francisco Tlaltica, was surveyed by Parsons in 1964 and resurveyed by Sanders in 1995. It is the main site on the Tlaltica ridge. The artifact collections from the initial survey was processed by Kolb in 1964 and 1965 and consisted of two samples. Collections made by the general survey team were also studied by Kolb. It was not resurveyed by an Aztec Team and the following data were abstracted from the Teotihuacan period volume. It should be noted that we did not survey all of the lots within the village of Tlaltica and it is very probably that the Aztec period site extends into the village area. It was probably a small dispersed village.

Natural Setting: Site T.A. 204 is located in the Middle Valley, between 2,350-2,360 m. Soils in the site area have a sandy to loamy texture and are tan to light brown in color, with depths ranging up to 45 cm. There is moderate erosion in the site area, and tepetate is exposed in the western section of the site. Heavy concentrations of rock and tezontle fragments are found in the area. Vegetation in the vicinity includes pirul, nopal, maguey, huizache, and various grasses. Other natural features include several washes developing to the west and east and the Barranca de Huixcololco on the northern edge of the site.

Modern Land Use: Cultural features include no structures and no jagüeys but the site is located immediately west of the village of San Francisco Tlaltica. The site area is used predominantly for agricultural purposes including the cultivation of maize and maguey. Maguey bancals and some nopal plantings are also found in the area. Some stone terracing is associated with the maguey bancals.

Figure 78


Medium Aztec Occupation
Light Aztec Occupation
Modern Occupation
To Olumba
Eroded
Area
To San Juan
Face
Huaxtec
Cave
Cliff
Jaguey
Jaguey
Jaguey
To Tamiahua
N
0 50 100 150 200 250 Meters

Archaeological Remains: The Teotihuacan period site complex includes a central site T.A. 25 and three isolated, satellite sites, T.A. 24, 27, and 28. The central site occupies 16.5 ha. Twenty-two mounds were identified all of which, on the basis of the general survey, observations by the Teotihuacan Survey Team, and by Sanders in his 1995 resurvey, have Teotihuacan occupation. In general the Teotihuacan occupation within the T.C. 25 portion of T.A. 204 is the dominant occupation and the Aztec is light. It is probable that most of the mounds on the site pertain, therefore, to the Teotihuacan period. All of the satellite sites T.C. 24, 27, and 28 have significant Aztec components on them as well as Teotihuacan. Also present was a Mazapan occupation, coded by Charlton as T.T. 329 and two localities with Tzacualli occupation, T.F. 237 and T.F. 269.

The site has a sparse and continuous distribution of lithic materials including obsidian blades, cores, and scrapers. Ground stone tools, especially manos, were noted.

Ethnohistoric Information: San Francisco Tlaltica, partially occupied by this site, was in all probability a dependent village of Oxtoticpac in the Early Colonial period.

T.A. 205

Classification: Hamlet.

Natural Setting: The site is located at 2610 m, high in the east piedmont. This is barren and badly eroded bench land. Sparse grasses and small cacti are seen here.

Modern Land Use: None, except for grazing and agave.

Archaeological Remains: Three localized and small (2.5 m in diameter) areas of Late Toltec ceramics, stone, and obsidian. The scattered Aztec village T.A. 205 is found over the same site area.

Site Area: 4 ha.

T.A. 206

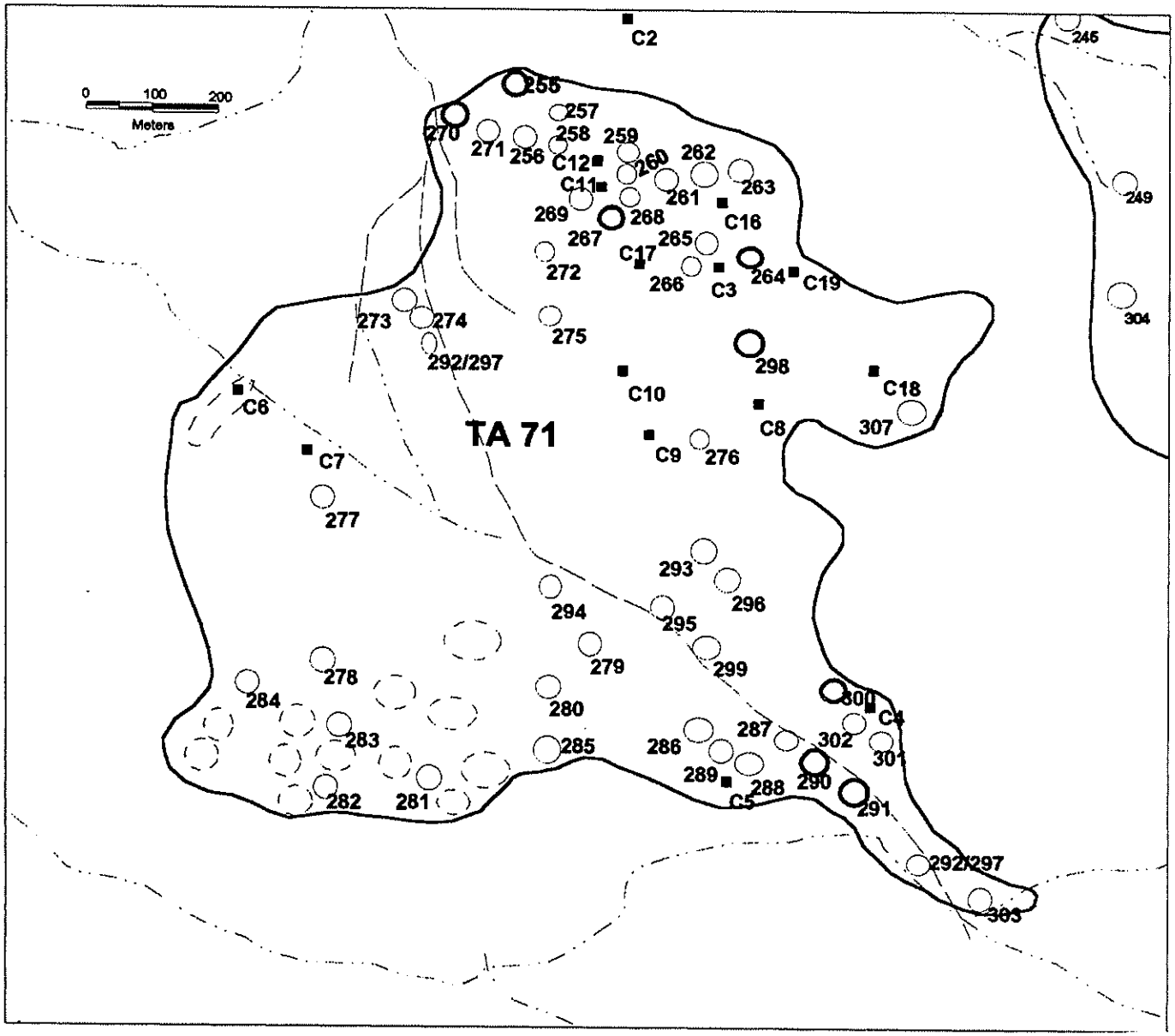
Classification: Ceremonial hilltop complex. This site was located in general survey and was not resurveyed.

T.A. 71 (Figs. 79, 80; Plates 70-73)

Classification: Probably a large dispersed village, assuming some mound destruction; if not it would be a borderline case between a small and large village.

Natural Setting and Modern Land Use: T.A. 71 is located in a wide, gently sloping interfluve between two mayor barrancas, El Pedregal to the north and Mixcoac to the south. It is the lowest of the ridges described previously for the Upper San Lorenzo Basin (Zone 12). The Barranca Pedregal is approximately 10-12 m deep where it borders the site, and is 30-50 m wide; the Barranca Mixcoac is 10-15 meters deep and 50-70 m wide. This site is located between 2350-2450 m.

Figure 79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Meters
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C3
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C10
C11
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Figure 80

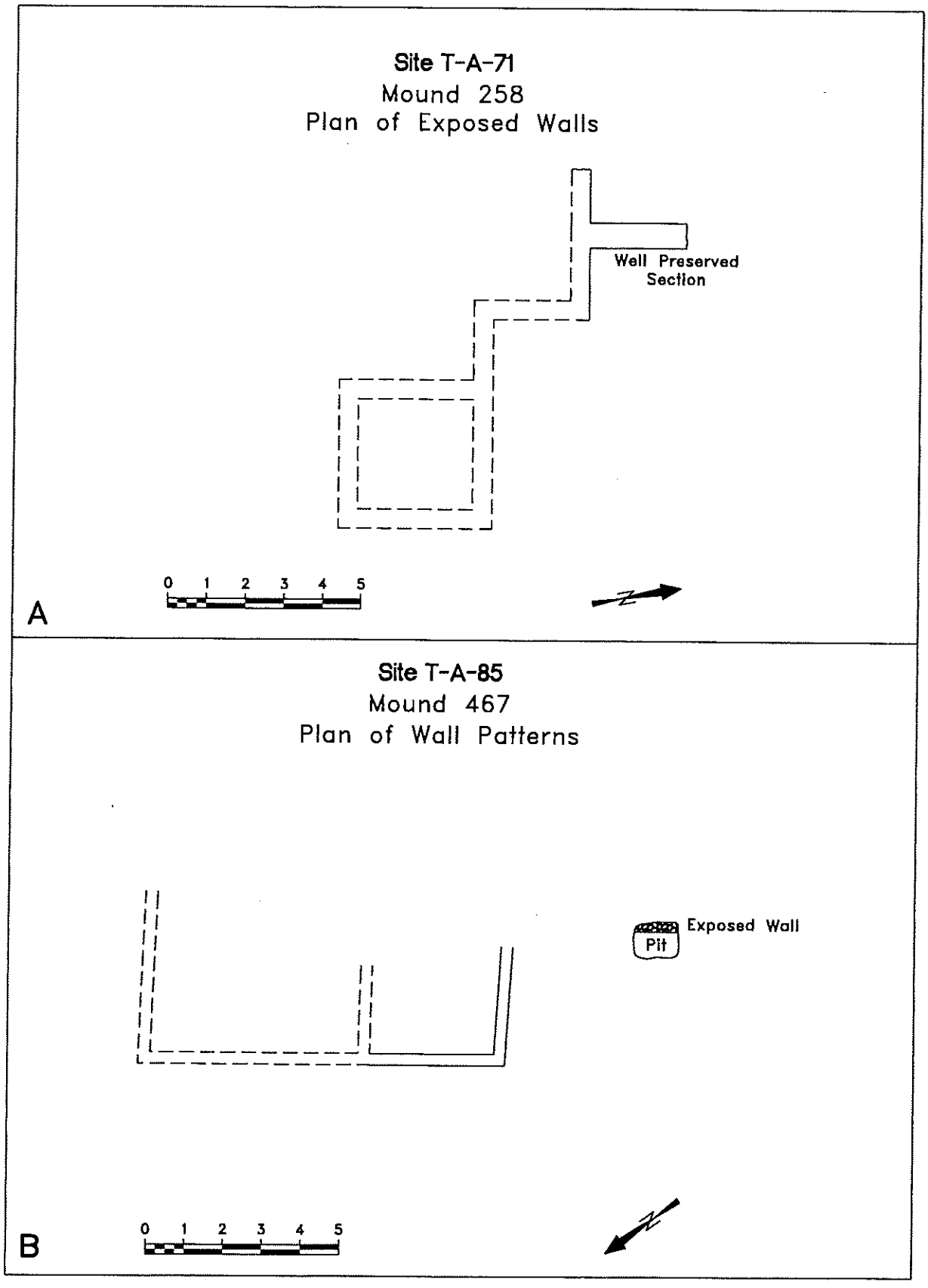
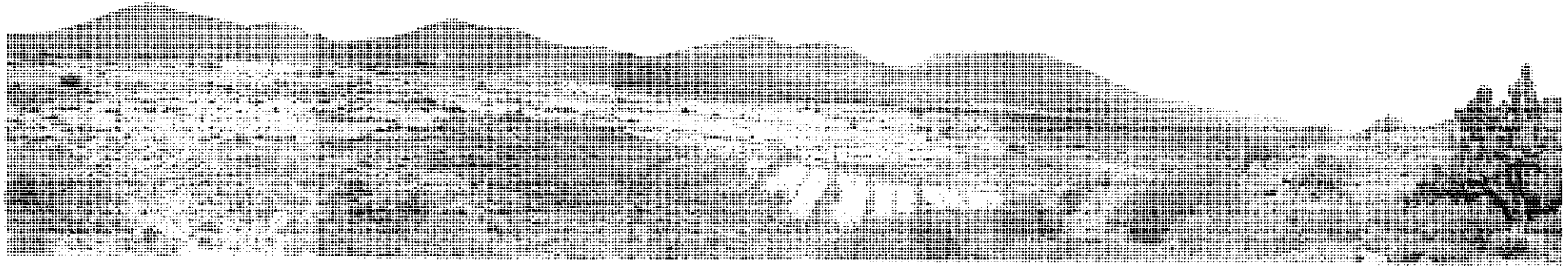

Site T-A-71
Mound 258
Plan of Exposed Walls
Well Preserved Section
0 1 2 3 4 5
A
Site T-A-85
Mound 467
Plan of Wall Patterns
Exposed Wall
Pit
0 1 2 3 4 5
B

Plate 70



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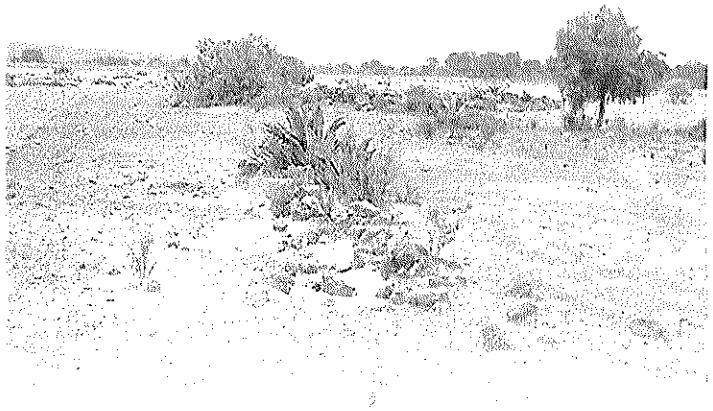
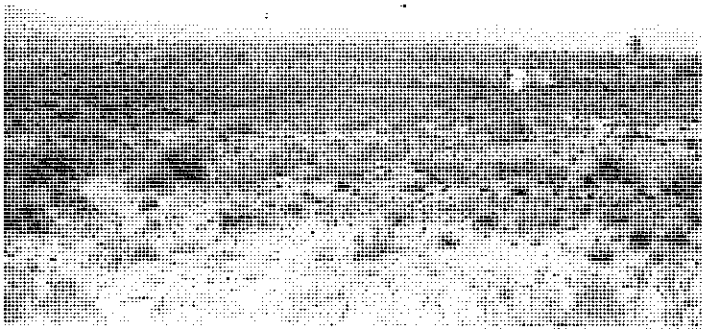
B



C

Plate 71



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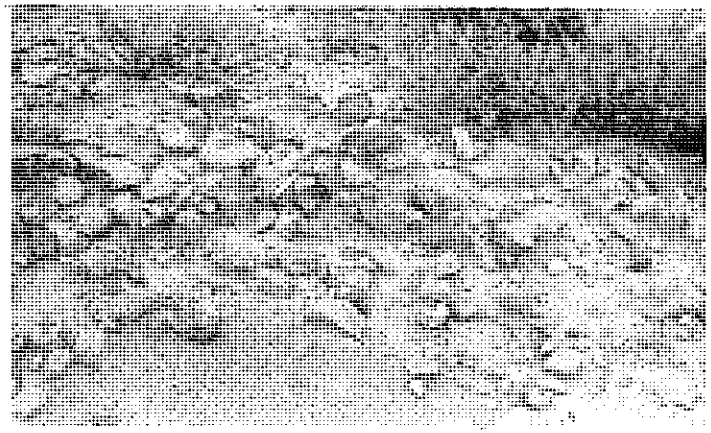

B

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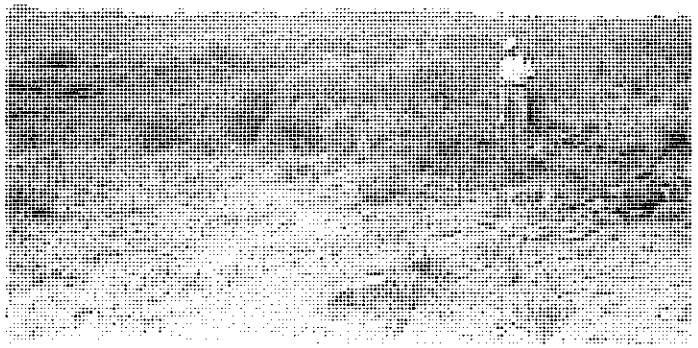
D

Plate 72



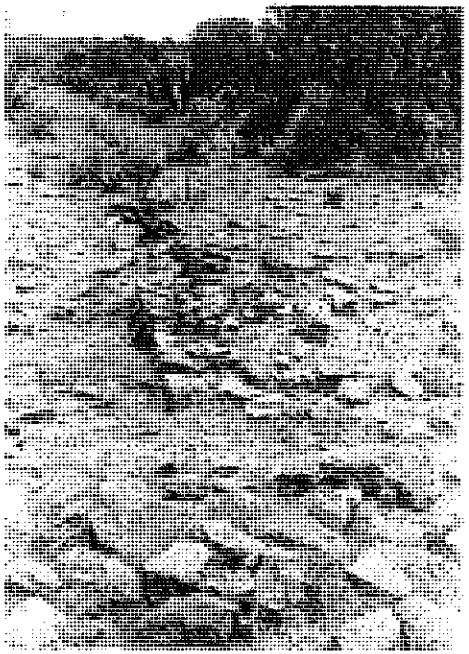
A

B

C

D

Plate 73



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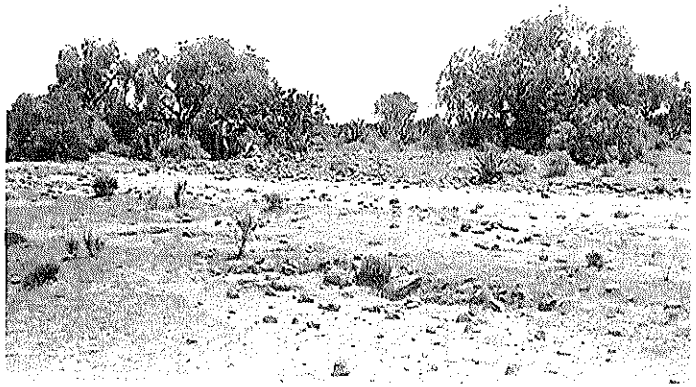

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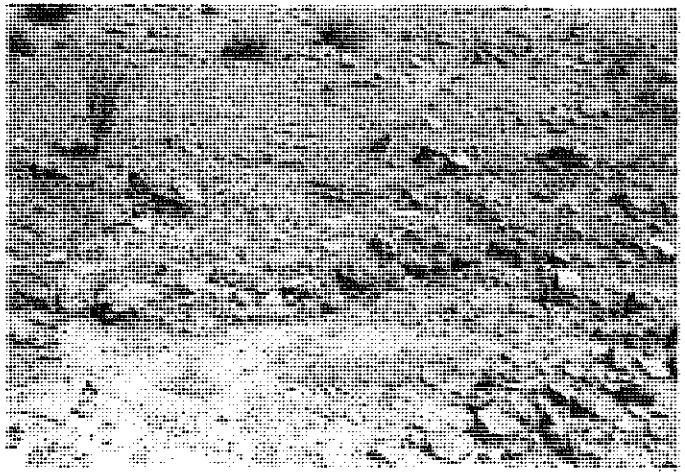

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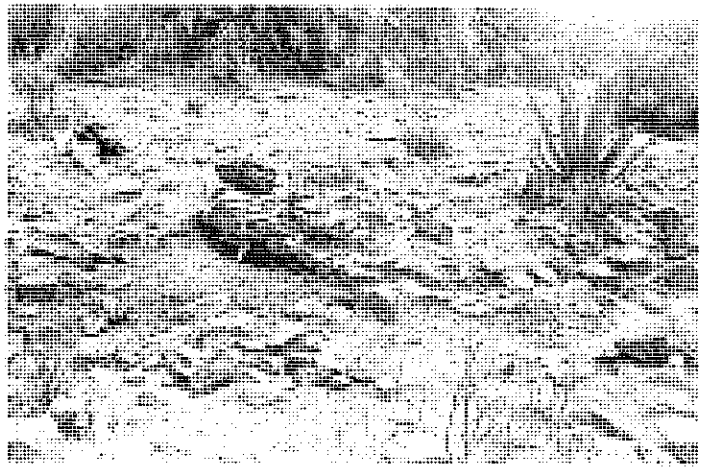

D

Table 9 T.A. 71 Mound Observations

Mound No.	Prob. Function	Height (cm)	Size (m)	Sherds	Rock	Comments
255	Cerem.	250	20	L. Az.	Heavy	Pitted
256	Res.	?	?	M. Az.	Heavy	Stone Wall Remnant
257	Res.	100	?	L-M Az	Heavy	
258	Res.	100-150	20	L-M Az	Heavy	Exposed Stone Walls
260	Res.	100	20	M Az (3-4)	Heavy	Exposed Stone Walls
261	Res.	75	25	M Az (3-4)	Heavy	Badly Eroded
262	N.d.	N.d.	N.d.	N.d.	N.d.	N.d.
263	N.d.	N.d.	N.d.	N.d.	N.d.	N.d.
264	Special	150	20	L-M Az	Heavy	
265	Res.	Imp.	20	M Az, L Maz	Heavy	Badly Eroded
266	Res.	Imp.	20	Maz, Tr Maz	Heavy	Badly Eroded
267	Special	200	20	L-M Az	Heavy	Exposed Walls
268	N.d.	N.d.	N.d.	N.d.	N.d.	N.d.
269	N.d.	N.d.	N.d.	N.d.	N.d.	N.d.
270	Special	150	20-25	L-M Az	Heavy	
271	Res.	Imp.	10	L Az	Heavy	Badly Eroded
272	Res.	20	20	M Az, L Maz, Tr Tzac	Heavy	Badly Eroded
Central Band of Low Density						
273	Res.	50	25	M-H Az (3,4)	Heavy	
274	Res.	50	25	M-H Az (3,4)	Heavy	
275	Res.	30-40	20	M Az	Heavy	
276	Res.	Imp.	10	L-M Az	Heavy	Badly Eroded
277	N.d.	N.d.	N.d.	N.d.	N.d.	N.d.
298	Special	200	25x10	L Az	Heavy	Wall Remnants
299	Res.	25	20	M Az	Heavy	Wall Remnants
307	N.d.	N.d.	N.d.	N.d.	N.d.	N.d.
South Cluster						
278	Res.	Imp.	?	L-M Az	Heavy	Badly Eroded
279	Res.	30	25	M Az	Heavy	
280	Res.	100	25-30	M Az (3,4)	Heavy	

281	Res.	35	25	M Az	Heavy	Exposed Wall
282	Res.	Imp.	30	M Az (2,4)	Heavy	
283	Res.	50	40	M Az	Heavy	Plaster Floor Fragment
284	Res.	10-20	15	M Az (4)	Heavy	
285	Res.	Imp.	40	M-H Az (2,3)	Heavy	
286	Res.	25	35	L-M Az	Heavy	
287	Res.	25	10	M Az (4)	Heavy	Badly Eroded
288	Res.	50	25	M Az	Heavy	
289	Res.	15-20	20	M Az	Heavy	
290	Special	200-250	20	M Az (2,3,4)	Heavy	
291	Cerem.	Total Ht.100-200	20	L Az	Heavy	Circular Plan. Has a Small Mound on Summit + Attached Patio
292	Special	150	20	L Az	Heavy	
293	Res.	30	?	L-M Az	Heavy	Badly Eroded
294	Res.	Imp.	20	L-M Az	Heavy	
295	Res.	?	?	M Az (3)	?	Badly Eroded
296	Res.	20	25-30	L-M Az	Heavy	
297	Res.	20	25-30	L-M Az	Heavy	
299	Res.	See Central Zone				
300	Special	100-200	35-40	L-M Az	Heavy	Badly Eroded
301	Res.	30	15	L Az	Heavy	Badly Eroded
303	Res.	Imp.	10	M Az	Heavy	

Erosion is moderate to severe over most of the site, generally severe, particularly in the northern 2/3. The northern third of the site is covered with pirul, wild nopal, thorn bush, and miscellaneous cacti and is used primarily as pasture. Maguey is common in the southern 2/3 of the site and bancal terraces occur with interplanted maize, beans, and barley. To the northwest is an area of old stone terraces, approximately 50 cm high and 10 m wide. In the southwestern portion of the site, near Mounds 281-285, is another series of old stone terraces, 50-75 cm high and 20 m wide. One jagüey is located near Mound 298. The site is on the lands belonging to Oxtotipac.

Archaeological Remains: Considering the severe erosion of the northern and central areas of the site, the identified mounds are generally in surprisingly good condition. Forty-nine mounds were numbered, but remains of at least a dozen additional areas were noted in the southern part of the site, marking the location of previous mounds. The mounds are distributed in two dense clusters, one occurring to the northern, less eroded 1/3 of the site (17 mounds), and a second concentration in the southern severely eroded area (24). The remaining mounds are found widely dispersed through the central 1/3 of the site. One mound, 255, is almost certainly a temple platform; eight other mounds, because of unusual height, surface area or configuration are either additional temple mounds, telpochcalli houses, or high status residences (264, 267, 270, 290, 291, 292, 298, and 300). Exposed walls were noted on Mounds 256, 258, 260, 267, 281, 291, 298, and 299 and pieces of plaster were found on Mound 283. Mound 291 appears as though it had a small summit platform at its eastern end and an attached patio to the west. Other than in and around mounds, the density of artifacts tended to be scanty. We could have actually defined two sites, based on the spatial distribution of mounds and sherds. Associated with the core area of the northern cluster of mounds is a small Mazapan site and over much of the western and central portions of the site are remains of a Patlachique phase site (T.F. 22). Also present is some Tzacualli occupation coded as T.T. 266, a Teotihuacan period site T.C. 106 and two Mazapan hamlets (T.T. 320, T.T. 322). The site area is approximately 99 ha. This latter occupation tends to occur in those areas of the Aztec site that have the lowest density of mounds.

Ethnohistoric Information: Probably a dependent community of Oxtoticpac.

T.A. 59 (Fig. 81; Plates 74, 75)

Classification: Small dispersed village.

Natural Setting: This site is located on a gently sloping interfluve. Three major barrancas occur on the margins of the site. One runs east-west and south of the site called the Barranca de Mixcoac. It is 10-15 m deep and 50-70 m wide in the site vicinity. Two others run southeast-northwest through the eastern part of the site and are 25 m wide and 2-3 m deep. They are associated with a large tepetate wash in that area. A third, called Carmelita, runs southeast-northwest across the northwest corner of the site and is 2-4 m deep and 20-40 m wide. Another crosses the site near Mound 305. Numerous washes occupy the central part of the site and occur along the Barranca Mixcoac. Soil depth in areas where soil is present is generally between 5-20 cm in depth. In a few small areas it reaches 50 cm. Pirul is common, and along the barrancas are dense thorn bush and wild nopal. The site area is located between 2450-2500 m.

Figure 81

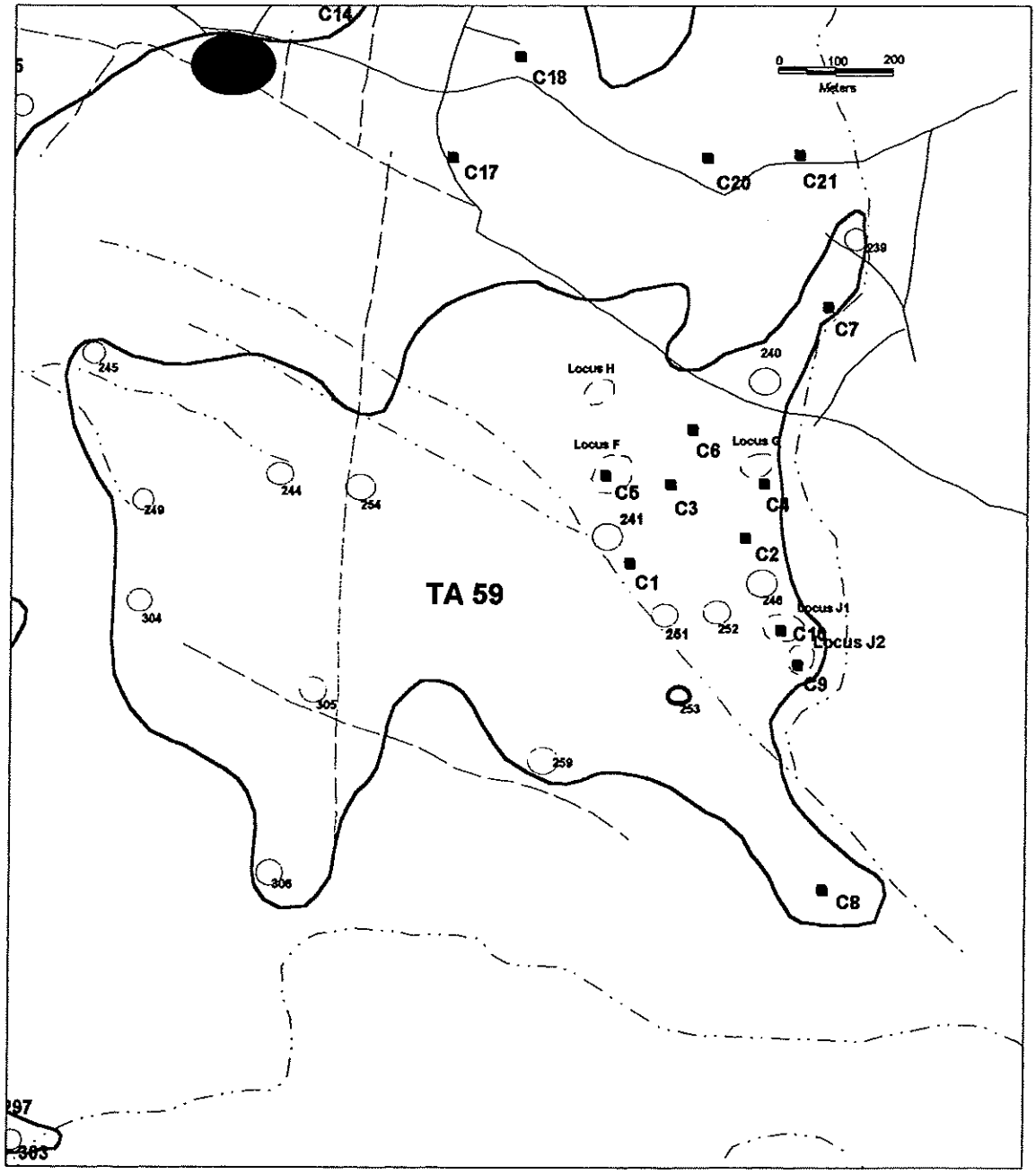
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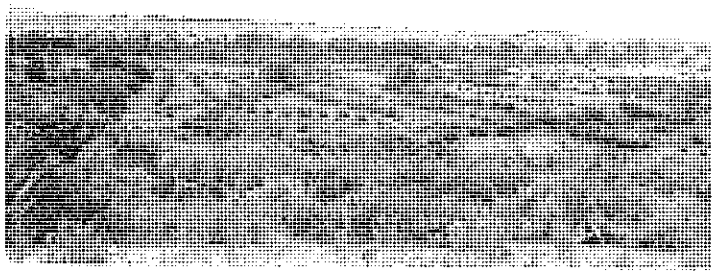
Plate 74



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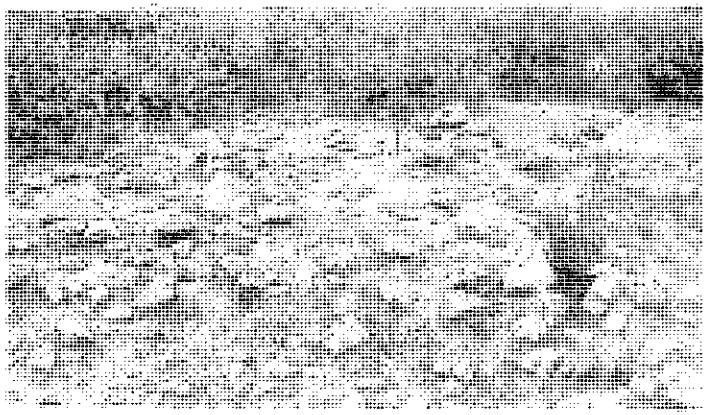
C

D

Plate 75

A

B



C

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Modern Land Use: House lots and ruined houses occur in the northeast and northern portions of the site. One small jagüey is found on the site near Mound 247. Much of the site is covered by maguey. In some of these maize, beans, and barley are interplanted, maguey bancals in the east are generally 6-8 m wide and 20-75 cm high and accompanied by numerous ditches and check dams. Lands of Oxtotipac and Tlaltica.

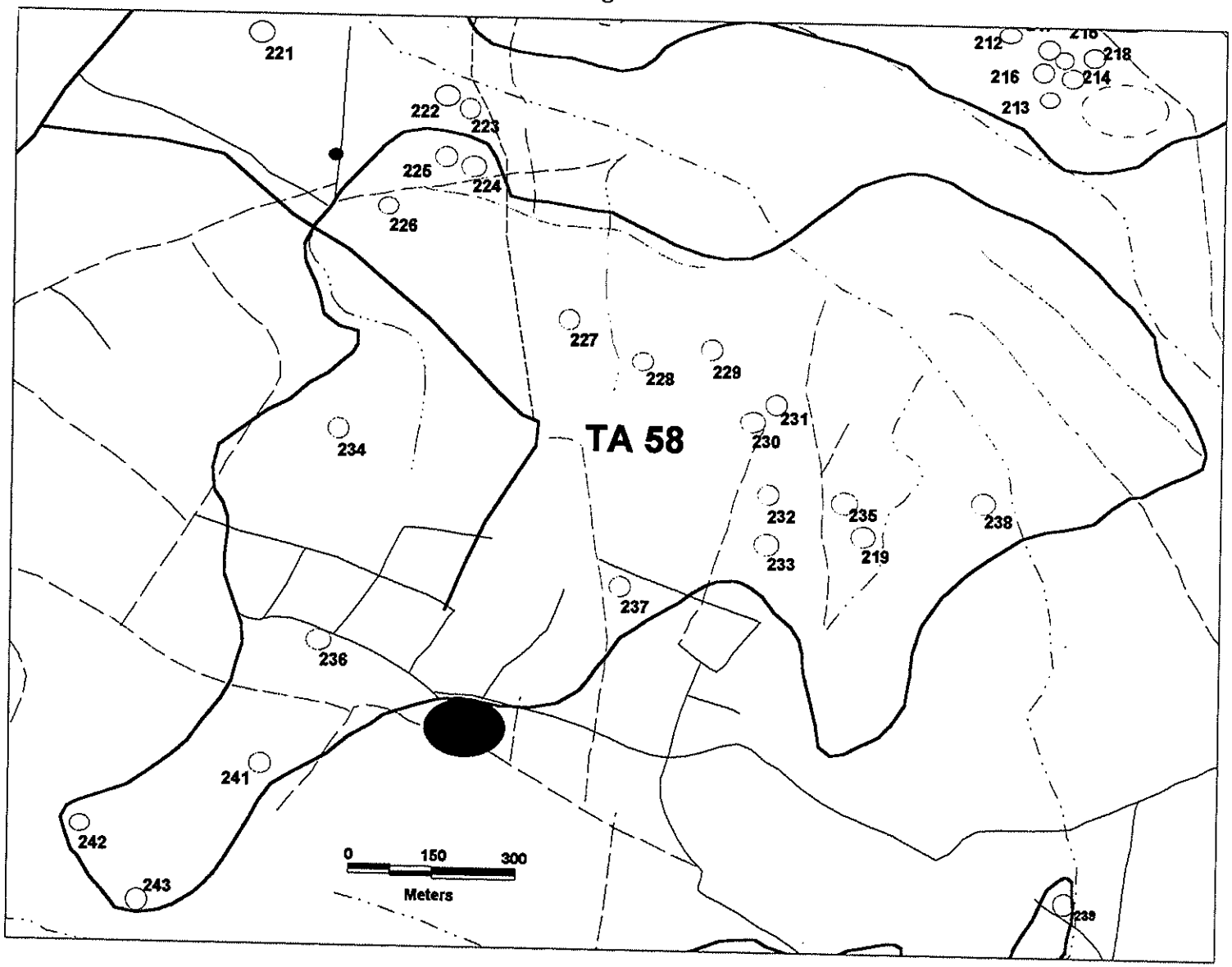
Archaeological Remains: Fifteen mounds were located in the survey. Six mounds form a dense cluster in the east central portion of the site. The rest are widely dispersed throughout the site area. In the eastern area, furthermore, are numerous loci of substantial rock and sherd concentrations, marking former residential structures. One mound, 250, is probably ceremonial in function and the balance are typical residential mounds. In the accompanying table, data presented on eleven of these mounds. Also on the map are four loci, F, G, H, and J, which mark additional concentrations of material where surface samples were collected. Two areas of Tzacualli occupation were noted (T.F. 289). Terraces were found near Mounds 247, 252 which may be prehispanic in date. The barrancas which cross the site conceivably represent the eroded remains of ancient canals rather than natural water courses, since the drainage pattern flows in the opposite direction from that of most normal drainage in the area, like those that we reported on the North Slope of Cerro Gordo. Three small areas of Mazapan occupation were noted and coded as T.T. 315, 316, 321. Traces of Tzacualli were also found and coded a T.F. 289. The total area occupied by the site was approximately 95 ha.

Table 10 T.A. 59 Mound Observations

Mound #	Prob. Function	Height (cm)	Size (m)	Sherd	Rock	Comment
250	Cerem.	150	25	L-M Az	L-M	
240	Res.	50	30	M Az (3,4)	Heavy	
244	Res.	Imp.	10	L-M Az	Heavy	
245	Res	Imp.	10	L-M Az	Heavy	
251	Res.	60	20	M Az (3,4)	Heavy	
252	Res.	Imp.	30	M Az	Heavy	
253	Res.	Imp.	5	L-M Az	Heavy	
254	Res.	Imp.	30	L-M Az	Heavy	
304	Res.	15-20	25	M Az	Heavy	
305	Res.	Imp.	25	L-M Az (3)	Heavy	
306	Res.	50-75	25	M Az	Heavy	
Not Described: 239, 241, 246, 249, 259, but on the map						

Ethnohistoric Information: Probably a sujeto of Oxtoticpac in Early Colonial times.

Figure 82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TA 58
232
235
238
233
219
237
236
241
242
243
0
150
300
Meters
239

T.A. 58 (Fig. 82)

Classification: Small dispersed village.

Natural Setting: This site is located on a gently sloping interfluve. Two major barrancas run southeast-northwest across the northern portion of the site and northeast of its border. These are 15-25 m wide and varying from 2-3 m in depth up to 5-8 m. Several small barrancas depart from these and run through the badly eroded center of the site and are 5-10 m wide, and 2 m deep. The east central portion of the site is a single great wash. Vegetation consists of pirul, and along the barrancas, dense concentrations of nopal, thorn bush, and shrubs. Maguey occurs everywhere; cultivated nopal is also found near house lots within the site. The site is located between 2450-2500 m.

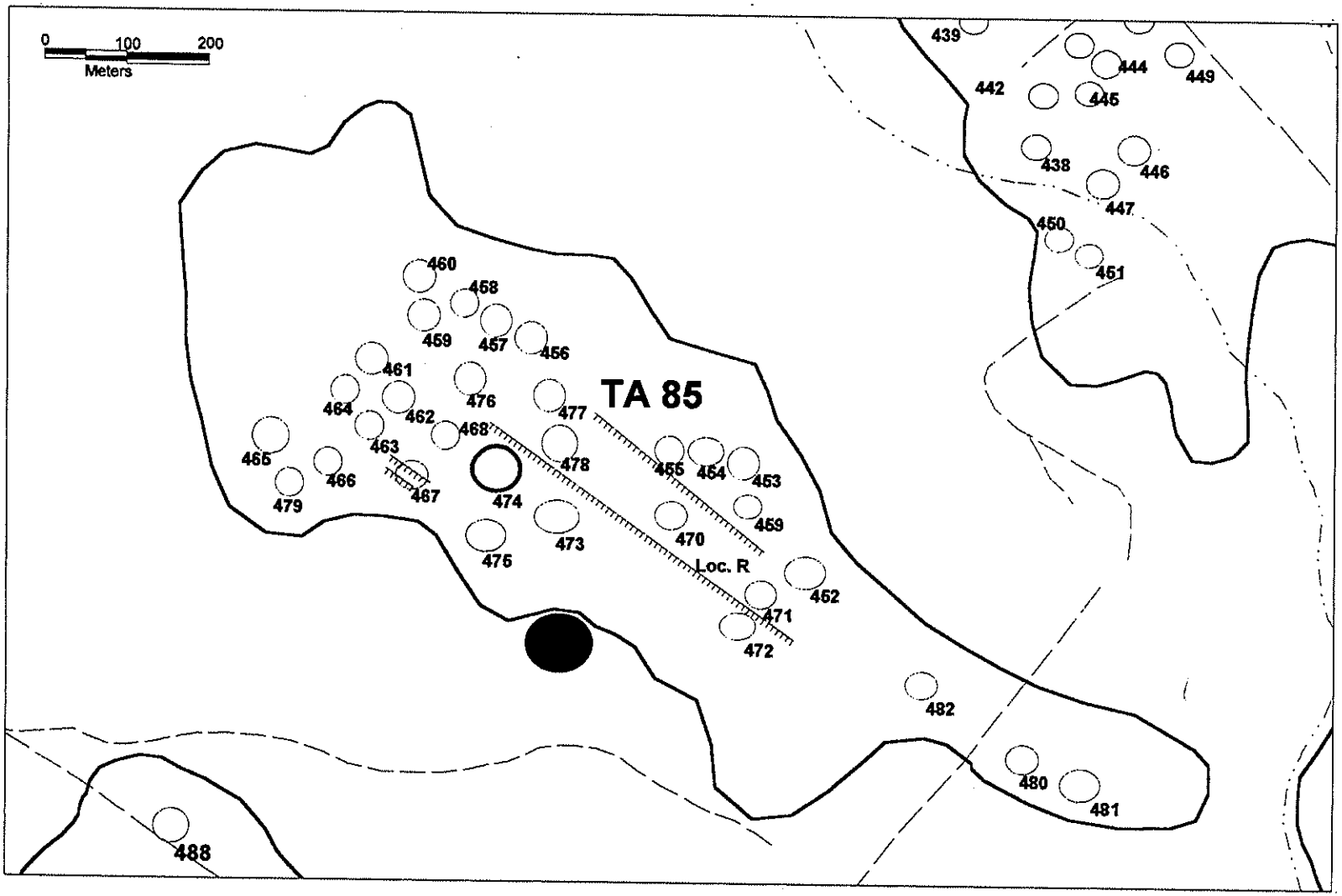
Modern Land Use: A number of scattered houses of a rancheria are found within and on the northern edge of the site area. The small village of Xoloc is immediately southwest of the site, the village of Coyotepec to the southeast, and Tlaltica, a large dispersed village, lies to the west of the site area. In the uneroded portions of the site maguey bancals are common, in some cases interplanted with maize, beans, habas, peas, and squash. These interplanted bancals are found primarily on the edges of the site in the direction of the three settlements. An elaborate network of drainage ditches and water collection ditches also occur within the site and there are numerous stone and brush check dams in the wash areas. Most of the site area is planted in maguey, particular the eastern portions. A large jagüey occurs on the southern edge of the site and a smaller one within it. The houses that lie within and on the edges of the site have nopal orchards. Site is on lands of San Francisco Tlaltica and San Miguel Xoloc.

Archaeological Remains: The archaeological remains consisted of nineteen defined mounds, all severely eroded and reduced to rubble and sherd concentrations on a tepetate surface. Even more eroded remains suggested a number of destroyed similar mounds. Only three of the nineteen mounds were well preserved. Of the nineteen, eighteen are undoubtedly residential structures and vary in size from 15-30 m in diameter, and 0-30 cm in height. The pattern seems to be one of relatively evenly dispersed residences over the site. The badly eroded southeastern portion has the heaviest overall sherd densities; clearly numerous mounds in that area have not survived. Mound 236 was almost certainly a ceremonial platform and was 25 to 30 m in diameter and 1.5 m high. It has been heavily pitted, but the pitting has not exposed walls or floors. Traces of plaster, however, were found. Immediately below Mound 219 are remains of old stone and earth bancals; since the mound itself seems to be resting on one of these, they are probably ancient terraces. The site area is approximately 135 ha.

On the map presented in Fig. 82, Mounds 221, 222, and 223 are located and they appear outside of the boundary of the site. This is because they are part of a Teotihuacan period site, T.C. 90, adjacent to T.A. 58 to the northwest and probably date from that time period. Tzacualli occupation occurs in a number of small local areas and was coded as T.F. 125, T.F. 134, T.F. 174, and T.F. 219, also present were two areas of Mazapan occupation T.T. 310, T.T. 318.

Ethnohistoric Information: The village of Xolco was a sujeto of Otumba in the Early Colonial period.

Figure 83


0
100
200
Meters
TA 85
Loc. R
439
444
449
442
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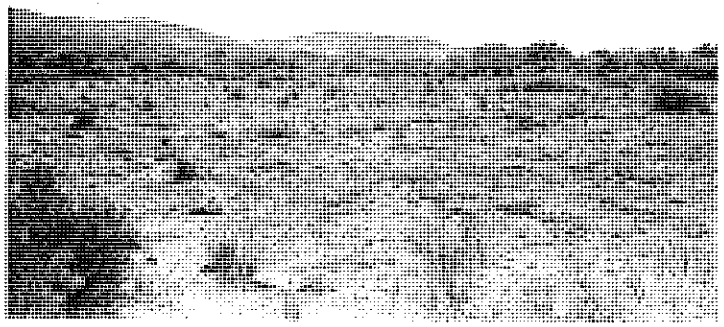
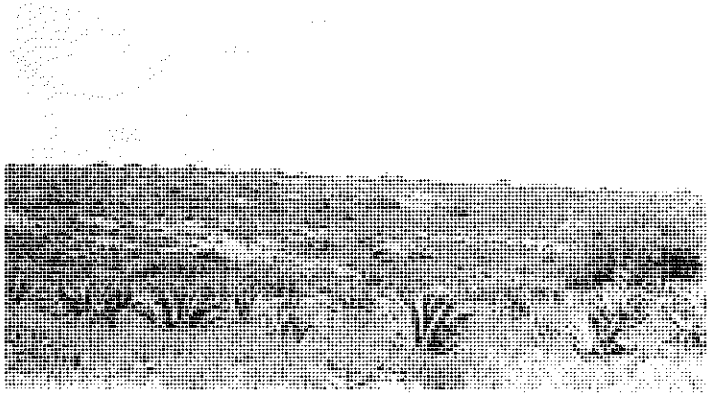
488

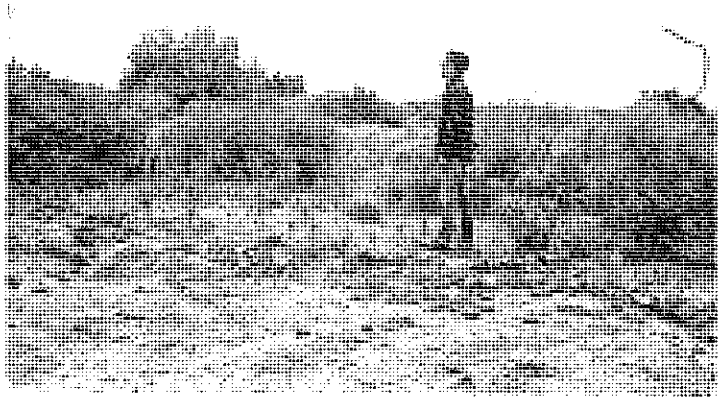
Plate 76



A



B

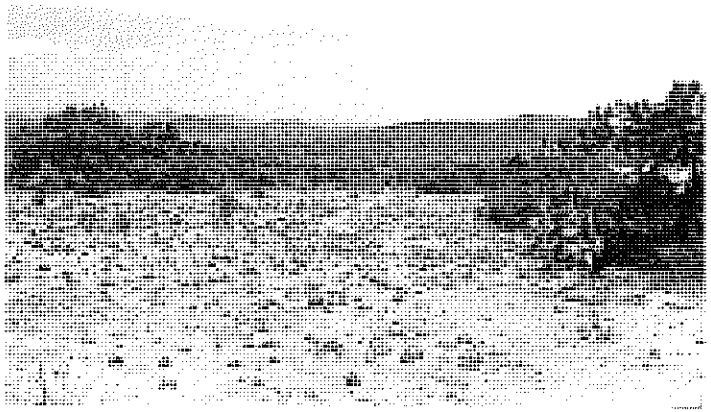


C

D

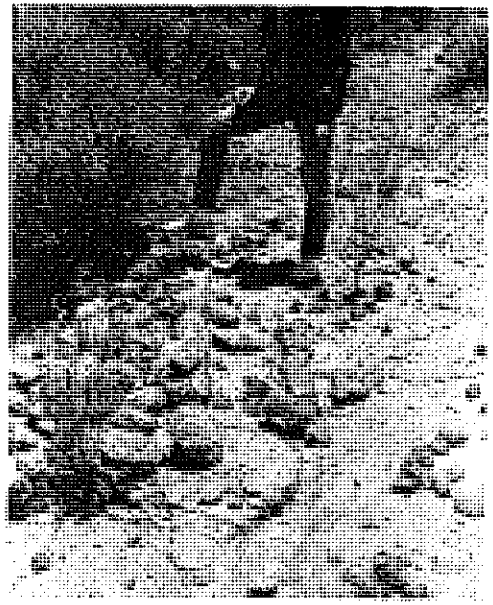
Plate 77

A



B

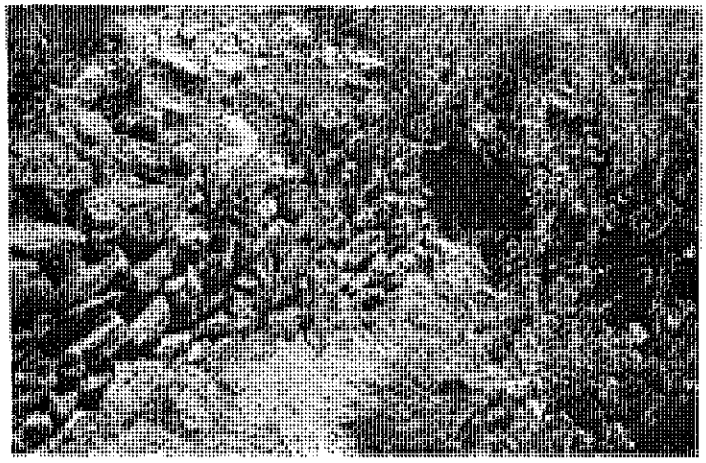
C



D

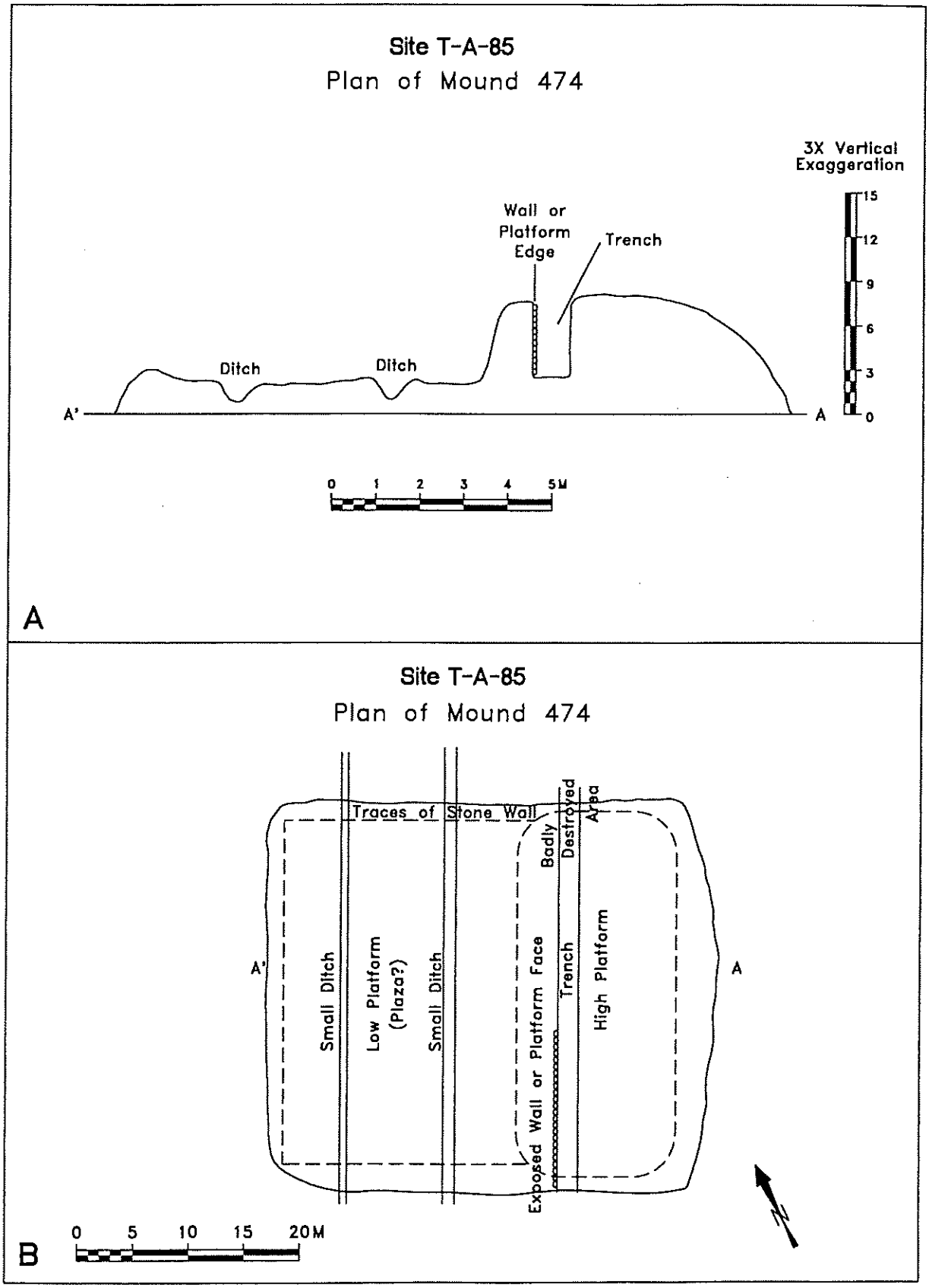
Plate 78

A



B

Figure 84


Site T-A-85
Plan of Mound 474
3X Vertical Exaggeration
15
12
9
6
3
0
Wall or Platform Edge
Trench
Ditch
Ditch
A'
A
0 1 2 3 4 5M
A
Site T-A-85
Plan of Mound 474
Traces of Stone Wall
Badly Destroyed Area
Small Ditch
Low Platform (Plaza?)
Small Ditch
Exposed Wall or Platform Face
Trench
High Platform
A'
A
0 5 10 15 20M
B

T.A. 85 (Figs. 83, 84; Plates 76-79)

Classification: Small dispersed village.

Natural Setting: Site is located on an interfluve of gently sloping terrain. A major barranca flows southeast-northwest on the north edge of the site and is 8-10 m deep, 25 m wide. The site is heavily eroded over much of its surface with much exposed tepetate. In the northwest there is recent stone terracing which has preserved the soil profile to a great degree. Over 80% of the surface soil occurs as small patches 5-20 cm deep, separated by large expanses of exposed tepetate. Pirul trees are widely scattered over the site and to the east and west there are fairly dense covers of wild nopal and thorn bush.

Modern Land Use: A very large jagüey, called the Jagüey de Santa Barbara is located just outside the site border to the south. No other structures were found on the site. This is a very marginal area, with minor cultivation of maguey, particularly at its west end; the rest of it is used primarily as pasture for sheep and goats. Remnants of bancals, and stone terraces, however, are found over all of the site area, and several long stone terraces found on the site are almost certainly ancient. Most of the bancals are of the narrow type (5-10 m wide, up to 50 cm high) and the implication of this for the pre-historic use of the area is important. Ejido of Oxtotipac. The site is located between 2600-2650 m.

Archaeological Remains: Thirty-one mounds were defined, all but 274 probably had residential functions. There were, however, numerous areas of medium to heavy sherd and rock scatter, suggesting one time presences of mounds. All but three of the mounds are in a densely concentrated core area that occupies the central 2/3 of the site surface. Indications of Mazapan occupation occur in the center of this core, and in the northwest no Aztec mounds were recorded. Remnants of two stone terraces, each 25 cm high, run through the center of the site. Stone wall remnants were exposed on Mounds 467, 474, and 477. Structure 467 is defined on both sides by stone terrace walls. Structure 474 appears to be a small temple platform place on a larger lower platform, 25 to 50 cm high, the total site area is 43 ha. Other occupations on the site include Tzacualli (T.F. 206, T.F. 259), Teotihuacan (T.C. 86-88), and Mazapan (T.T. 314).

Table 1 T.A. 85 Mound Observations

Mound No.	Prob. Function	Height (cm)	Size (m)	Sherd	Rock	Comments
452	Res.	Imp.	20	M Az (3)	Heavy	Badly Eroded
453	Res.	Imp.	10	M Az (3-4)	Heavy	Badly Eroded
454	Res.	Imp.	10	L Mod-Az	Heavy	Badly Eroded
455	Res.	50-75	20	L-M Az	Heavy	At End of a Stone Terrace and Poss. Associated with It
456	Res.	Imp.	20	M Az	Heavy	Very Badly Eroded and Dispersed, Poss. Remains of 2 or more mds
457	Res.	50	20	M Az (3-4)	Heavy	
458	Res.	50	20	M Az, L Mod	Heavy	
459	Res.	20	20	M Az	Heavy	Poorly Defined
460	Res.	50-75	20	L-M Az	Heavy	Poorly Defined

461	Res.	50-75	20	M Az (2,3,4)	Heavy	
462	Res.	50-100	25-30	L-M Az	Heavy	
463	Res.	25	20	L-M Az	Heavy	Heavy Rock Rubble Extends between 463-464, Both Poss. Part of 1 large. Md.
464	Res.	50	15	L-M Az	Heavy	
465	Res.	10-15	15	L-M Az	Heavy	Questionable
466	Res.	10-25	10-15	L-M Az	Heavy	
467	Res.	30-40	20	M Az (4)	Heavy	Excavation has Exposed Wall Patterns, Md. is Located between 2 Terraces
468	Res.	50	15	M Az	Heavy	
469	Res.	10-15	10-15	M Az (3,4)	Heavy	Badly Eroded
470	Res.	25-30	35	M Az	Heavy	Poorly Defined
471	Res.	0-25	15	M Az (2,3), Tr Maz	Heavy	Badly Eroded
472	Res.	20	10	L-M Az	Heavy	At Edge of Long Stone Terrace
473	Res.	25-50	20-25	M Az	Heavy	Well Defined
474	Cerem.	100-150	35	L-M Az	Heavy	Long Trench has Exposed Walls; Str. Appears to be Located on Basal Platform
475	Res.	50-75	15	L-M Az (3)	Heavy	Well Defined
476	Res.	75	15-20	M Az (2,3)	Heavy	
477	Res.	25	20	M-H Az (2,3,4)	Heavy	Badly Eroded - Exposed Stone Wall
478	Res.	25-30	25	M Az (3,4), Tr. Maz	Heavy	
479	Res.	20	10-15	L Az	Heavy	
480	Res.	25	20	M Az	Heavy	
481	Res.	Imp.	25-30	M Az	Heavy	Badly Eroded
482	Res.	50	20	L-M Az (4)	Heavy	Badly Eroded

Location R - Area of Heavy Rubble, M-H Aztec Pottery, including some Mazapan

Ethnohistoric Information: This site was probably a part of San Juan Chi, a sujeto of Otumba in the Early Colonial period.

T.A. 86 (Fig. 85; Plate 79)

Classification: Hamlet or small dispersed village.

Natural Setting: Site occurs on gently sloping terrain. A complex of shallow and moderately deep barrancas cut through and flow adjacent to the southwestern margin of the site. These are small tributaries of a large barranca that flows southeast-northwest, southwest of the site. The barrancas on the site range from 10-40

m in width and 1-5 m in depth. Washes occur also throughout the site area, particularly in the northwest and along the eastern edge. A well defined wash runs east-west above the northern edge of the site. Average soil depth, where soil is left, is 30-50 cm, increasing to 50-75 cm in the south central and northwestern portions of the site. Numerous extensive areas of exposed tepetate occur elsewhere. Narrowly spaced maguey occurs on the site along with pirul trees, while nopal and thorny bush are found along the barranca and in the northeastern portion of the site. This site is located between 2600-2650 m.

Modern Land Use: No modern structures were found on the site; on the western edge of the site are a few house lots of Santa Barbara Coyotepec. A large ruined hacienda complex occurs to the south. There are no jagüeys on the site itself, but a very large jagüey, called Santa Barbara, is northeast of it. Maguey is found everywhere, occurring in narrowly spaced bancals. In the northwestern portion of the site, where soil is deeper, maize, beans, and barley are planted, here the bancal terraces are widely spaced, up to 25 m wide.

Archaeological Remains: Most of the eroded bancals on the site are only 6 to 8 m wide and associated with them are silted drainage ditches. A linear feature crosses the site from southeast to northwest and may have been a floodwater canal or drainage ditch, at some time in the past.

The Aztec site overlies part of, but is placed primarily south of a compact Teotihuacan village site, T.C. 86-87-88. The Aztec occupation appears as a more dispersed settlement over the area of the more concentrated earlier community. Mazapan traces were noted around Mounds 492 and 489 (T.T. 314). The Teotihuacan occupation occurs in and around Mounds 488, 487, 485, and 484 with the site, traces of Tzacualli were noted as well and coded as T.F. 206, 259. This site is part of the ejidos of Coyotepec and Oxtotipac. The total surface area of the site is 27 ha.

Table 12 T.A. 86 Mound Observations

Mound No.	Prob. Function	Height (cm)	Size (m)	Sherd	Rock	Comments
483	Res.	25-30	15	L-M Az	Heavy	
484	Res.	25	15	L-M Az, Teo	Heavy	Questionable
485	Res.	50	15	L Az, M Teo	Heavy	Prob. a Teotihuacan Mound
487	Res.	15-73	25-30	M Teo, L-M Az (3,4)	Heavy	Exposed Wall Section
488	Res.	25-50	20	M Teo, M Az	Heavy	Partially Eroded by a Terrace
489	Res.	On Natural Rise	25-30	L-M Az, Tr Maz	Heavy	Poorly Defined
490	Res.	0-25	20	M Az, Tr of Teo	Heavy	Assoc. with it Part of Stone Terrace
491	Res.	15-20	30	M Az, Tr of Teo	Heavy	Heavily Eroded, Poss. 2 Str.
492	Poss. Cerem.	50	15x5	L Az, Tr Maz and Teo	Heavy	Heavily Eroded

Ethnohistoric Information: This site is probably part of the community of San Gabriel Tepoliuhca, a sujeto of Otumba in the Early Colonial period.

Figure 85

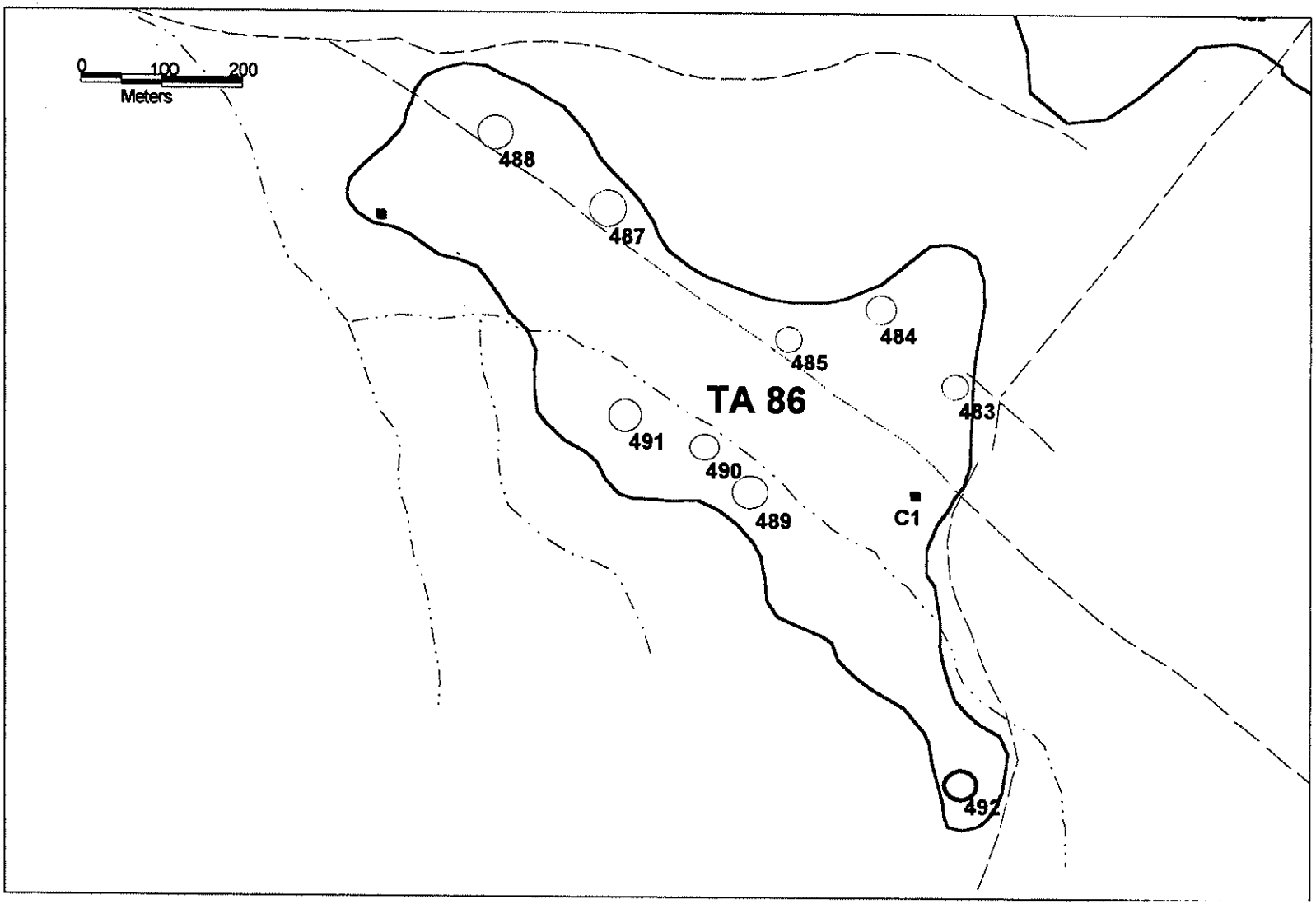
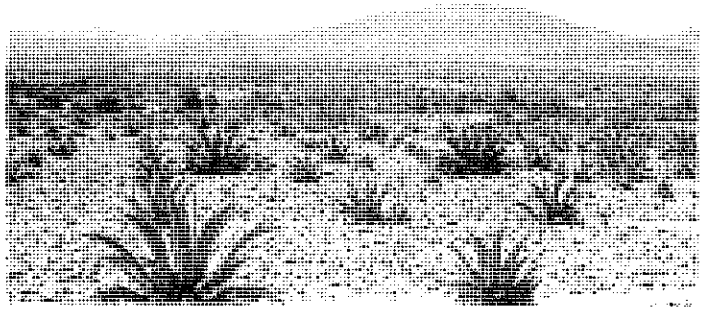
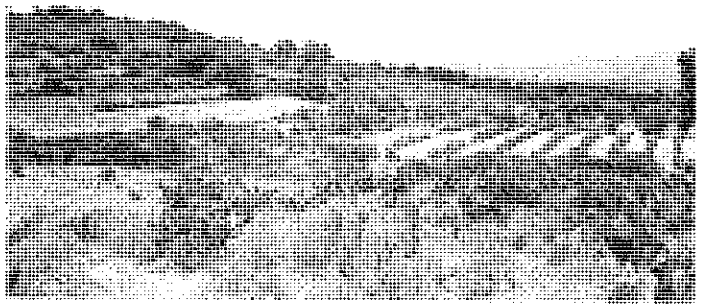


Plate 79

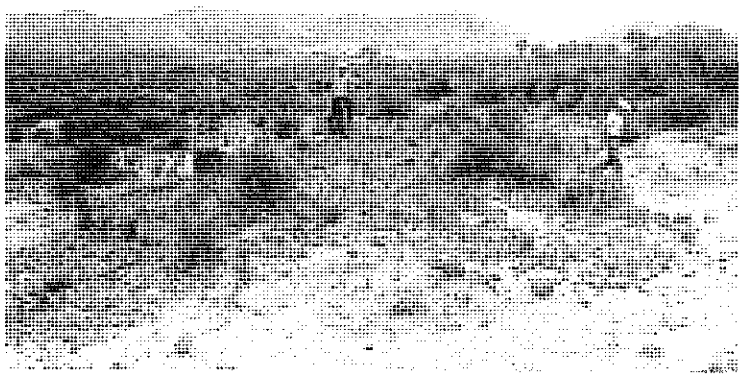
A



B



C



D

T.A. 38 (Fig. 86; Plate 80)

Classification: A borderline case between a small and a large dispersed villages.

Natural Setting: The site is located at 2550-2600 m on a gently sloping interfluve between two barrancas that in this area flow south to north. Most of the site is severely eroded with large areas of exposed tepetate particularly through the center of the site and along the barrancas. Where soil is present, generally near the large sunken-in jagüey, it varies from 5-50 cm, averaging around 20 cm.

Two major barrancas run along the western and eastern margins of the site, that in fact, were used in part to define it. To the north they are 40-50 m in width and 10-20 m. in depth; to the south these dimensions decrease to 5-30 m in width and 3-10 m in depth. A major wash network with two major channels traverses the site southeast-northwest, departing from the east barranca. This wash area is 20-30 m wide and the maximum depth is 2-5 m to the north; the width increases to 15-20 m in the south and decreases to less than 1 m in depth. This network could be the remains of several ancient floodwater canals. Along the barranca are dense stands of wild nopal, pirul, weeds, thorn bush, and cacti. Elsewhere are scattered pirul trees. Maguey is ubiquitous and associated with bancals.

Modern Land Use: A large adobe ruin is found southwest of Mound 49 near the jagüey. A major feature of the site is the large sedimented jagüey, associated with a complex of dams, drainage ditches, diverse water channels, and earthen embankments, all undoubtedly part of a large hacienda project. The area today is used for a combination of maguey plantings and pasture.

Archaeological Remains: Considering the eroded condition of the site, the Aztec settlement pattern seems unusually clear. The survey noted 63 mounds, generally in the form of concentrations of rubble and sherds. Most of them were poorly preserved but they clearly represented the remains of small residential structures. We probably missed a number of them in the area southwest of the jagüey, where the natural vegetation is denser. Other less obvious remains suggest the presence of unrecorded mounds as well. We suggest that those areas where the mounds were recorded, and the unusual density, probably represent the average density of the original residential structures on the site. The mounds found on the site that were reasonably well preserved varied in size from 15-35 m in diameter and 20-50 cm in height. Three probably had special functions, Mounds 165, 166, and 167. Mounds 166 and 167 are large mounds, about 2 m high; 167 is rectangular in shape and measures 30-10 m; 166 more irregular and varies from 50-20 m in measurement. Mound 165 is 1.5 m high, circular in appearance and was 20-25 m in diameter. Mound 166-167 may be the remains of a single high status residence. No obsidian workshops were noted, as we saw at T.A. 36 and 37. The total site area is 88 ha. Other occupations on the site include Mazapan coded as T.T. 304. The boundary between T.A. 37 and 38 is somewhat arbritary.

Ethnohistoric Information: This is probably part of the community of San Miguel Axoloapan, a sujeto of Otumba in the Early Colonial period.

Figure 86

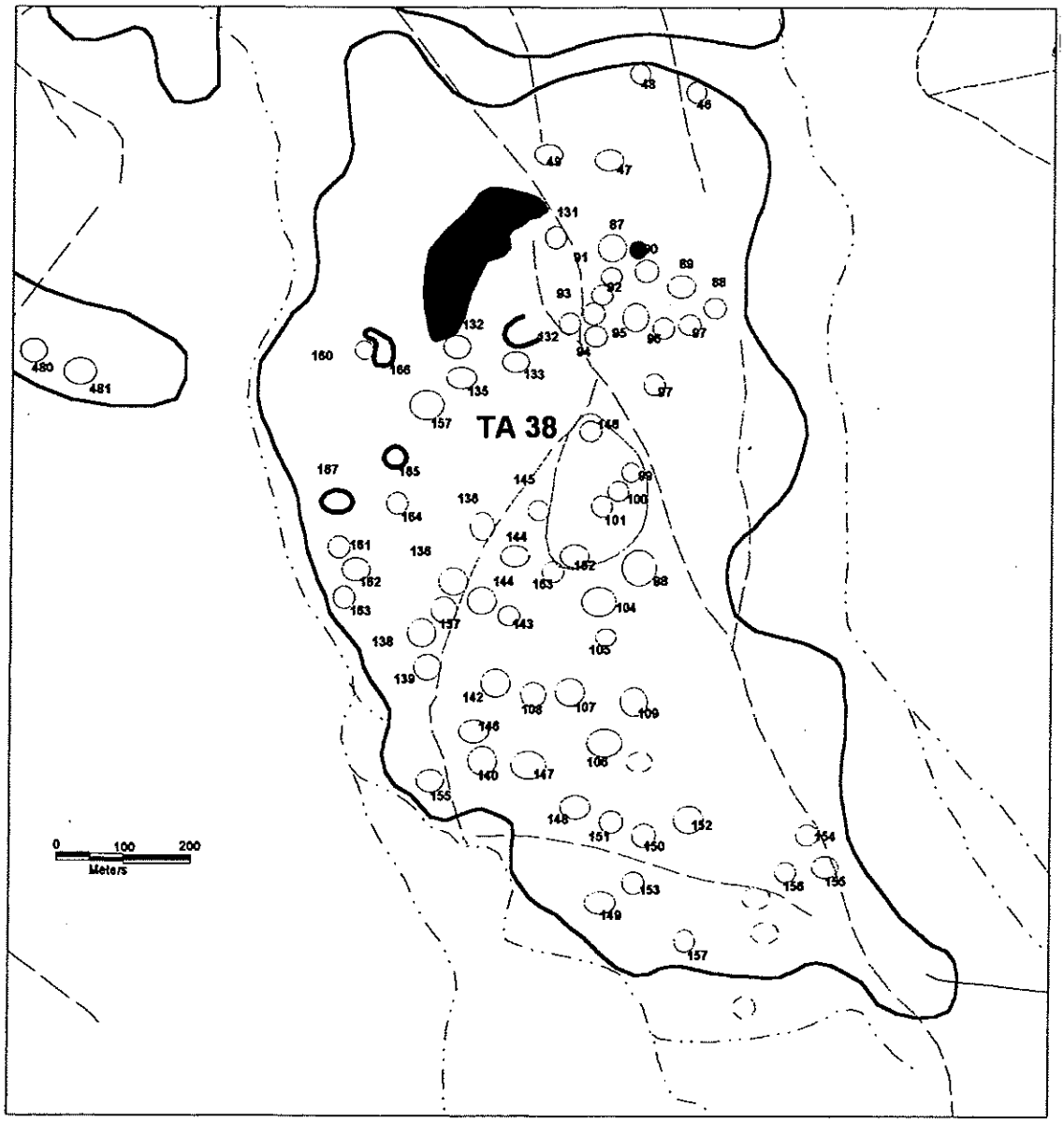
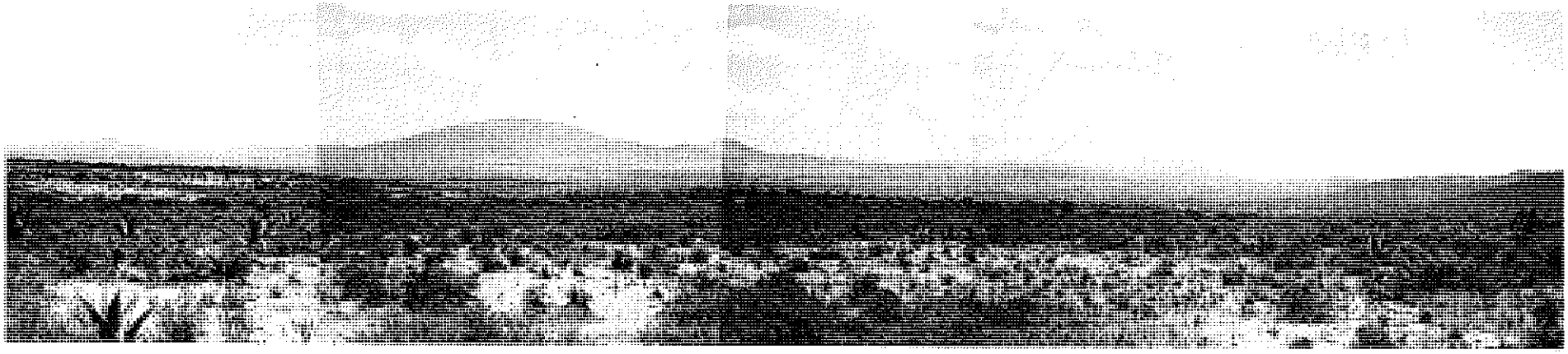
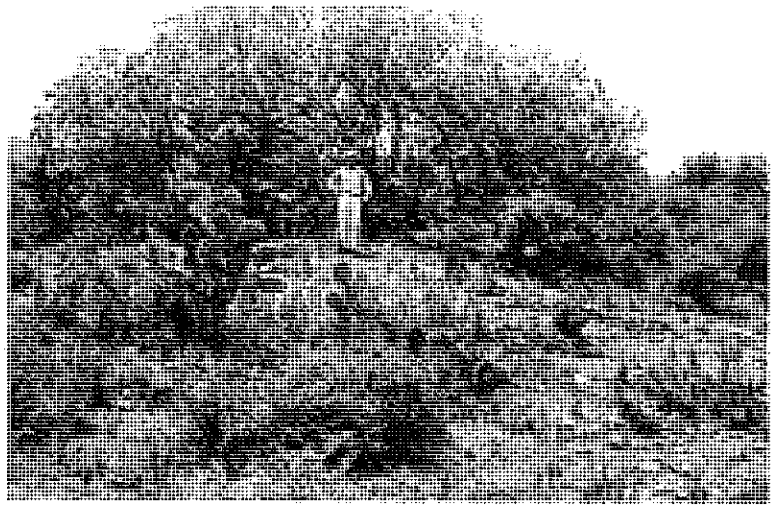


Plate 80



A

B



C

Figure 87

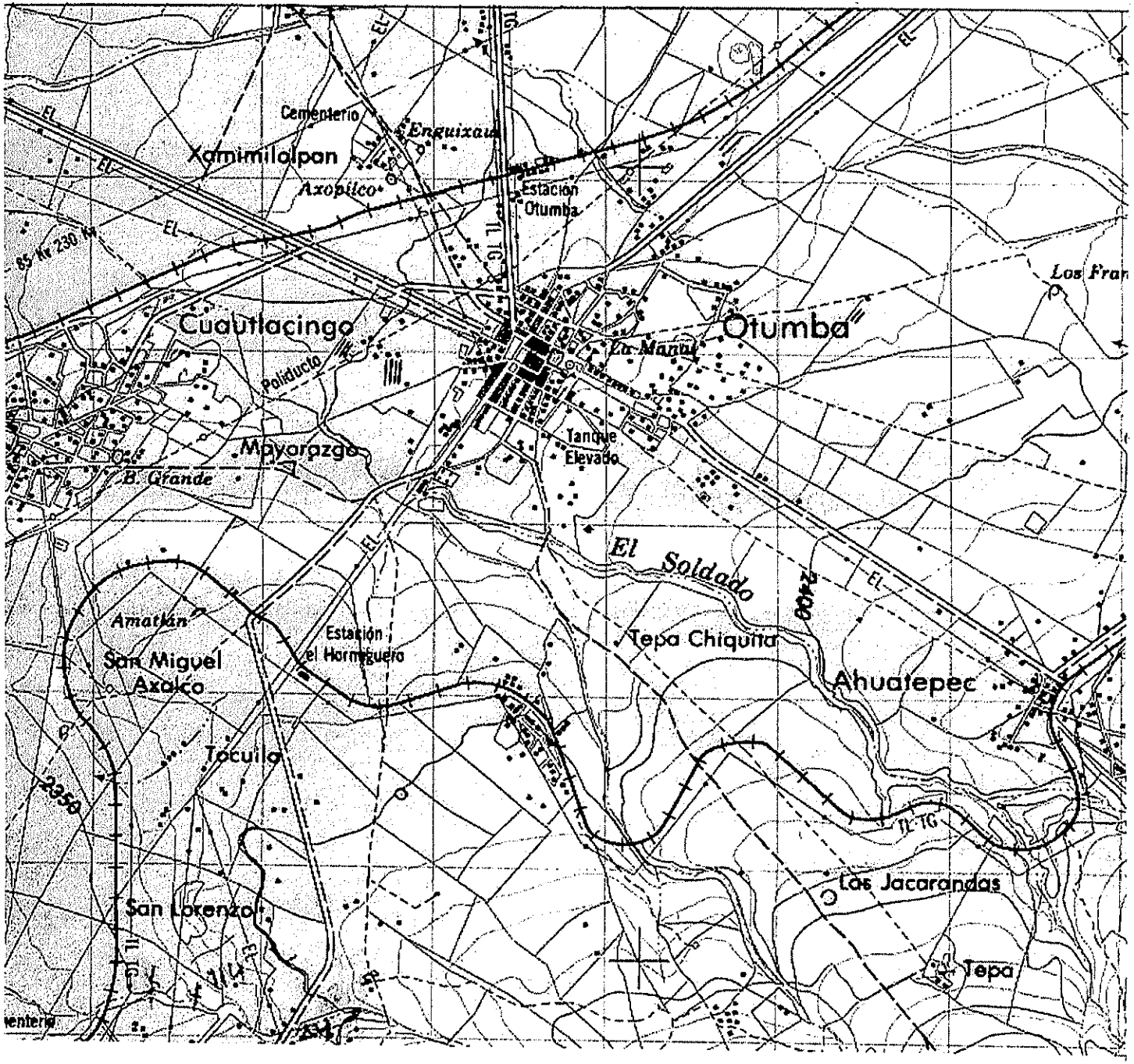

Cementerio
Enquixaua
Xamimilolpan
Axopilco
Estación Otumba
Cuautlacingo
Otumba
La Manga
Poliducto
Mayorazgo
B. Grande
Tanque Elevado
El Soldado
Amatlán
San Miguel Axalco
Estación el Hormiguero
Tepa Chiquita
Ahuatepec
Tocuila
San Lorenzo
Las Jacarandas
Tepa

Figure 88

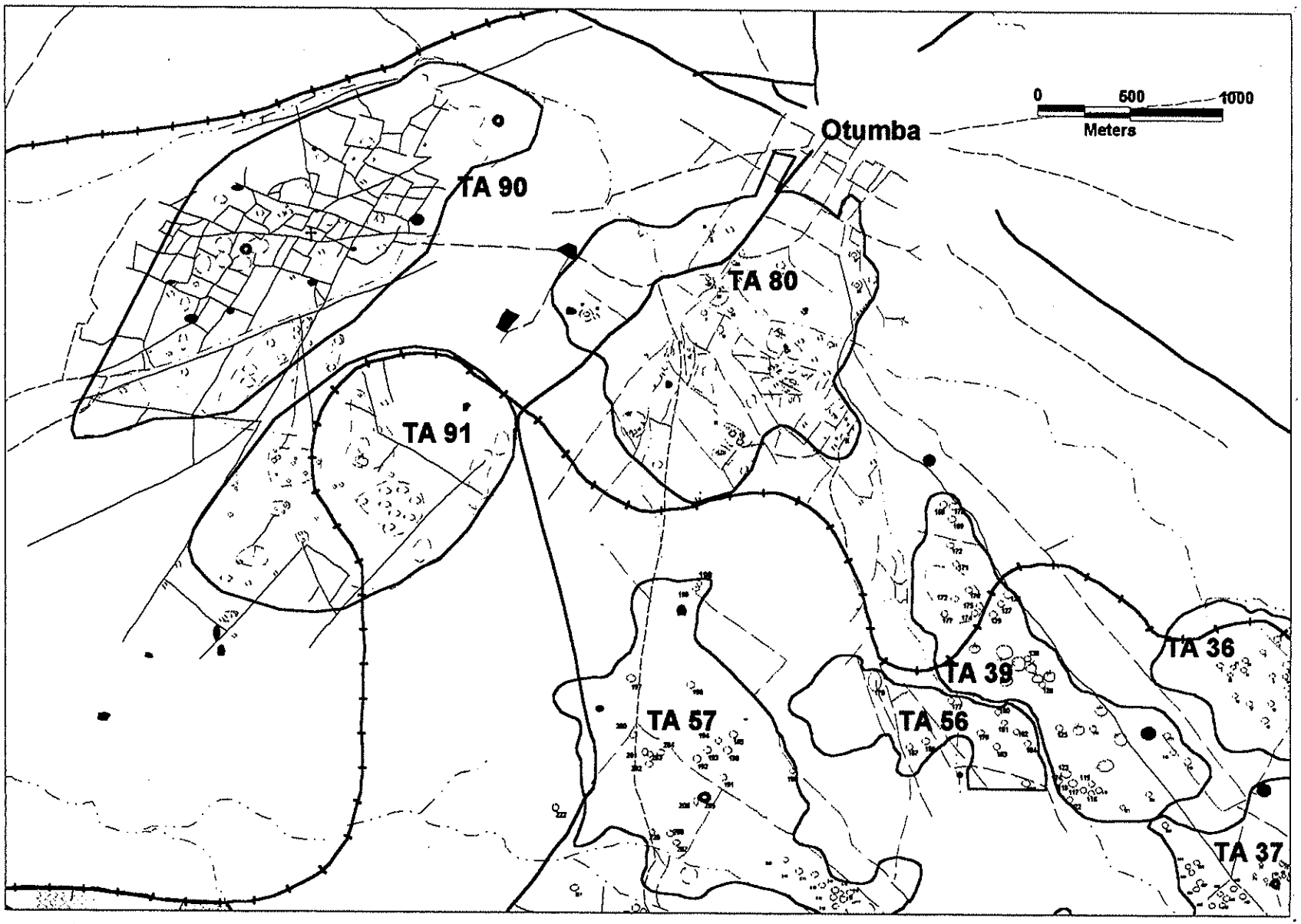

0
500
1000
Meters
Otumba
TA 90
TA 80
TA 91
TA 57
TA 39
TA 56
TA 36
TA 37

Plate 81

13. ZONE 14: UPPER VALLEY: THE OTUMBA CONURBATION (Figs. 87, 88; Plate 81)

Even a cursory glance at the aerophoto reveals the obvious centrality of the town of Otumba (see Plate 81). It lies almost exactly in the geometric center of the Upper Valley; it is the largest community in the area, the only community with a truly urban economy; and all roads converge on it radially, like the spokes of a wheel.

Included in the zone is the small, deep-soil, alluvial plain in the center of the Upper Valley; an extensive plateau-like elevation, where the dispersed village of Cuahutlacingo (or Cuauhtlancingo) is located; and to the east the lower portion of a series of relatively flat ridges defined by deep, wide barrancas that descend from the eastern mountain range. The soils on the ridges are generally thin, with extensive areas of severe erosion as is the case of the Cuahutlacingo ridge. Today, because of this erosion, much of the elevated terrain is of marginal agricultural value, used primarily for pasture or planted in maguey.

The plain of the Upper Valley is the most unproductive portion of the entire plain of the Valley of Teotihuacan today; and to judge by the scanty nature of its human occupation through all the ceramic phases of the past 3,000 years, it has been unproductive far into the past. It is not so much an alluvial plain, as a conjunction of the piedmont interfluves in a jumble on the floor of the Upper Valley. The soils that are found here, even in the deeper pockets, are very thin, never more than 100 cm. The only settlements are at the edge of the plain, at the point of convergence of the plain and the piedmont.

T.A. 209

Classification: This was originally defined as a ceremonial precinct underlying the church in the town of Otumba (see discussion under T.A. 80).

T.A. 210

Classification: Probably a small dispersed village.

Natural Setting: The site is located at 2420 m, at the eastern edge of the upper floodplain, at its juncture with the steep piedmont. Prickly pear, tecojote, maguey, and pirul grow through the area in house lots. There is little erosion of the brown to dark brown soils here.

Modern Land Use: Modern village and house lots of the village San Marcos Ahuatepec.

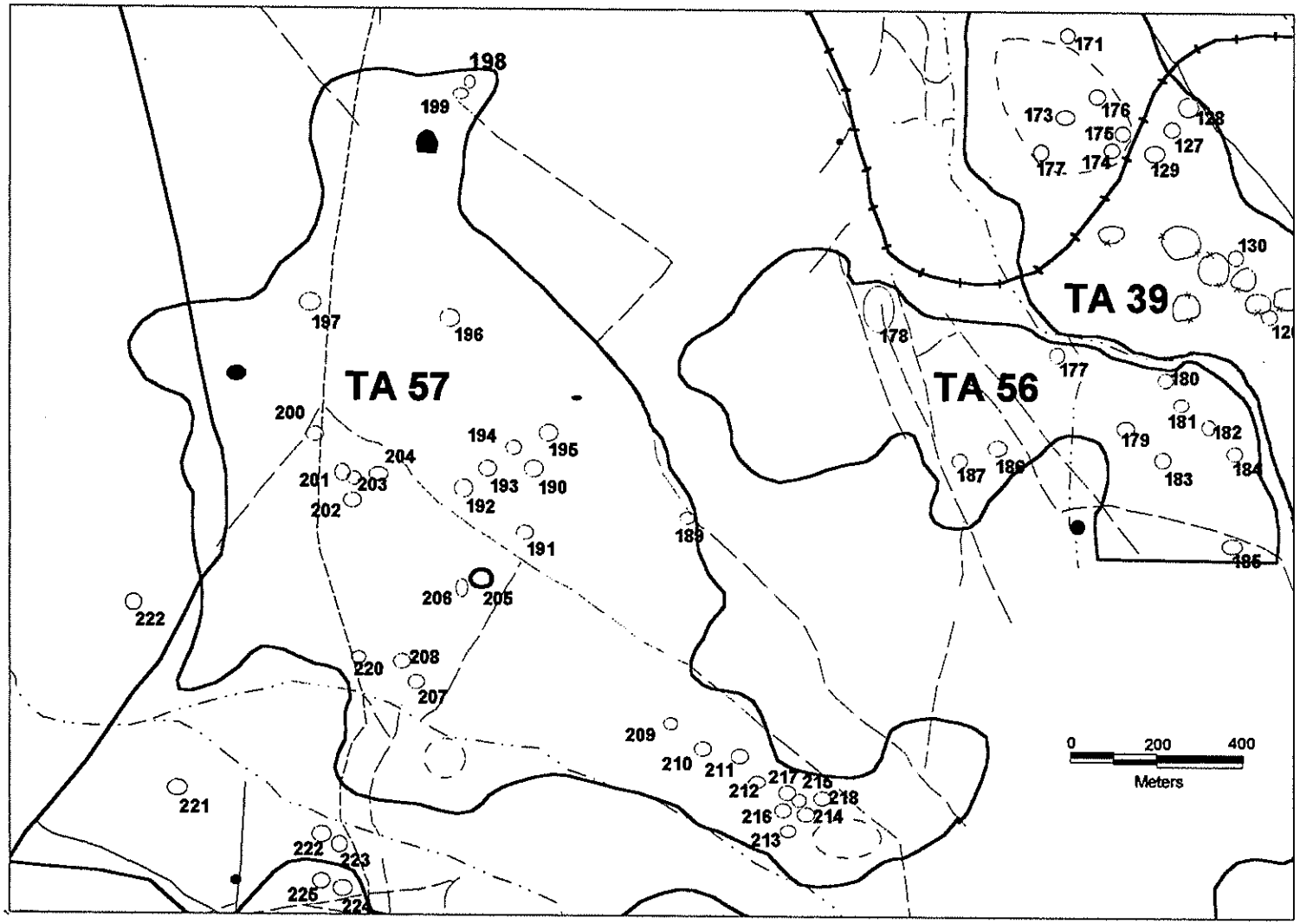
Archaeological Remains: Aztec and Late Toltec ceramic indications are found in the fields surrounding San Marcos as well as in the house lots. Mounding is visible against the sides of several of the small residential foci. Other occupations include T.F. 18 (Patlachique) and T.C. 95.

Site Area: 39 ha.

Date: Not surface sampled; surface survey recorded Late Toltec.

Ethnohistoric Information: see page 368.

Figure 89


TA 57
TA 56
TA 39
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222
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226
171
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400
Meters

Figure 90

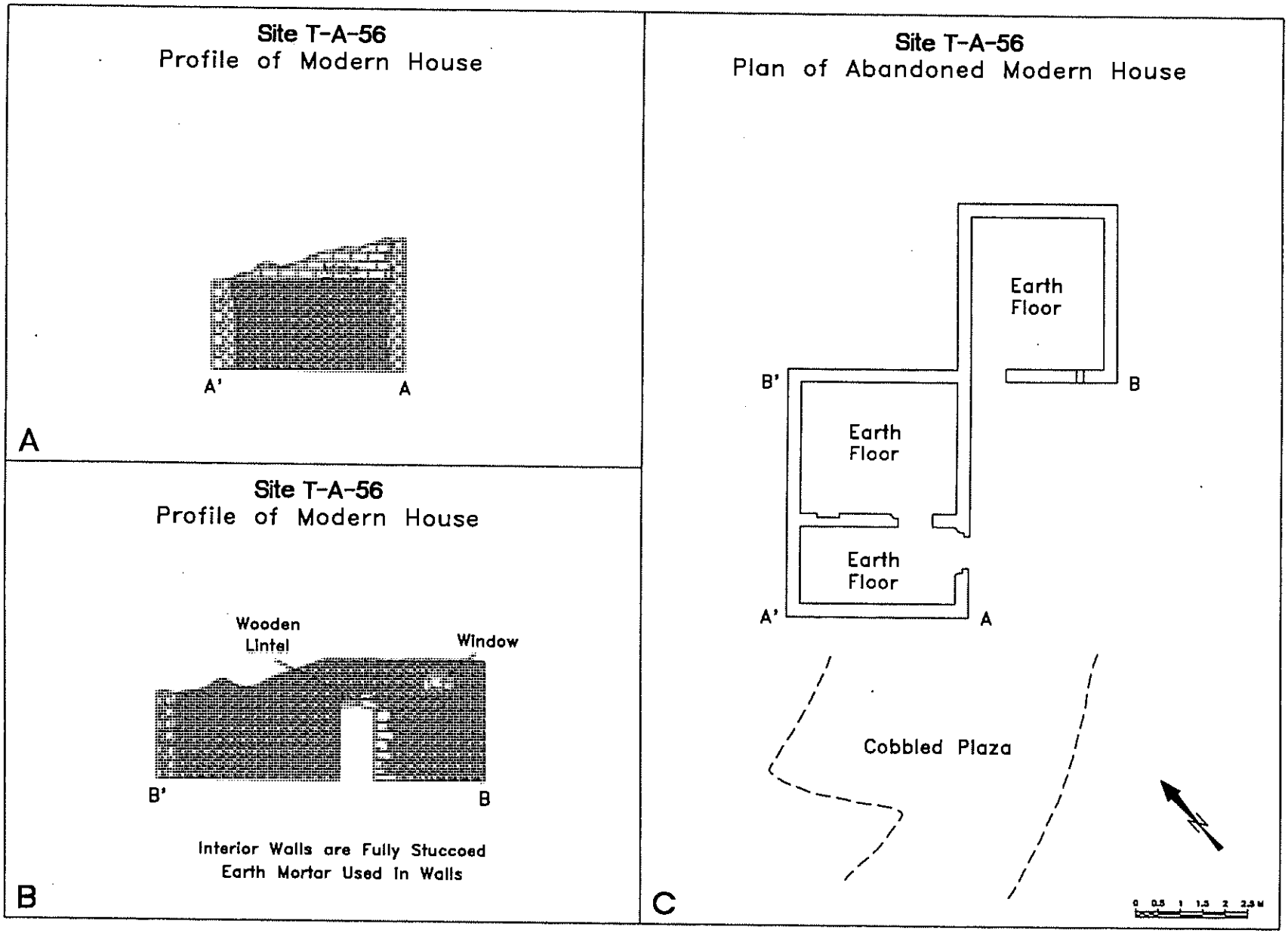
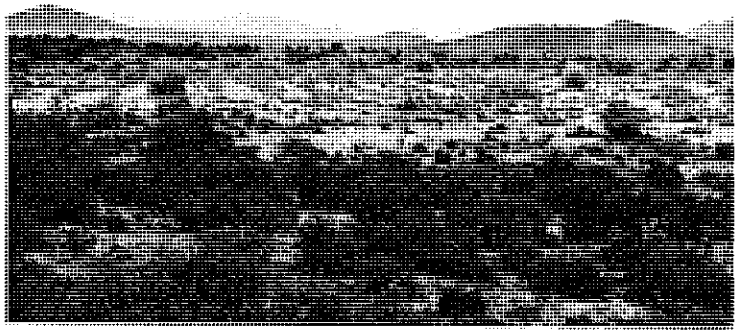
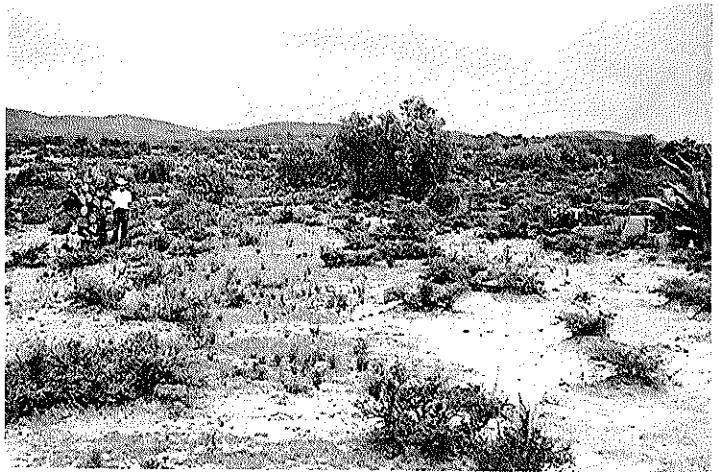

Site T-A-56
Profile of Modern House
A'
A
A
Site T-A-56
Profile of Modern House
Wooden Lintel
Window
B'
B
Interior Walls are Fully Stuccoed
Earth Mortar Used In Walls
B
Site T-A-56
Plan of Abandoned Modern House
Earth Floor
B'
B
Earth Floor
Earth Floor
A'
A
Cobbled Plaza
C

Plate 82



A



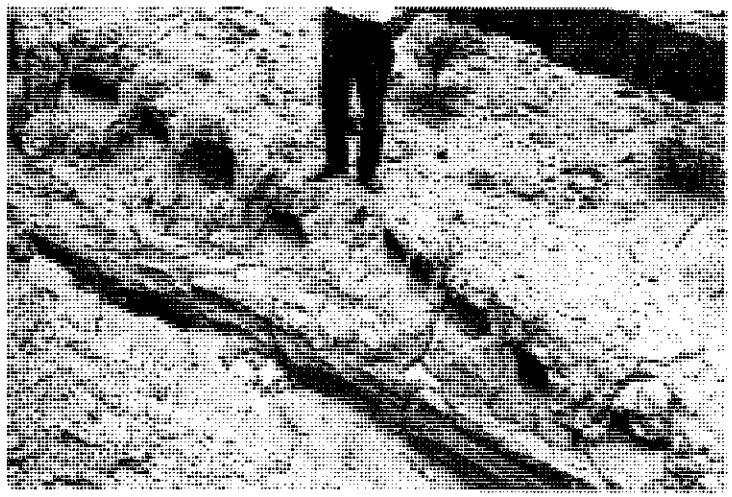
B

C

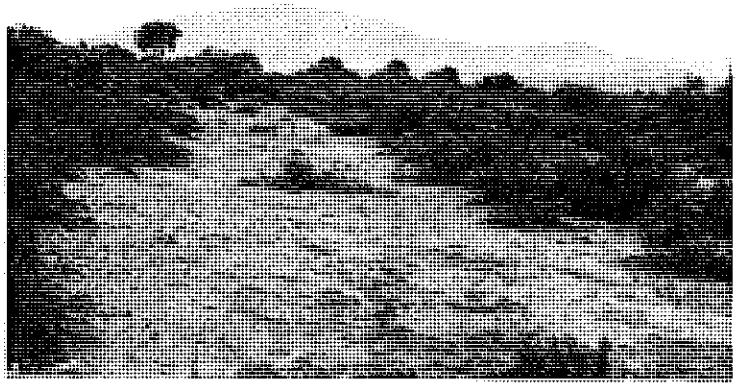
D

Plate 83

A



B



C

D

T.A. 56 (Figs. 89, 90, 96: Plates 82, 83)

Classification: Large hamlet or very small dispersed village.

Natural Setting: This site is located on an interfluve between two barrancas, on gently sloping terrain. A major barranca runs along the eastern and northeastern border of the site, 15-20 m wide and 5-6 m deep. Several small barrancas/washes run northward through it, one beginning at a jagüey suggesting they might be artificial. One of them is 10-12 m wide and 2-3 m deep and runs immediately west of Mound 186. There are numerous round pits in the walls of this barranca suggesting mining of obsidian cobbles - see below.

Soil depth due to erosion is highly variable, with large areas of exposed tepetate, and where present is from 5-25 cm in depth. The most heavily eroded area is at the western and eastern margins of the site. Pirul trees are found dispersed all over the site area, in some areas mixed with nopal, thorn bush, and miscellaneous cacti, particularly in the central area of the site. Some maguey is found in the eastern portion of the site. The site area occurs between 2400-2450 m.

Modern Land Use: At the northern edge of the site is the small settlement of Tepa Chico with some house lots located in that area; on the site proper, however, there are no structures. Ruins of a jagüey occur near the heads of the noted tributary barrancas and southeast of Mound 186. Virtually no crops were found on the site but maguey bancals occur all around it, penetrating to some degree within the site in the southwest and southeast. Ruined houses were also found in the central portion of the site, where Aztec occupation is densest. Silted and eroded ditches were found in the western part of the site, that may be of prehispanic age. Site is located on the ejido land of Tlaltica.

Archaeological Remains: Aztec occupation is concentrated in the central and eastern portion of the site where all of the 10 enumerated mounds were located. An area of medium to heavy occupation occurs in the western portion, where mounds are absent, suggesting that some mounds were once located here as well. In the same area we noted the presence of Tzacualli and Mazapan. All of the mounds identified seem to be the remains of residential structures, ranging from 15-30 m in diameter and 0-40 cm in height; most of them were approximately 20 cm in height. A number of very poorly defined and heavily eroded mounds were found in the central part of the site. A heavy concentration of obsidian was noted between Mounds 179 and 184, near the main barranca, in the form of blades and chips suggesting a workshop location. This conclusion would seen to be confirmed by what appeared to be the mining of cobbles in the tributary barranca. The possible ancient terraces noted in the eastern part of the site are of two types, one 5-6 m wide and 10-20 cm high, and the other 15-20 m wide. The total site area is 52 ha. Other occupations on the site include Patlachique in various localities coded T.F. 44, 56, 81, 218; Tzacualli in two localities coded as T.F. 169, 171; a Teotihuacan site, T.C. 90, and Mazapan in a number of localities coded as 137-141 and 302, 313

Ethnohistoric Information: See T.A. 39.

T.A. 57 (Figs. 89, 91-92; Plates 84, 85)

Classification: Small dispersed village.

Natural Setting: This site is located on gently sloping terrain north of a major barranca that flows southeast-northwest. It has a maximum depth of 8-10 m and width of 15 m. Erosion on the site varies from moderate to very severe with numerous large areas of exposed tepetate. In the west-central and southern portions of the site soil occurs but is usually less than 20 cm. Deep soil areas occur in the north where 30-50 cm depth

Figure 91

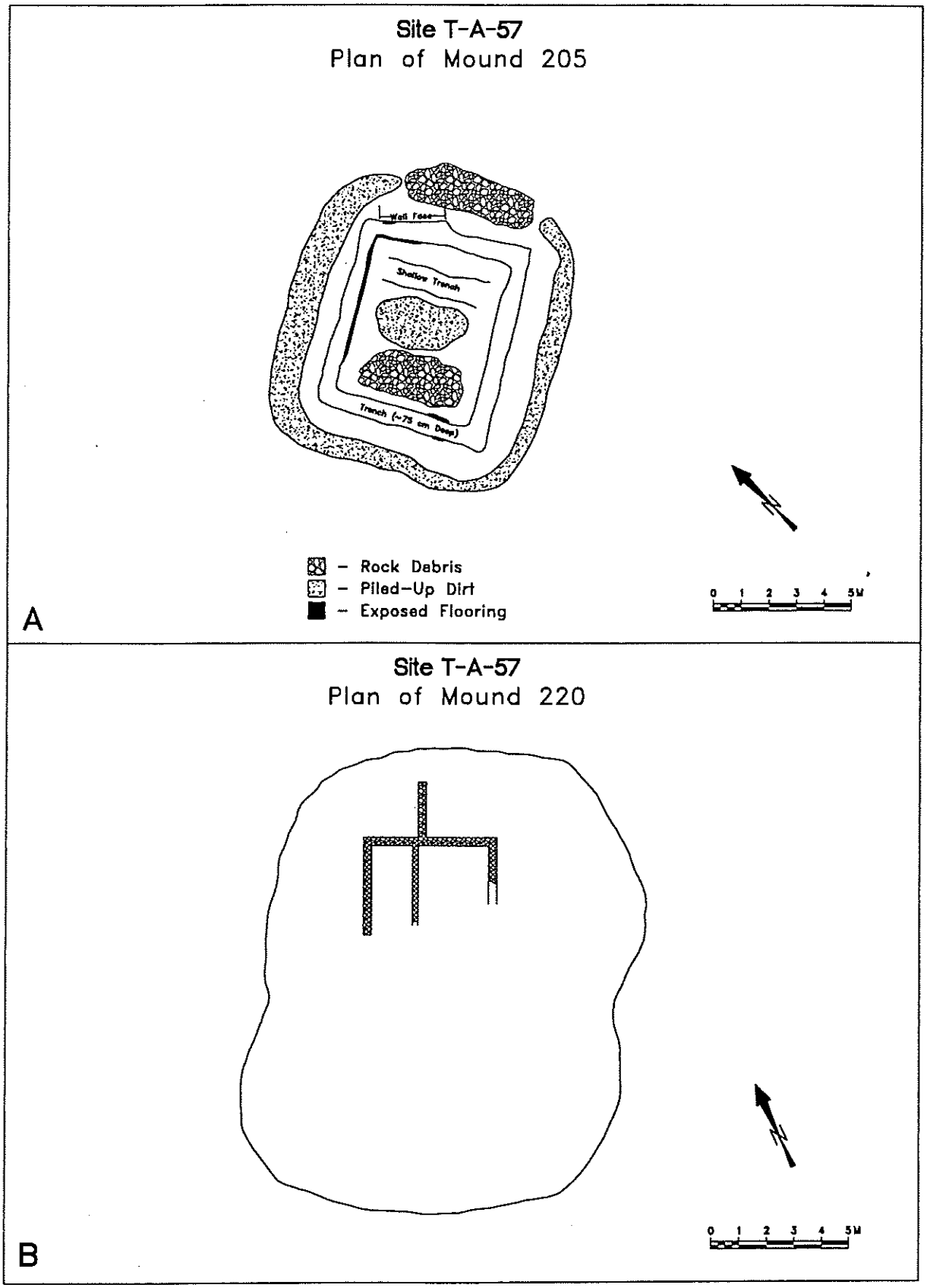

Site T-A-57
Plan of Mound 205
Wall Face
Shallow Trench
Trench (~75 cm Deep)
– Rock Debris
– Piled-Up Dirt
– Exposed Flooring
0 1 2 3 4 5M
A
Site T-A-57
Plan of Mound 220
0 1 2 3 4 5M
B

Figure 92

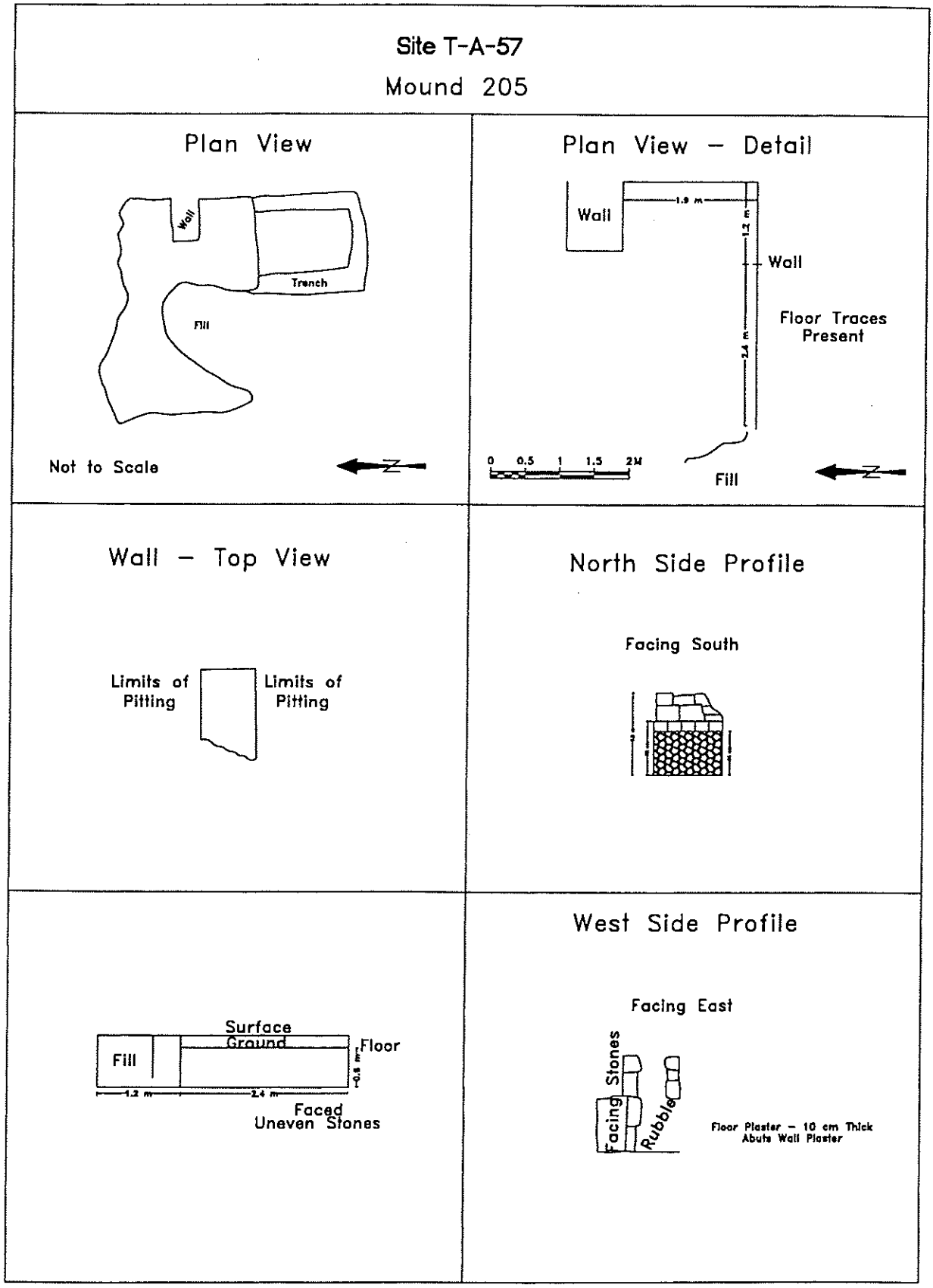
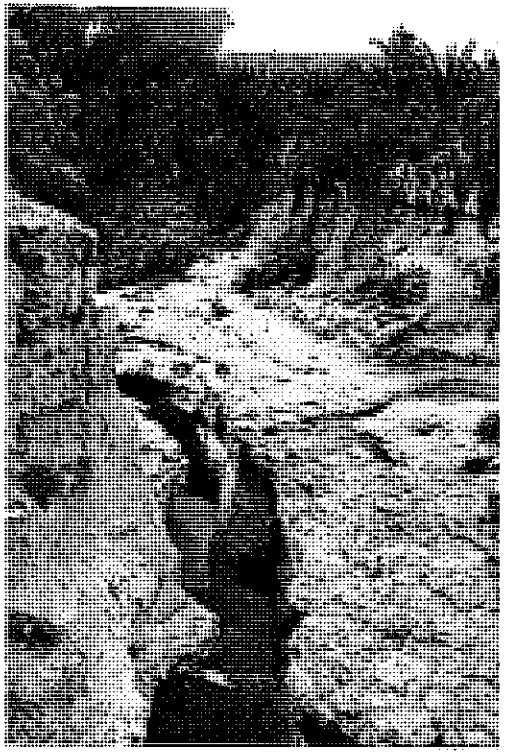

Site T-A-57
Mound 205
Plan View
Wall
Trench
Fill
Not to Scale
N
Plan View – Detail
Wall
1.9 m
1.2 m
Wall
Floor Traces Present
2.4 m
0 0.5 1 1.5 2M
Fill
N
Wall – Top View
Limits of Pitting
Limits of Pitting
North Side Profile
Facing South
Surface Ground
Fill
Floor
0.8 m
1.2 m
2.4 m
Faced Uneven Stones
West Side Profile
Facing East
Facing Stones
Rubble
Floor Plaster – 10 cm Thick
Abuts Wall Plaster

Plate 84

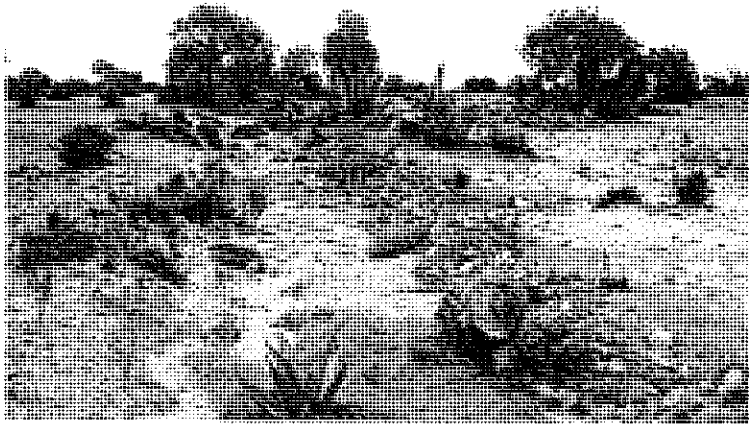
A

B

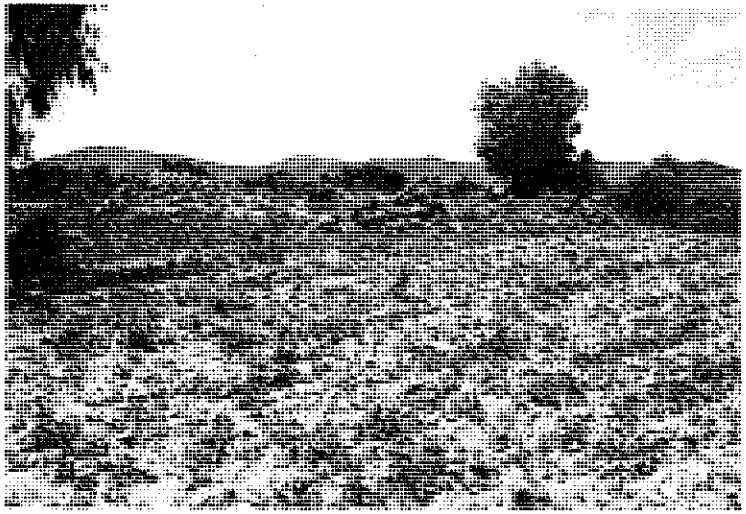


C

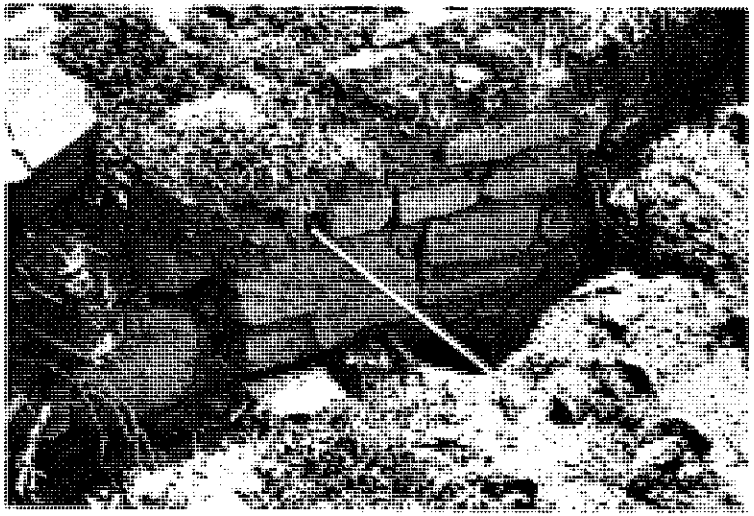
Plate 85



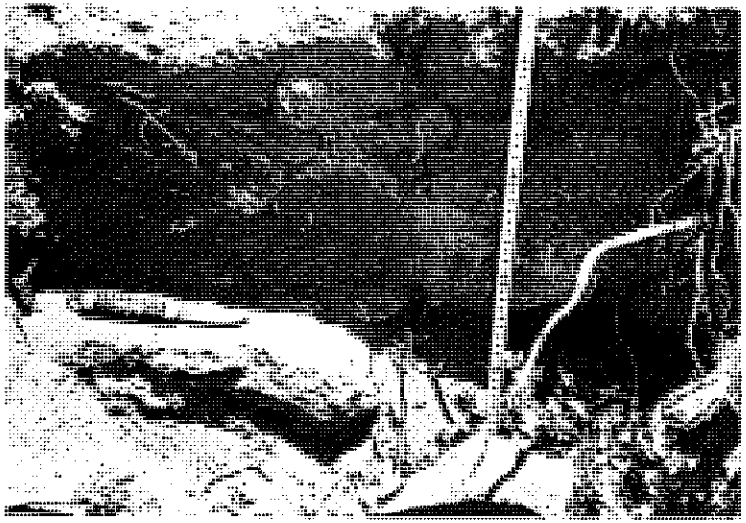
A



B



C



D

of soils is common. About half of the site consists of a single great wash, and a large one also runs southeast-northwest through the center. Several others run southwest-northeast on the southern edge of the site where it parallels the road to Tlaltica. The barranca bed near Mound 212 exhibits two stages or cycles of erosion in its profile. Pirul is abundant in the areas near the barranca and pirul is abundant over the site as a whole, and in areas near the barranca is a dense concentration of thorn bush, nopal, and cacti. The site area lies within the 2400-2450 m.

Modern Land Use: A rancheria occupies part of the site with five houses and house lots. Four ruined structures also occur within the site area. Outside of the site area to the southwest are six more house lots and three abandoned structures. Three large jagüeys are found, one on the site, approximately 300 m northwest of Mound 200, and one 80 m southwest of Mound 198-199. Besides these a number of very small jagüeys are found near the ruined structures.

Maguey bancals are widely distributed in the area were soil is present, and in some areas is intercropped with maize, beans, and barley. Drainage ditches are very common, along with water collection ditches. Most of the cultivation is in the northern half of the site. Also noted were check dams and floodwater canals, in and originating from the barranca. Lands of San Francisco Tlatica

Archaeological Remains: Twenty-nine mounds were located, only six in good condition the remainder, in various stage of erosion, often severe. Twenty-seven of them appear to be the remains of ordinary residential structures, consisting of rock rubble and sherds, varying from 15-35 m in diameter and 0-50 cm in height. Mound 205 is a definite ceremonial structure. It appears today to be 50 m in diameter but it is severely eroded; and 1 1/2 m in height. Near it is 206, which appears to be associated with it, and may be another ceremonial structure. It has an unusually heavy concentration of obsidian blades, sherds, and bone, the latter possibly human. Occupation occurs concentrated in three zones. One is to the southeast where Mounds 209-218 are located. This is a heavily eroded area with medium to heavy surface pottery over all of the intervening spaces between the mounds, suggesting the former presence of destroyed mounds. A second concentration occurs in the south-central part of the site where Mounds 205, 206, 207, 228, and 222 are located (this cluster includes the two identified religious structures 205 and 206). A third cluster is immediately north of Cluster 2 in the center of the site where Mounds 190-195 and 201 204 are located. Here also we found concentrations of rubble and sherds that were not identified as mounds but are probably destroyed residential structures. Occupation of a more dispersed nature occurs in the north and the east central portions of the site. The site occupies 161 ha. Unusually heavy obsidian concentrations were noted near Mound 206, and southeast of Mound 205 near 212 and 213. This debris was primarily in the form of blade fragments suggesting a non-workshop context. Stone wall bases were exposed on Mound 220. A clandestine trench dug into Mound 205 revealed stone walls and a stucco floor. Other occupations on the site include several locations with Tzacualli (T.F. 170, 172, 234) and Mazapan (T.T. 307, 309, 312).

Ethnohistoric Information: This sites probably lies within the community of San Lorenzo Teshianco, a sujeto of Otumba during the Early Colonial period.

T.A. 80 (Figs. 93, 94; Plates 86-90)

Classification: Town and provincial center.

Natural Setting and Modern Land Use: The modern town of Otumba is located on the eastern edge of the alluvial plain of the Upper Valley and extending up the very gently sloping eastern piedmont. T.A. 80, which we believe to be the Aztec period town, lies predominantly on the piedmont and south of the modern

Figure 93

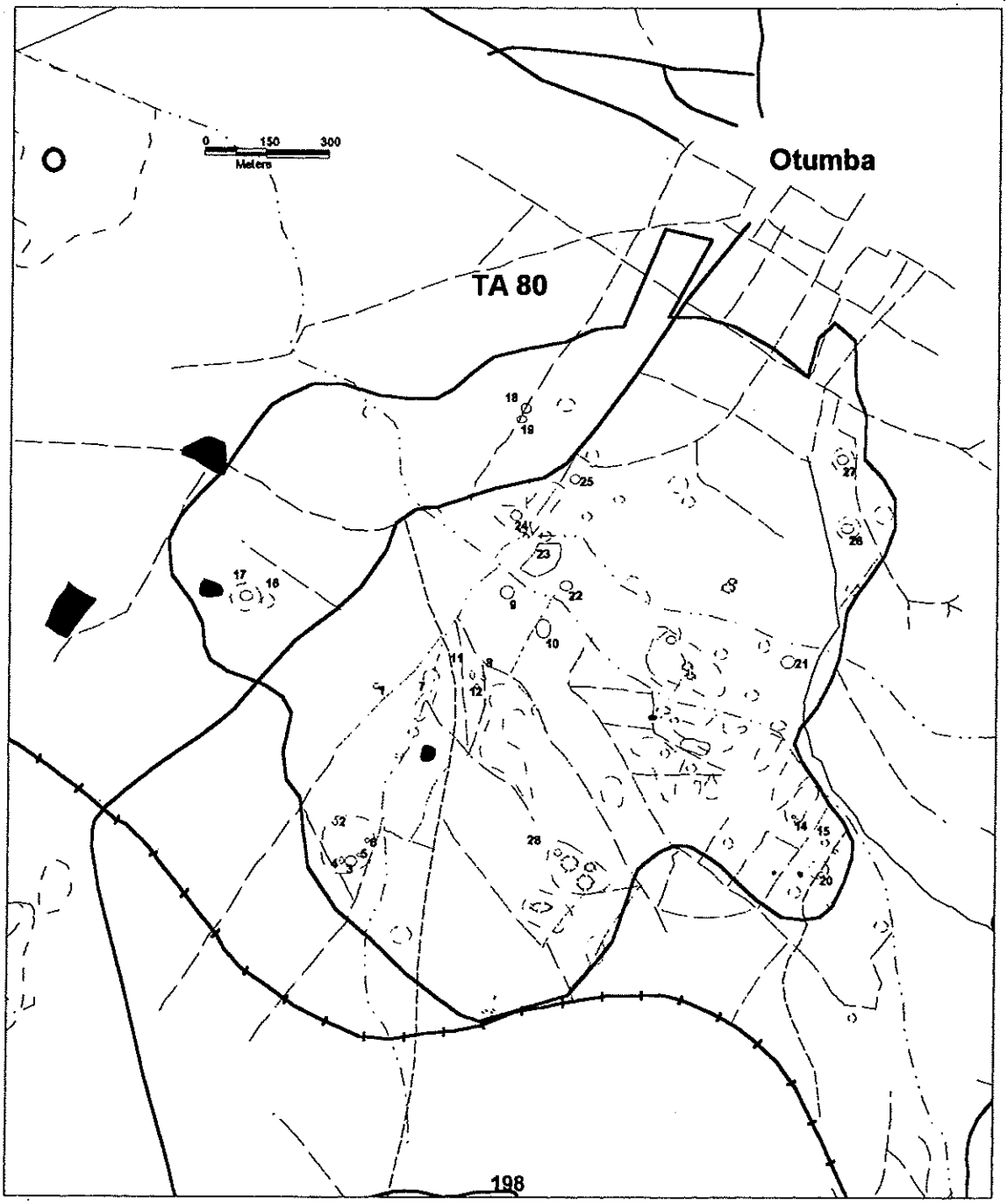


Figure 94

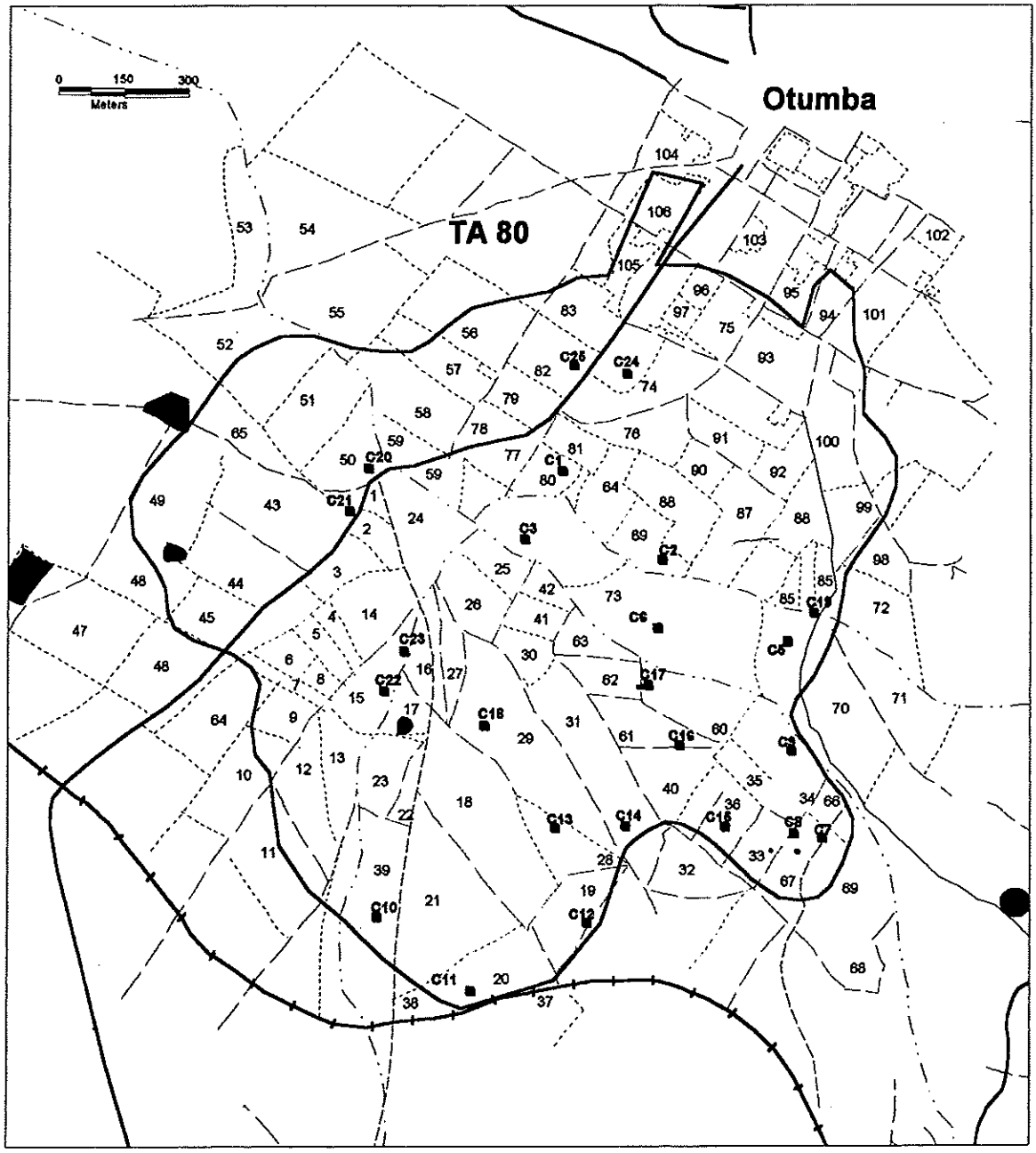


Plate 86

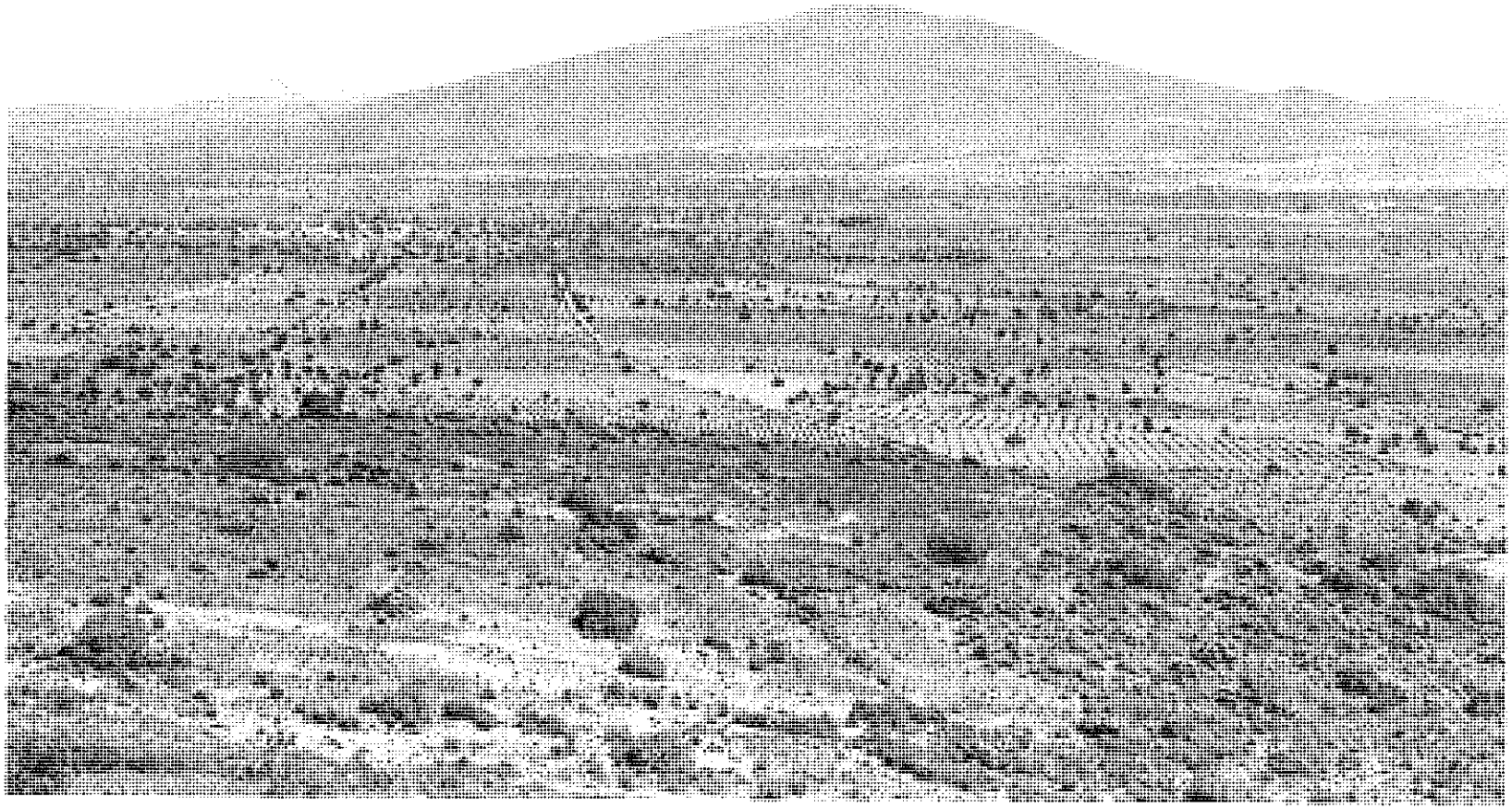
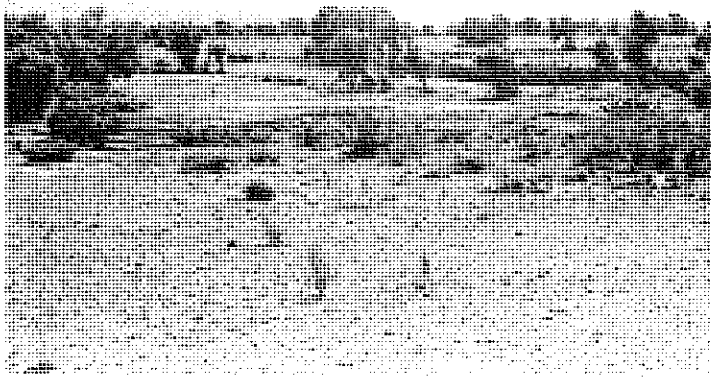
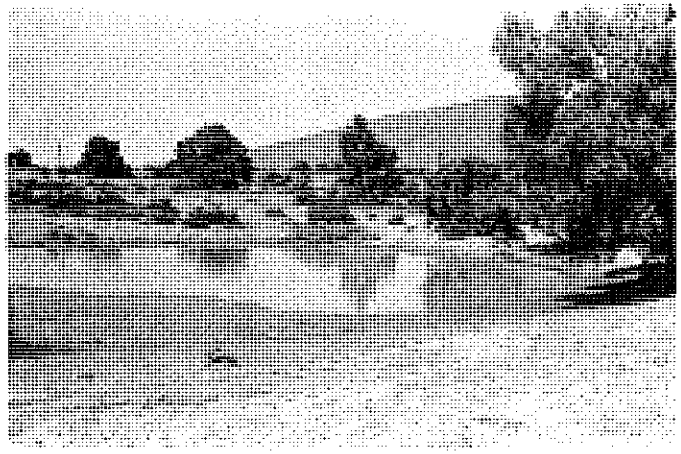


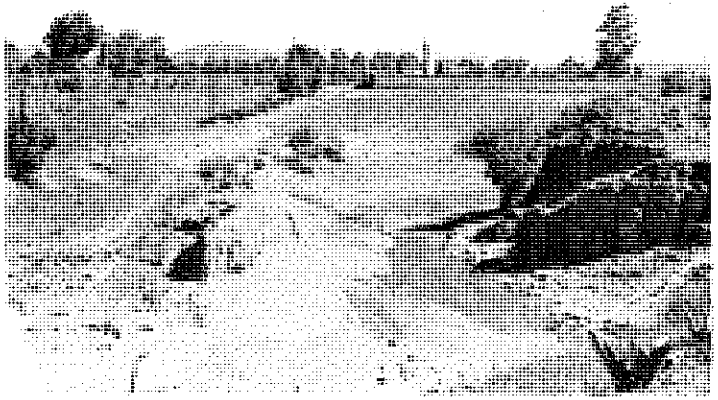
Plate 87



A



B

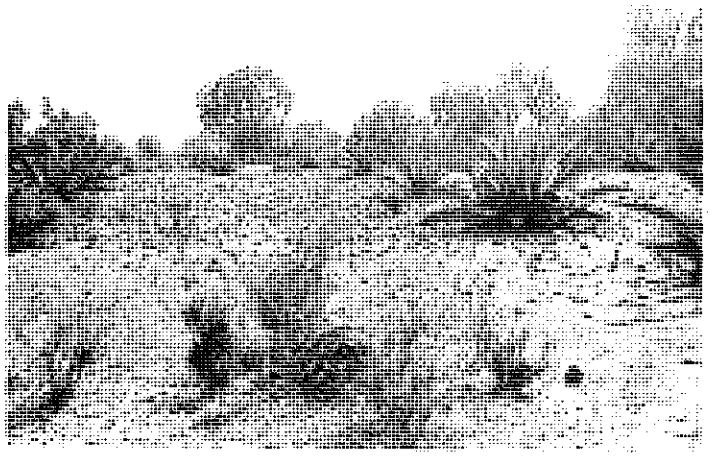


C

D

Plate 88

A

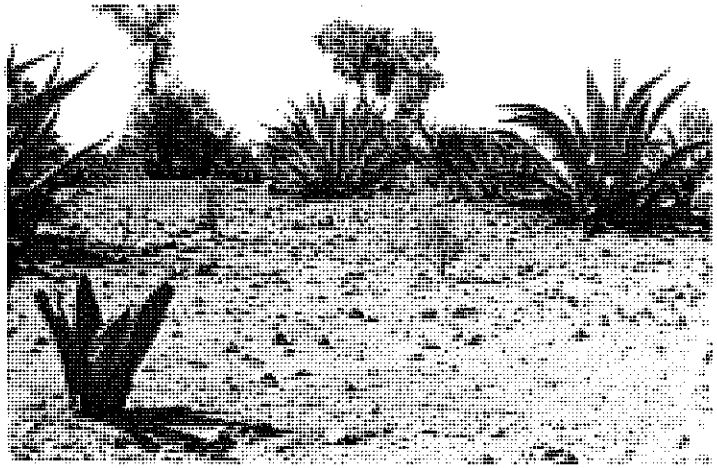


B

C

D

Plate 89



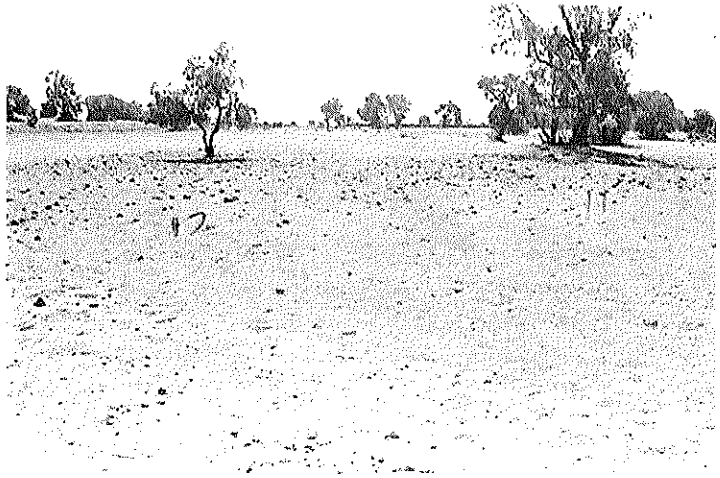
A

B

C

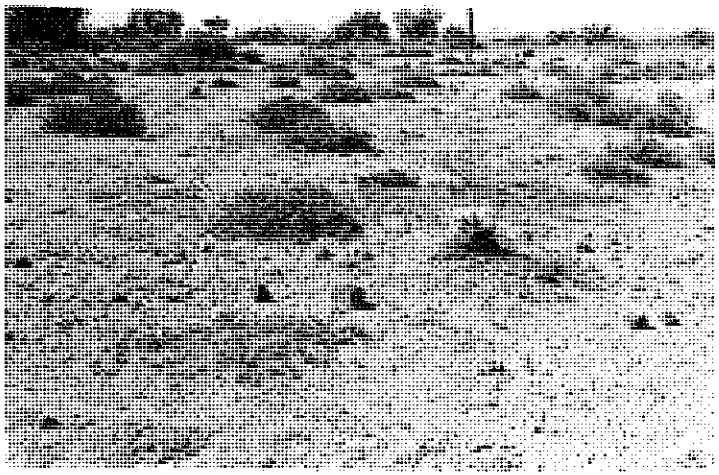
D

Plate 90

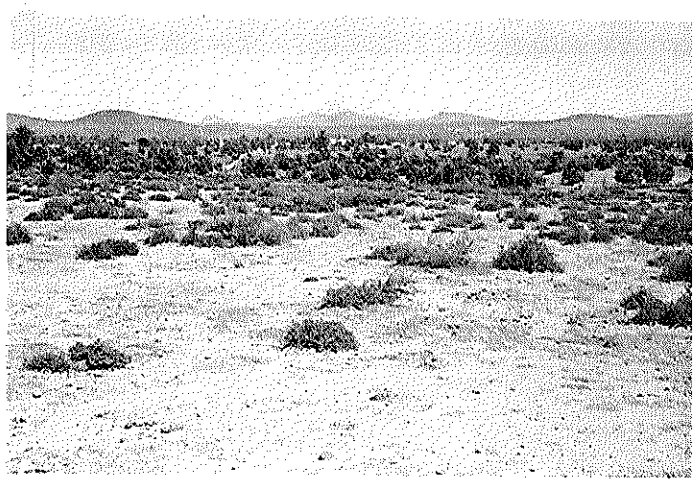


A

B



C



D

town, in an area of maguey cultivation and very severely eroded terrain. This is an area of very marginal use today, and the condition of the terrain means that much of the site has been heavily damaged and destroyed. An additional source of damage to the site is found in the two barrancas traversing its center. Profiles taken from what are today wide, deep channels indicate that they were narrower and shallower streams at the time of the Aztec occupation. The fact that the majority of the Aztec site lies outside the modern town enabled us to conduct an almost complete survey of an urban center in the Teotihuacan Valley. The Aztec site, however, does extend part-way into the southern half of the town itself, a densely nucleated community. This statement is based on a number of surveyed lots where small fields were found adjacent to houses, along several streets, almost to the present day plaza of the town. Prior to Charlton's research in the Upper Valley, following the Teotihuacan Valley Project, we noted that the Catholic church, facing the plaza, seemed to be located on a large low elevation and thought that it might have served as the basal terrace of the main temple of the Aztec town. We also suggested because of its location, that the present-day plaza may have functioned as the central market place of the Aztec town. Charlton's observations, however, with respect to the church and plaza, based upon recent excavations (as the product of public works in the nearby areas) indicate that the church is situated on top of a natural feature. Furthermore, surveys by Charlton, in connection with the Otumba town project (see Chapter 11), of a few fields northwest and northeast of the present day town indicate that occupation in these areas is sparse. It now appears that Mound 23, a large three meter high feature measuring approximately 75 x 115 meters in dimensions, is probably the basal portion of the main temple platform for the Aztec town. In all probability the upper portions were removed for building construction in the Colonial- Republican period town of Otumba. Elevation 2360- 2380 m.

Archaeological Remains: The following evaluation is based entirely on the results of the 1963 survey. The reader is directed to Chapter 11 where we summarize the Otumba project (Charlton and Nichols) for a much more detailed picture of the Otumba town site. The major area of settlement i.e. occupation ranging from light to medium is a large square measuring 1.2 kilometers to a side, or approximately 144 hectares. Added to this are zones to the south, west, and, if the Aztec town reached the modern plaza, to the north as well, a total area of approximately 200 hectares. It was one of the three largest urban areas in the valley in 1519. The modern town of Otumba had a 1940 population of 2,000 people and covered an area of approximately 60 hectares with an internal density of 32 people per hectare or 3,204 per km^2. In 1571 the town had approximately the same population, according to the Arzobispado de Mexico, i.e. 557 vecinos. The 1571 town then apparently approximated the 1940 town in population and surface area occupied. Allowing for the decline rates that Sanders has calculated for the period of 1519 to 1571 this would mean a population of between 5 and 6,000 for 1519 for a density of 2,500 to 2,700 per km^2 (i.e. over the estimated 200 hectares of the site), this is very close to our calculations for the population of the T.A. 80 site presented below.

The eastern half of the Aztec site is traversed southeast-northwest by two closely spaced barrancas, that converge about two-thirds of the way across the site into a single channel called the Barranca el Soldado. Within the peninsula-like zone between the two barrancas, continuing for a distance of approximately 150 meters northwest of the junction, and including an area to the south of the peninsula, is an almost continuous zone where the density of occupation was estimated minimally as medium and often heavy to very heavy. Within it lie a large number of mounds and it appears as an urban core comparable to that which we defined at T.A. 9, 10, 12 and tentatively at T.A. 155, the other towns of the Teotihuacan Valley. This area covers approximately 60 to 70 hectares, about that of the modern town of Otumba. It almost certainly had an internal population density comparable to that of the modern town. This would mean a population of 2,000 to 2,500 people. Even the periphery, however, of 130 to 140 hectares, has many areas of medium to high density. It is in the southern portion of this periphery that the major obsidian workshops were found.

This obsidian workshop area is characterized by a very high density of obsidian debris and ceramics. It includes several small preserved residential mounds and covers an area of three to four hectares, found

in fields 18 and 28 (see Figs. 93, 94 and Tables 13, 14). A figurine workshop, evidenced by an unusual concentration of figurine fragments and numerous remains of pieces of molds was found in Field 73, within

Table 13 T.A. 80 Mound Observations
(See Fig. 93)

Mound #	Location (Field #)	Height (in cm)	E-W Dimen. (in m)	N-S Dimen. (in m)	Stone Debris	Pottery Abundance	Comments
1	4	-	-	-	Heavy	Medium	Small, partially destroyed
2	12	15-20	4	4	Medium	Medium	See plan for grouping of mounds 2-6. Area generally has very scanty pottery except for immediately surrounding the mounds and washes downhill from the mounds
3	12	15-20	10	4	Very Little	Heavy	
4	12	30-50	20	8	None	Light	
5	12	10-20	6	4	--	--	
6	13	10-20	4	4	--	Medium	
7	15	10	4	4	Very Little	Heavy	7 m space between centers of these 2 low mounds, mounds located nearly on bare tepetate
8	27	10	4	4	Very Little	Heavy	
9	25	3 m	40	40	Heavy	Heavy	Several pieces of red plaster on top
10	25-42	175	25	25	Medium	Light	16 meters of red stucco floor exposed by a ditch
11	27	50	15	20	Very Heavy	Medium to Heavy	Grouping of 3 mounds in a semi-circle on a gentle slope between 2 work areas. Pottery is light in rest of the field
12	27	30	8	12	Very Heavy	Medium to Heavy	
13	27	50	8	12	Very Heavy	Medium to Heavy	
Possible mound	28	15-20	5	3	None	Light	Adjacent to 2 obsidian chip concentrations
14	34	50-100	5	25	Heavy	Medium	Possible 2 1/2 m of wall stones on raised area of #14. See Plan
15	34	75	10	10	Heavy	Medium	
16	44	150	25	25	--	--	#16 pitted, exposing modern appearing plaster and brick.
17	44	100	5	10	--	--	
18	56	30	6	8	Very Heavy	Medium	Mound #19 is 20 m to the SW of Mound #18

19	56	30	6	8	Very Heavy	Medium	
20	67	15	5	5	Heavy	Medium	Gentle slope, thin soil.
21	73	50	32	30	Very Heavy	Extremely Heavy	
22	73	Mound or midden - semicircular very heavy Aztec concentration on a moderate to steep slope					
23	73	3 m	75	115	Heavy	Heavy	Exposed plaster floors. Covers practically the entire end of the ridge at the junction of the 2 barrancas. Because of the ridge it is difficult to tell just how much is mound and how much is natural rise. Together with #21, 22, 9, 10 - may be the center of the town.
24	77	100	75	75	--	Medium	
Possible Mound	80	50	20	20	Very Heavy Water	Heavy	Possible mound on N. side of barranca from Mound #23. Due to contours of the land sloping into the barranca it is difficult to tell whether they are mounds. Pottery is generally heavy throughout the field
Possible Mound	80	100-200	30	30	Worn Pebbles + Obsidian	Heavy	
25	81	175	30	30	Not Noted	Medium	Bisected by cemetery front gate
26	100	100	30	40	Not Noted	Medium to Heavy	
27	100	80	25	30	Not Noted	Medium	

Table 14 T.A. 80 Field Unit Observations
(See Fig. 93)

No	Modern Land Use	Occupational Density Evenly Divided. Bet?	Structures	Sample No	Special Features
1	AF	VSc Sc-L	None	None	None
2	AF	Generally Medium	None	None	None
3	AF	Generally Medium	None	None	None
4	AF	Gen L, 1/3 M	Md 1	None	None
5	AF	1/4 M, Rest L-M	None		None
6	AF-HL	Gen M	None		None
7	AF	Gen L-M	None		None
8	AF	Gen M	None		None
9	AF	Half Sc, Half L	None		None
10	AF	VSc	None		None
11	AF	Gen VSc, 1 Large Localized Area L	None		None
12	AF	Gen Sc, in Middle is Area of M	Cluster Mds3, 4, 5 Separated from Md2 and Md6	1	Occ Heavy on Mounds
13	AF	Gen Sc, in Middle is Area of M	Cluster Mds3, 4, 5 Separated from Md2 and Md6	1	Occ Heavy on Mounds
14	AF	Upper 1/3 H, Middle 1/3 M, Lower 1/3 L	None	None	None
15	AF	Lower 1/3 Sc, Upper 2/3 L, 2 Areas M and H	Md7,8	22, 23	Occ Heavy on Mds
16	AF	Gen H	None	None	None
17	AF-Jagüey 1	Gen L	None	None	Medium Concentration of Rock
18	AF	Gen L	None	None	Lower 1/3 Large Obs. Workshop
19	AF-Jagüey 2	Gen L, 1 Local Area M-H	None	12	Some Mazapan
20	AF	Gen Sc, except Mound	Cluster of 4 Possible Mds	11	None
21	AF	VSc	None	None	None
22	AF	Sc	None	None	None
23	AF	Gen L	None	None	None

24	AF	Equal Areas of L and H	None	None	None
25	AF	2/3 L, 1/3 H	2 Med Size Mds (9,10)	None	None
26	AF	Half M, Half VH	None	None	None
27	AF	Gen L	Mds, 8, 11, 12, 13	None	None
28	AF	1/4 L, Rest H	1 Poss. Md	13	Major Obsidian Workshop
29	AF	Lower Half L, Upper Half L-M, 2 Large Areas of H	None	18	None
30	HL-AF	Gen M	None	None	
31	AF- Long Rectangular Lot	Gen L - 2 Local Areas M	None	14	Much Rock in Medium Areas
32	AF-HL	Sc-L	None	None	None
33	AF-Jagüey	About Half L, Rest M-H	None	7, 8	Figurine Molds
34	AF	Gen H	Mds 14,15	None	Much Rock Debris
35	AF	Lower 1/2 + 2 Sep Areas H	None	2	None
36	AF	Gen L-M	Possible Very Large Mound	15	Some Mazapan
37	AF	Sc	None	None	None
38	AF	Check Original	None	None	None
39	AF	About 2/3 Sc, 1/3 L + Small Area M	None	10	None
40	AF	3/4 L, 1/4 H	None	None	Heavy Occ. Area, is an Extension of that in 61
41	AF	Gen H	Section of Md 10 from Unit 25	None	None
42	AF	Gen M	Section of Md 10 from Unit 25	None	None
43	AF	Gen M, Heavy in NE Corner	None	21	None
44	AF-Jagüey 4	Gen M	Mds 16, 17	None	Mds may be Post Conquest
45	AF	Gen M	None	None	None
46	AF	Gen Sc-VSc, Small Area of L	None	None	None
47	AF	Gen Absent, One Small L Area	None	None	None
48	AF	2/3 L, Rest Sc	None	None	None
49	AF	Gen L	None	None	None

50	AF	Gen H	None	20	None
51	AF	Gen L-M	None	None	Circular Area of Heavy Rock
52	AF	Sc-L	None	None	None
53	AF	VSc	None	None	None
54	AF	Sc	None	None	None
55	AF	SC	None	None	None
56	AF	Half Sc, 1/4 L, 1/4 M	Mounds 18, 19	None	None
57	AF-HL	Even Areas of Sc, L, M	None	None	None
58	AF	Gen L	None	None	None
59	AF	3/4 L, 1/4 H	None	None	None
60	AF	About Half L, Rest 2 Separate Areas of H	None	17	Numerous pieces of Figurines and Figurine Molds
61	AF	2/3 H, 1/3 L	Poss Md	16	Localized Conc. of Rock
62	AF-HL	Mostly H, One Area of M	None	None	None
63	AF	L-M	None	None	None
64	AF	North 1/3 L, Rest Sc	None	None	None
65	AF-Jagüey 5	West 1/3 L, East 2/3 M	None	None	None
66	AF	Gen L, Two Loc. Areas of H	None	None	None
67	AF	Gen L, 2 Loc. Areas of H	Md 20	None	None
68	AF-HL	VSc	None	None	None
69	AF	Sc	1 Poss Md	None	None
70	AF	VSc	None	None	None
71	AF	Fairly Large Area M-H, Rest VSc	None	None	None
72	AF-HL	SC	None	Poss 9	None
73	AF	Gen L-M, 2 Large Areas Several Small Ones H	Mds 21, 22, 23	3, 5, 5, 6	Tongue of Land between 2 Barrancas, Exposed Floors, Concentrations of Obsidian Figurines
74	AF	Gen M, Localized Area of H	1 Poss	24	None
75	AF-HL	1/2 M, 1/2 L	None	None	None
76	AF	Varies from L to M, H, VH	1 Poss	None	None

77	AF	Very Complex Unit with Areas of L, M, H, VH	Md 24	None	Some Mazapan
78	AF	L-M	None	None	None
79	AF	Half L, Half M	None	None	None
80	AF	Gen H	2 Poss Mds	Says Collection Poss? 19	None
81	Panteon	Gen M	Md 25 + 1 Poss Md	None	None
82	AF	L-M	1 Poss Md	25	None
83	AF	Gen L, 1 Small Area of H	None	None	None
84	AF	Gen M	None	None	None
85	AF	2/3 L, Localized Areas of M, H	None	None	None
86	AF	Gen L or M, One Area of H	None	None	None
87	AF-HL	Gen M, Small Areas of L	None	4	H Conc. of Obsidian
88	AF	Gen M, Small VH Area	None	None	Mazapan Presence
89	AF	Gen L-M, Small VH Area	None	2	None
90	AF	L-M	None	None	None
91	AF	L-M	None	None	None
92	AF	M	None	None	Heavy Rock Debris
93	AF-HL	2/3 L, 1/3 M	None	None	None
94	AF	L	None	None	None
95	AF-HL	VSc	None	None	None
96	AF	L-M	None	None	None
97	AF	M-H	None	None	None
98	AF	Gen L, Large Area of M	None	None	None
99	AF-Jagüey	Gen L	None	None	Teo Period Presence
100	AF	Gen L-M	2 Large Mds 26, 27, + 1 Poss	15	None
101	AF	2/4 Sc, 1/4 L	None	None	None
102	AF-HL	VSc	None	None	None
103	AF-HL	No Occ	None	None	None
104	AF-HL	Gen Sc, Small Area of M	None	None	None
105	AF-HL	Gen L	None	None	None
106	AF-HL	Half L, Half M	None	None	None

the urban core and in the space between the two barrancas. Associated with it was a heavy concentration of obsidian fragments, so this area was probably a ward of obsidian and figurine craftsmen.

Because of severe erosion on the site only 27 localities were identified as probable or definite mounds and even some of these were identified as mounds because of unusual concentrations of rock as well as sherds. A number of loci were identified as possible mounds because of similar but less clear conditions; almost certainly they represent the remains of destroyed mounds. In Table 4 we present data on these mounds with their associated architectural features. Of the 27 mounds found on the site, 12 have minimal diameters of 20 meters in both of their dimensions, larger than the size of normal Aztec residences. Among them are two which have dimensions of 75 by 115 meters and 75 by 75 meters and elevations of over 2 meters. Two other mounds have at least 20 meters or more in one dimension. Mound 10 is almost 2 meters high, both of its dimension are 25 meters and is bisected by a ditch that has exposed 16 meters of red stuccoed floor. This mound is located in Fields 25 and 32. Mound 23, in Field 73, is at the junction of the two barrancas and apparently once extended into what is now the presentday barranca bed. It is associated with the plaster floors exposed along the barranca cut that we noted previously. Much of the area adjacent to the mound is elevated and the entire area may be artificial, perhaps representing the remains of series of a major elite residential structures. It is comparable to similar mounds we noted at T.C. 12 and T.C. 9. Also recorded within the T.A. 80 site was a Tzacualli occupation (T.F. 196), and several areas of Mazapan occupation, recorded as T.T. 90, 92, 300, 305, and 306.

Ethnohistoric Information: Otumba was a cabecera and center of a corregimiento in the Early Colonial period. While its Relación Geográfica has not been located, a number of ecclesiastic documents refer to the town. In 1570-71 Otumba was the center of a large parish that included virtually all of the Upper Valley and a portion of the Middle Valley. During most of the 16th century it political domain apparently included Cuauhtlancingo to the west, a former cabecera (see discussion in T.A. 90-91), Ahuatepec (also a one time cabecera (see discussion on page 368), and a series of sujetos lying east and southeast of the town (see Chapter 12 for further discussion).

T.A. 90-91 (Fig. 95; Plates 91-92)

Classification: Very large village of varying density or one time regional center and small town with attach suburb (see ethnohistoric discussion in Chapter 12).

Natural Setting: The site is located at 2360 to 2365 m on the summit and slopes of the small "eagle" or "sun" hill of Cuahutlacingo (or Cuauhtlancingo). From Plaza Luna, the sun, which is also conceived of as an eagle in Nahuatl terms, would be seen rising over this hill in the early morning. The slope and bench are rocky, and overgrown with huizache and prickly pear. A shallow barranca runs northeast-southwest along the southern edge of the village. It has a maximum depth of only one meter and it is only three to four meters wide and may possibly be the remains of an ancient canal.

Modern Land Use: The modern low density scattered village of Cuahutlacingo covers the site area. The top is divided into large house lots planted in maguey, capulin cherry, and nopal. The village covers 160 hectares and in 1940 it had a population of 700 inhabitants, a density of approximately 440 per km^2. Generally this is an area of gentle slopes with shallow soils and only moderate erosion. Within the village are between nine and ten jagüeys. Maguey is grown and in the small house lot fields maize is also found.

Archaeological Remains: An extensive area, almost coterminous with the 20th century village, has continuous light to medium density occupation. Within the light and medium areas are localized areas of medium or heavy occupation. Within the village the survey located seven definite residential mounds, but also recorded approximately twenty-four localized areas of medium to heavy occupation, along with considerable rock debris, and varying in size from that of a typical Aztec residential mound to areas of 50-80 meters in diameter. The latter undoubtedly represents a cluster of residential structures. Survey also recorded several extensive areas varying from 2-5 hectares in size, which contain one or more of the noted localized areas and probably represent an even larger cluster of residences. Possibly some of these may have been the elite residences of the ancient community. Enough of the occupation remains to suggest a very extensive town site with heavily urbanized areas. Marino also noted in general survey a low mound underneath the church which he suggests represents the remains of a temple platform. Approximately 300 meters west of the church is a well preserved temple mound 30 meters in diameter and 10 meters high with an attached lower platform to the northeast. It is possible that the two temple mounds, the intervening area, along with the adjacent, heavily occupied, localized areas were part of the ceremonial-elite core of the town. Pitting in the temple mounds has exposed floor levels suggesting a history of rebuilding.

Northeast of the main body of the site is a detached ward, unfortunately not included in the intensive survey of the site, but recorded on the general survey map by Marino. It appears as a rectangle 700 meters by 250 meters of heavy occupation, or approximately 17.5 hectares. Attached to this is an area 300 x 200 meters (6 hectares) within which is a temple mound of the size comparable to that in the main village area.

To the south of what we define as the town site of Cuahutlacingo and separated from it by only the shallow barranca described above, is an extensive area of Aztec occupation which we have designated T.A. 91. This area covers approximately 80 hectares and within it survey reported approximately 31 mounds, usually occurring in a series of separate clusters. Additionally, survey disclosed four extensive areas within which were three to seven loci of heavy occupation, each representing a destroyed mound cluster, with only a few surviving mounds. Within one of these we found an obsidian workshop. We estimate that originally T.A. 91 must have had at least 60-70 residential structures, possibly more, a kind of suburban extension of T.A. 90. Based on this assumption, we estimate that the total site area of the town was approximately 200 hectares or very close to that of Otumba, and, at its peak, the town may have had a population comparable to that of the Otumba town site.

Ethnohistoric Information: Cuauhtlancingo, prior to Nezahualcoyotl's reign at Texcoco was a cabecera with its own tlatoani. It was demoted by him to direct sujeto status to Texcoco. In the Early Colonial period it was a sujeto of Otumba.

T.A. 39 (Fig. 96; Plates 93, 94

Classification: Small dispersed village.

Background: This site consisted of a northwest-southeast linear band of settlement on the same interfluve T.A. 37 and T.A. 38 being the northernmost of the three sites. It was surveyed towards the end of the 1964 field season and the intensive survey was limited to an area northwest and southeast of a road that traverses the center of the interfluve (see Fig. 96). The intensive survey was terminated at the road because of lack of time, but a relatively large area north of the road was briefly examined and did reveal the presence of extensive Aztec occupation that probably extended as far as the east barranca, which defines the site, and runs south-north. If this conclusion is correct then the site area would be double that which was intensively surveyed. A brief summary of that preliminary survey is appended to this description here. Finally the

Figure 95

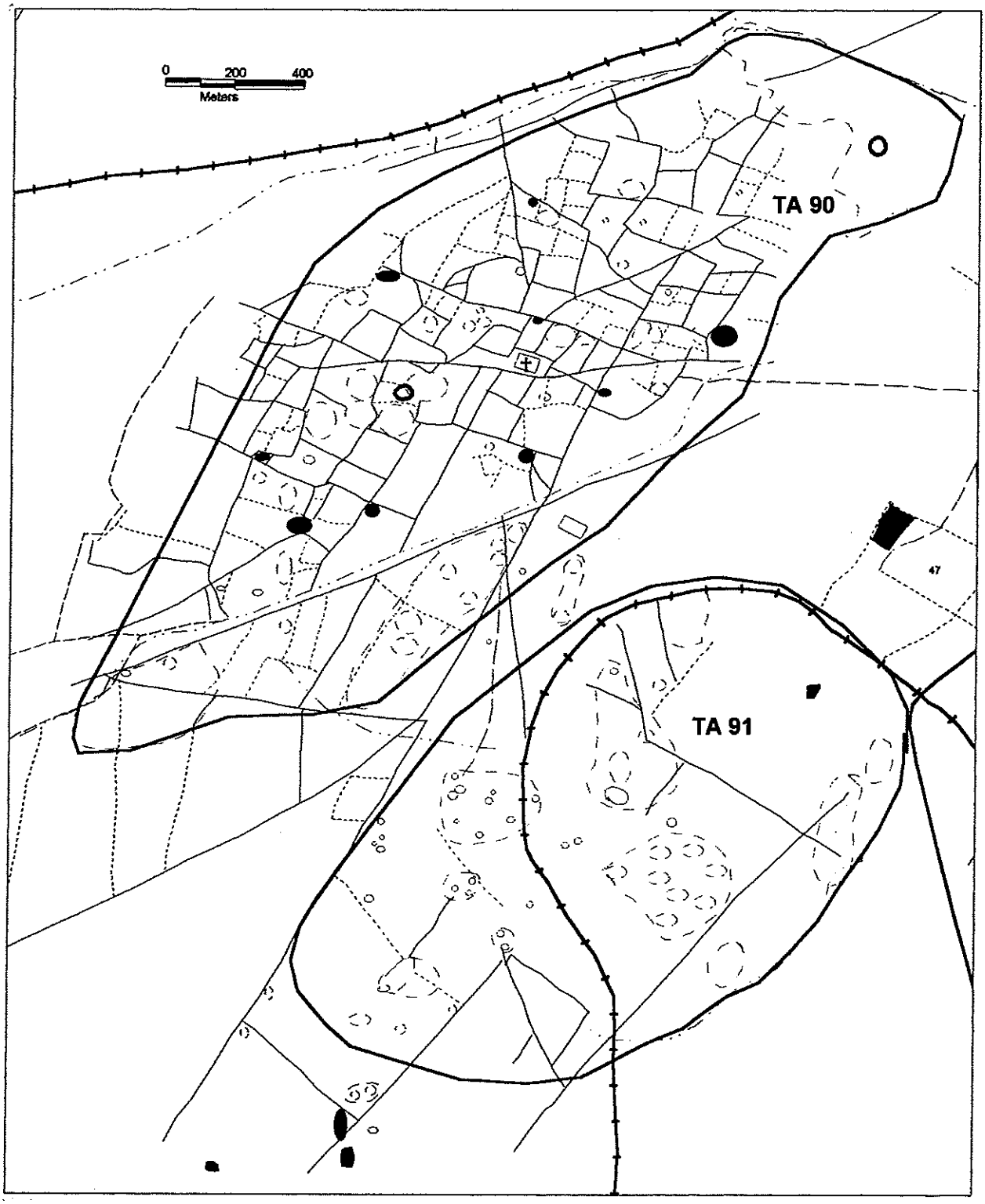
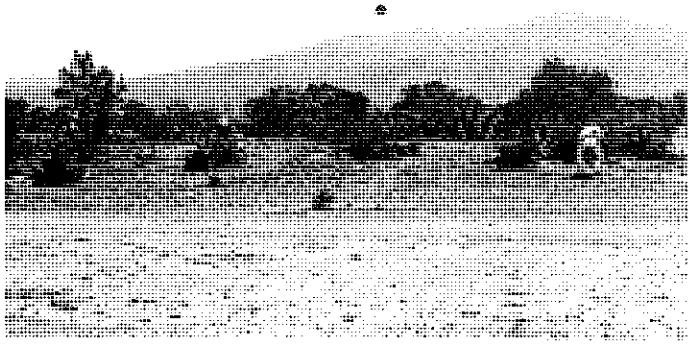
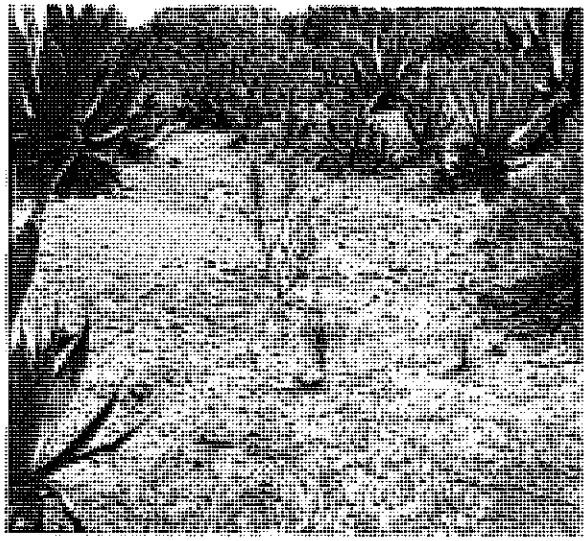


Plate 91

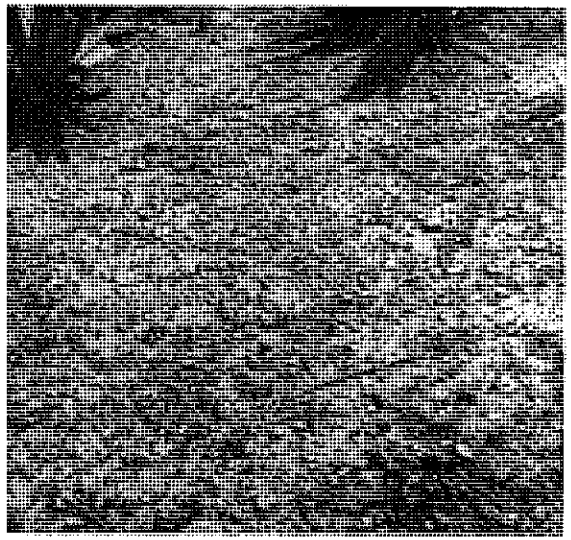
A



B



C

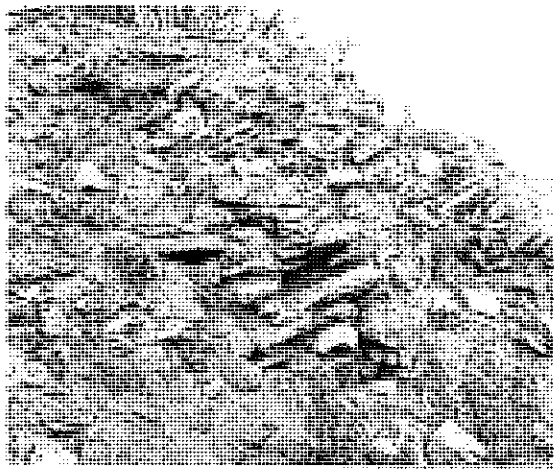


D

Plate 92

A

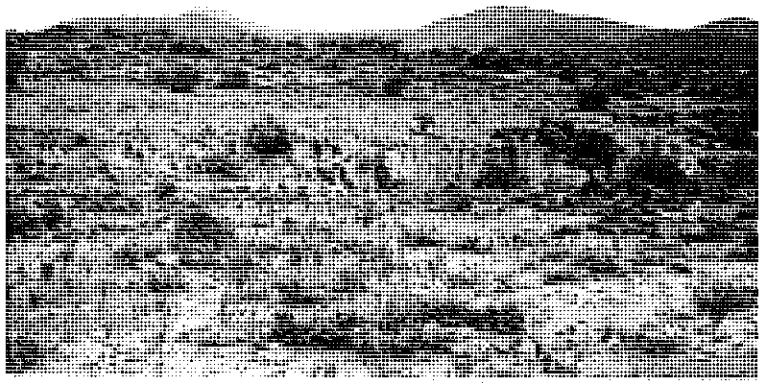
B



C

D

Plate 93



A

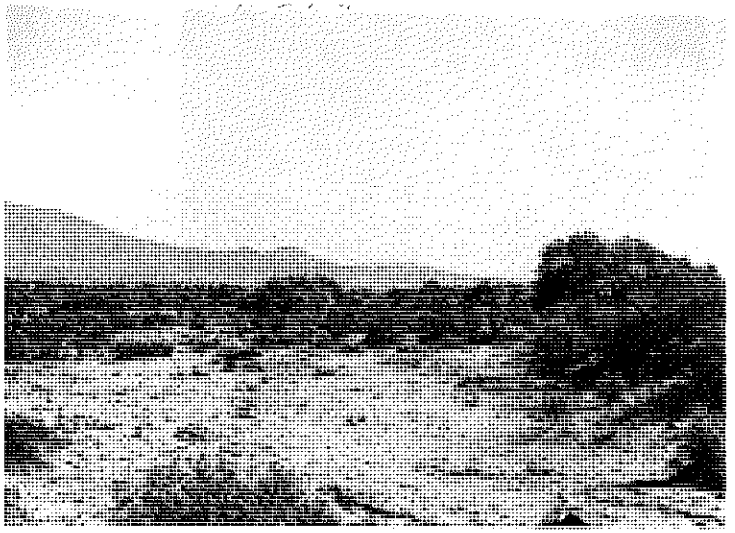
B

C

D

Plate 94

A



B

C

D

boundary between T.A. 39 and T.A. 56 to the southwest is a very arbritary one, based entirely on the fact that a barranca runs between the two sites. Occupation, however, on both sites runs to the very edge of the barranca.

Natural Setting: T.A. 39 occupies part of a gently sloping interfluve between two major north-south barrancas. The western barranca is 30-50 m wide and 5-15 m deep. Since the survey did not reach the east barranca we have no observations on it. In general soil depth over the site varies from 10-50 cm where present, and a small alluvial plain with several meters of soil was located west of Mound 126 next to the barranca. A major wash runs southeast-northwest through the northeastern portion of the site and is 10-30 m wide. Pirul and maguey are common plants on the site and along the barranca are heavy concentrations of pirul, thorn bush, wild nopal, and miscellaneous herbs. Most of the site has suffered some level of erosion. Site area is between 2400-2450 m.

Modern Land Use: The Rancho las Jacarandas is located on the eastern edge of the site. Two large jagüeys, one immediately northwest of the site and one near Mound 111 are found in the site area. Much of the area was planted in maguey. There are numerous drainage ditches, water collection ditches, and brush and stone dams across the washes. Much of the site belongs to the Hacienda Tepa.

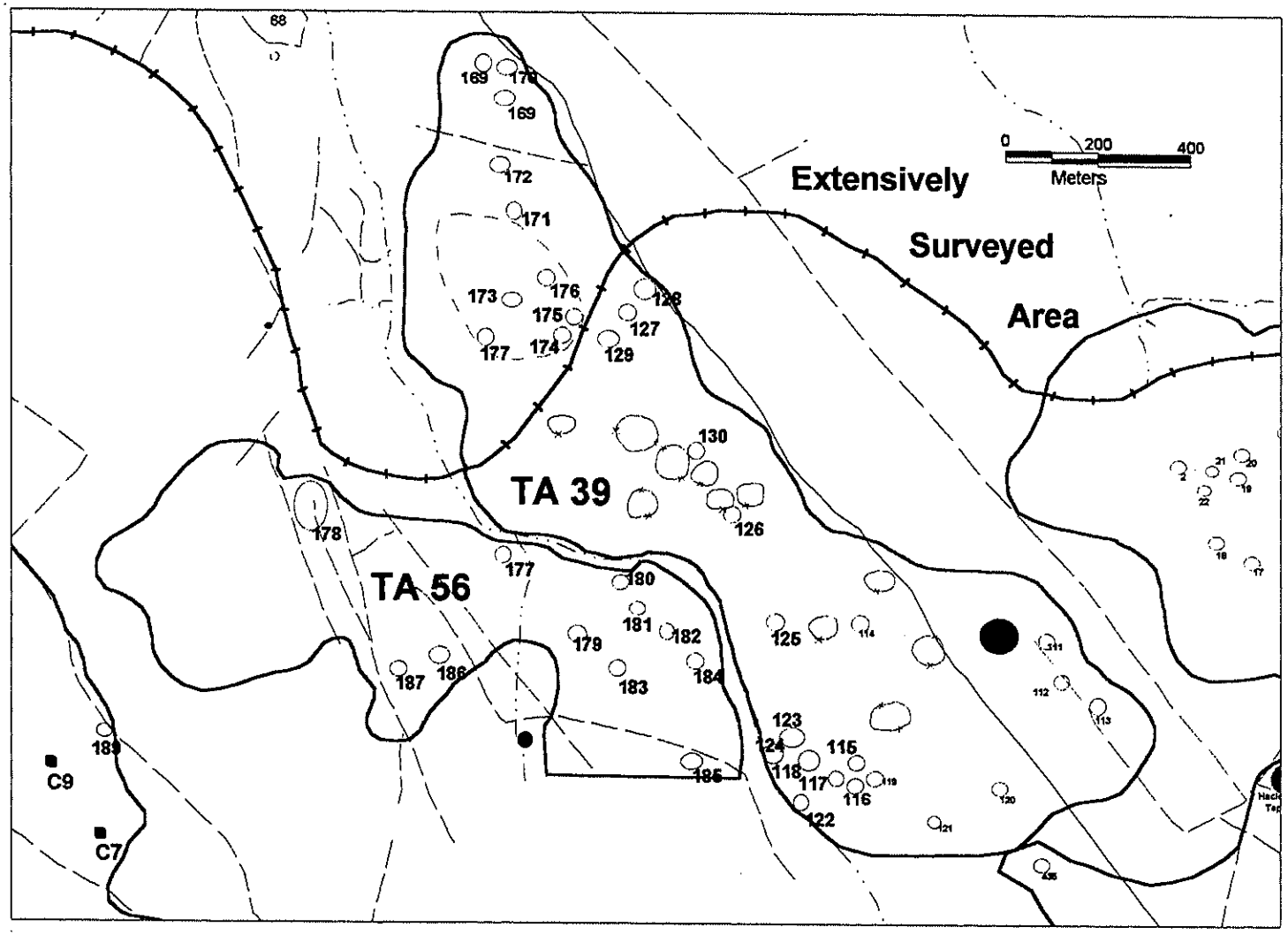
Archaeological Remains: Twenty-nine mounds were found, evenly distributed throughout the site. Rubble and sherd concentrations, however, indicate the former existence of a number of others. All seem to be of the small residential type varying from 15-30 m in diameter and 0-50 cm in height. The total site area is 101 ha.

Substantial concentrations of obsidian chips and flakes occur in numerous areas on this site (see Fig. 96), almost certainly workshops; obsidian processing seems to have been a major non-agricultural activity in the ancient community.

North of and outside the area of intensive survey of T.A. 39 is an area of flat terrain and good soil cover, averaging 50-100 cm in depth, covered with well maintained maguey fields that belong to the Hacienda Tepa. Very little erosion has occurred in this area. A brief preliminary survey indicated that Aztec occupation was substantial, particularly in the south central portion of the area, where we recorded medium to heavy densities. Two definite mounds were located and heavy obsidian workshop debris was found through most of the area that was surveyed.

Ethnohistoric Information: In the Early Colonial period this site was probably Los Reyes Tepan, a sujeto of Otumba

Figure 96


Extensively
Surveyed
Area
0
200
400
Meters
TA 39
TA 56
C9
C7
169
170
172
171
173
176
175
128
127
177
174
129
130
126
178
177
180
181
182
179
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121
68

Plate 95

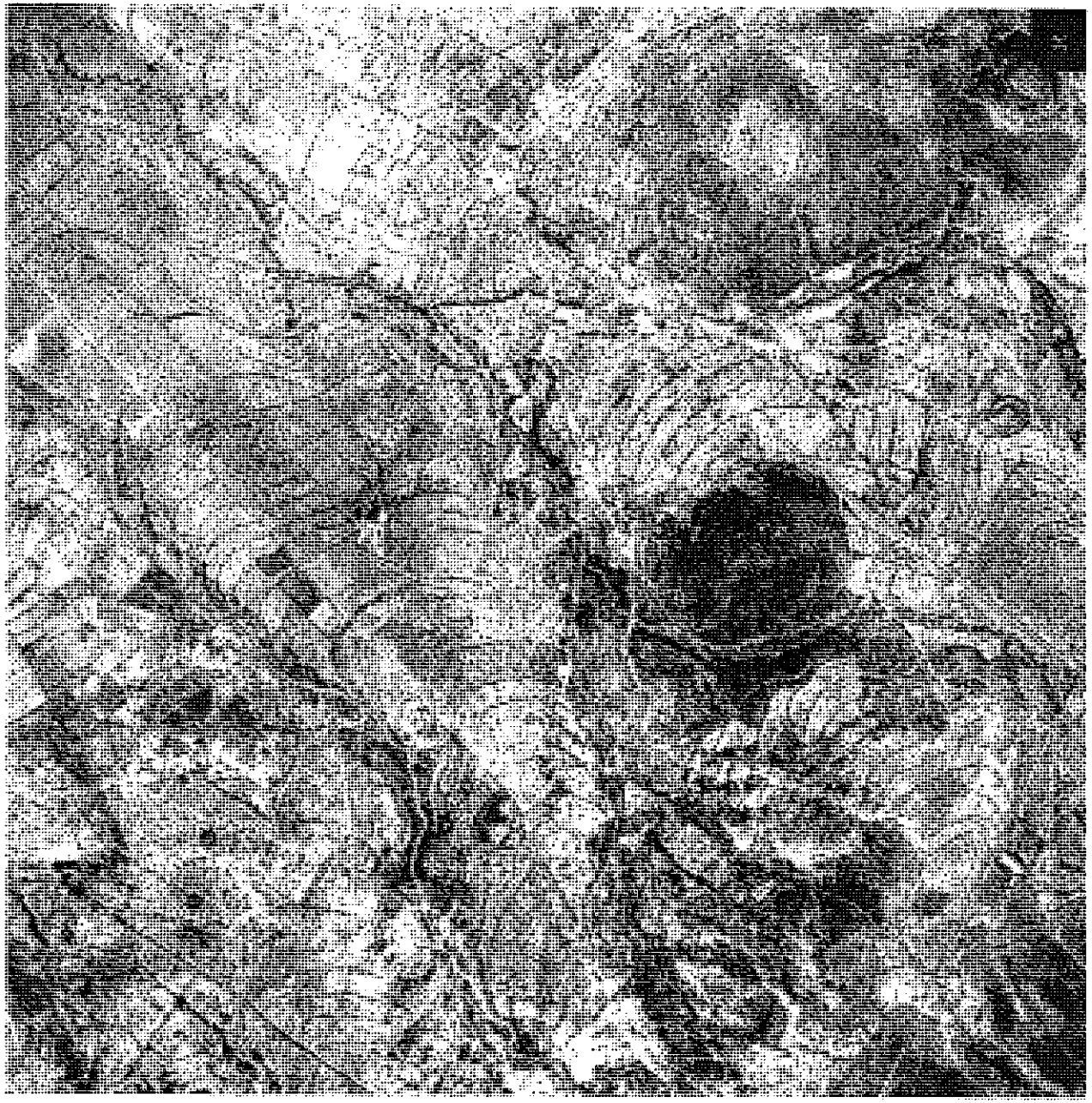


Figure 97

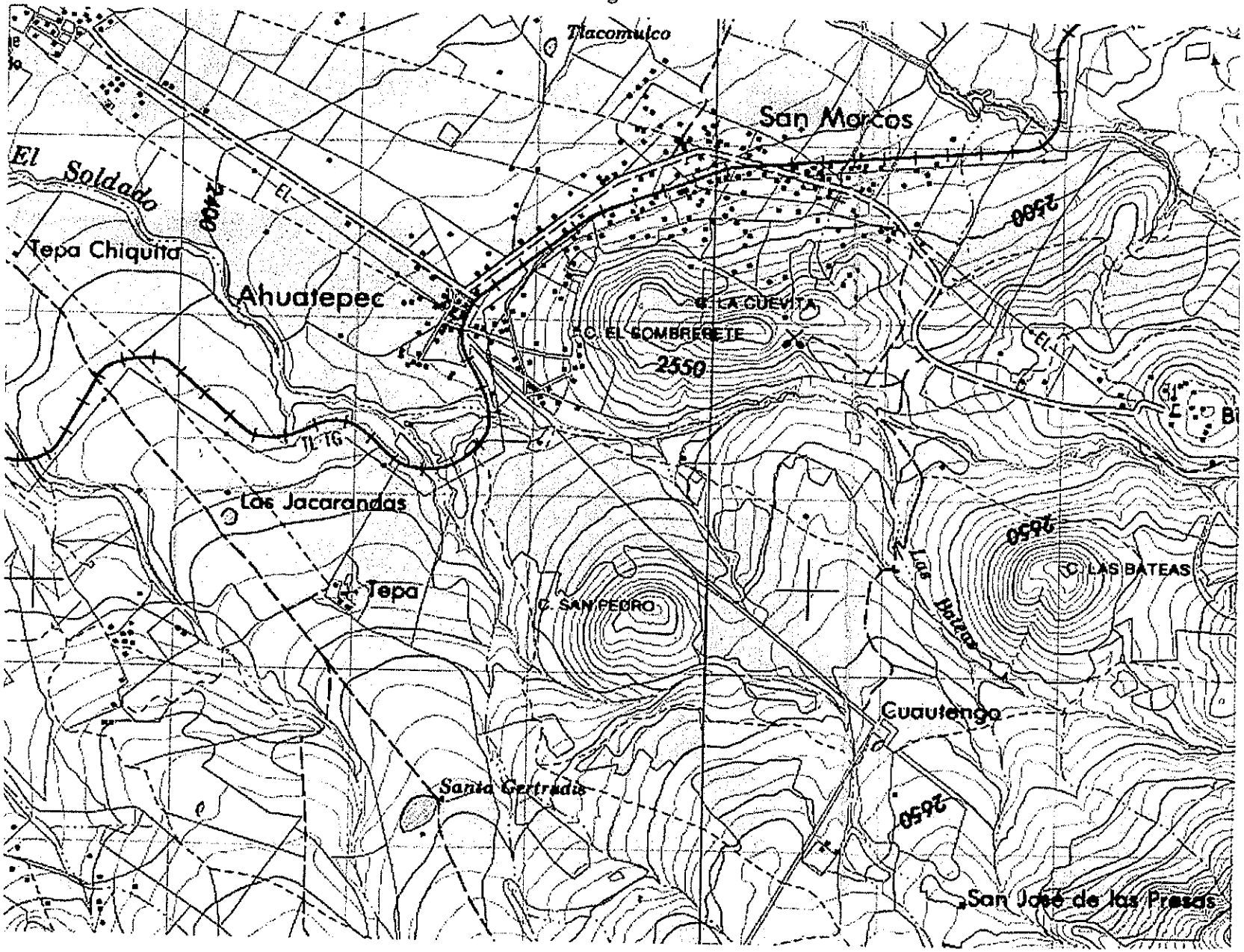
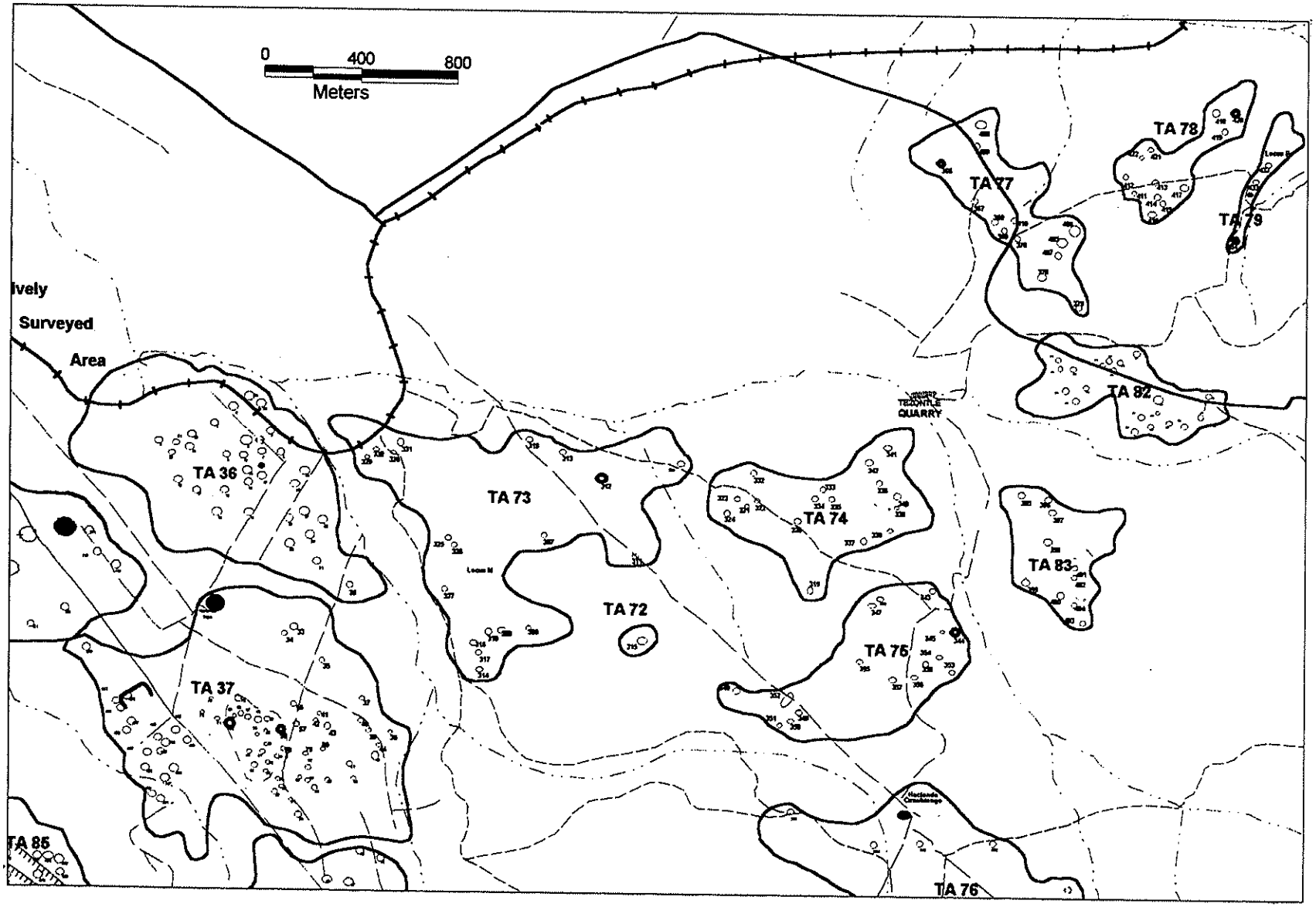

Nacomulco
San Marcos
El Soldado
Tepa Chiquita
Ahuatepec
C. LA CUEVITA
C. EL SOMBRERETE
2550
Las Jacarandas
Tepa
C. SAN PEDRO
C. LAS BATEAS
Las Huertas
Cuautenco
Santa Gertrudis
San José de las Presas

Figure 98


0
400
800
Meters
ively
Surveyed
Area
TA 36
TA 37
TA 73
TA 72
TA 74
TA 75
TA 76
TA 77
TA 78
TA 79
TA 82
TA 83
TA 85
TEZONTLE
QUARRY

14. ZONE 15: UPPER VALLEY: THE AHUATEPEC PIEDMONT (Figs. 97, 98; Plate 95)

This zone embraces the area running east of the town of Otumba. In contrast to Zone 13 it is predominantly an area of closely spaced volcanic cones. The Aztec settlement pattern is typical of areas of this type, consisting of line villages on the lower flanks of the hills. The pattern was very much like that of the present day village of Ahuatepec. In the early 15th century Ahuatepec was a cabecera, probably with the sites located in Zone 15, along with T.A. 81 in Zone 16, as its sujetos. Nezahualcoyotl in the 15th century demoted it to sujeto status to Texcoco. In the mid 16th century the town and its tributary domain were part of Otumba's civil domain. The spatial locations of the subject communities are less clear than in Zones 13 and 14, but did definitely include the following settlements, San Martin Teocali, Xaxalpa, Nopalcalco, Tocoma, Xocoyoltepec, Tlatenco, Tliltepec, Cotonlo, and Posuhtecali.

T.A. 36 (Fig. 99; Plate 96 A)

Classification: Small dispersed village

Natural Setting: This site is located on a gently sloping interfluve, on lands belonging to the Hacienda Tepa. 2400-2450 m. A major barranca runs southeast-northwest along the eastern and northern margins of the site. It is 10-35 m wide and 15-35 m depth where it borders the site. Soil depth over the site varies and there are numerous areas of tepetate. Average soil depth in the area where soil is present is 15-20 cm; near the major barrancas this rises to 30-100 cm. Pirul trees are widely distributed around the site and concentrations of wild nopal, thorn bush, and miscellaneous cacti occur in some areas. Maguey is ubiquitous on the site.

Modern Land Use: South of the site are located the main buildings of the Hacienda Tepa which has a very large jagüey associated. The Mexico City - Veracruz railway runs through the northern portion of the site. A small jagüey within the site, near Mound 13, and a very large one are found southwest and within the borders of T.A. 39. This is mostly an area of maguey cultivation with very few other crops. South of the site and around the hacienda are numerous maguey bancals planted in maize. Numerous ditches and check dams are found on the site. Some of the terrace remnants may be ancient. In general the site is located in marginal land, compared to the nearby surrounding areas.

Archaeological Remains: Thirty-two mounds were identified, including very poorly preserved as well as well defined ones. These occur in a broad continuous arc through the center of the site. In numerous areas, however, localized rock and sherds suggest former mound locations. All but Mound 8 are of the typical small residential type. Mound 8 was higher and somewhat larger in extent but it is associated with domestic refuse, suggesting a upper status residence rather than a ceremonial structure. It is 1 m high and 25 m in diameter. The others mounds vary from 10-25 m in diameter and 0-50 cm in height. Total area 72 ha.

In some areas of the site obsidian, in the form of chips and flakes, was particularly heavy, especially around Mounds 23-24, and west of Mound 36, and suggest the presence of workshops. All are close to the big barranca and the obsidian probably came from the bed of this stream.

Ethnohistoric Information: See above this page.

Figure 99

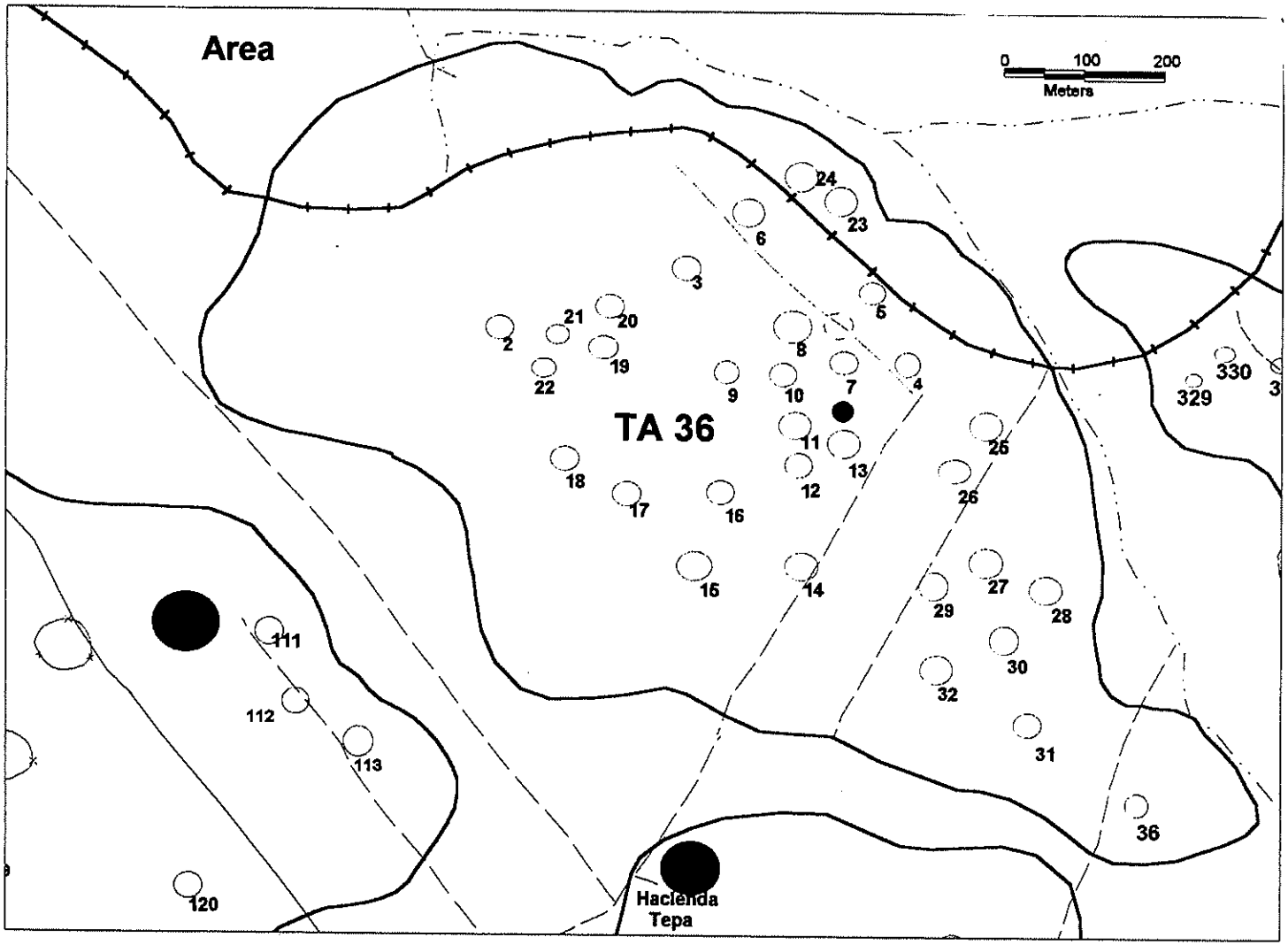
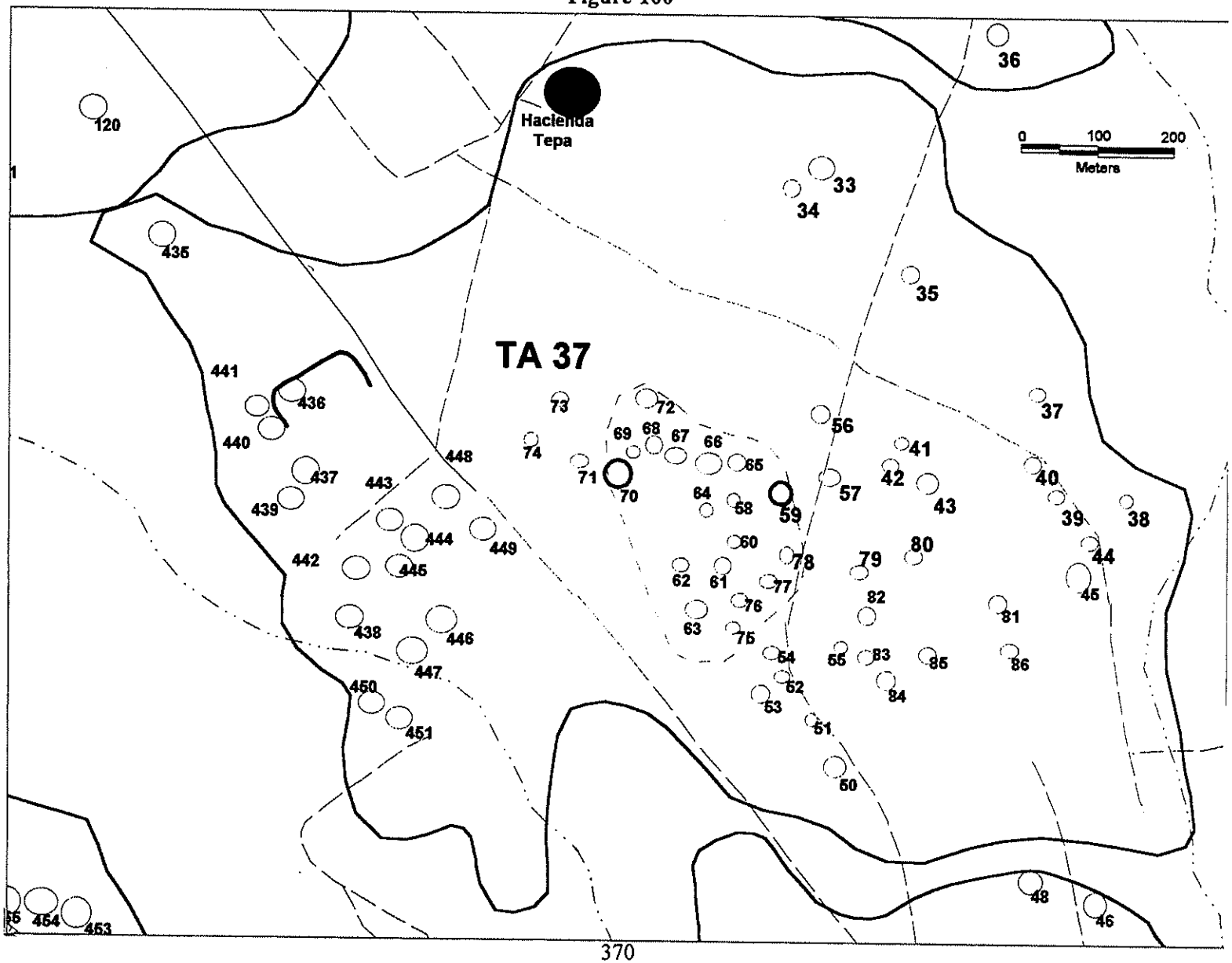

Area
0
100
200
Meters
TA 36
24
23
6
3
5
21
20
2
8
19
22
9
10
7
4
330
329
11
25
18
13
12
26
17
16
15
14
27
29
28
30
32
31
36
111
112
113
120
Hacienda
Tepa

Figure 100


Hacienda
Tepa
TA 37
0
100
200
Meters
120
36
33
34
435
35
441
436
440
437
439
443
448
444
449
442
445
438
446
447
450
451
73
72
74
69
68
67
66
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64
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455
454
453

Figure 101

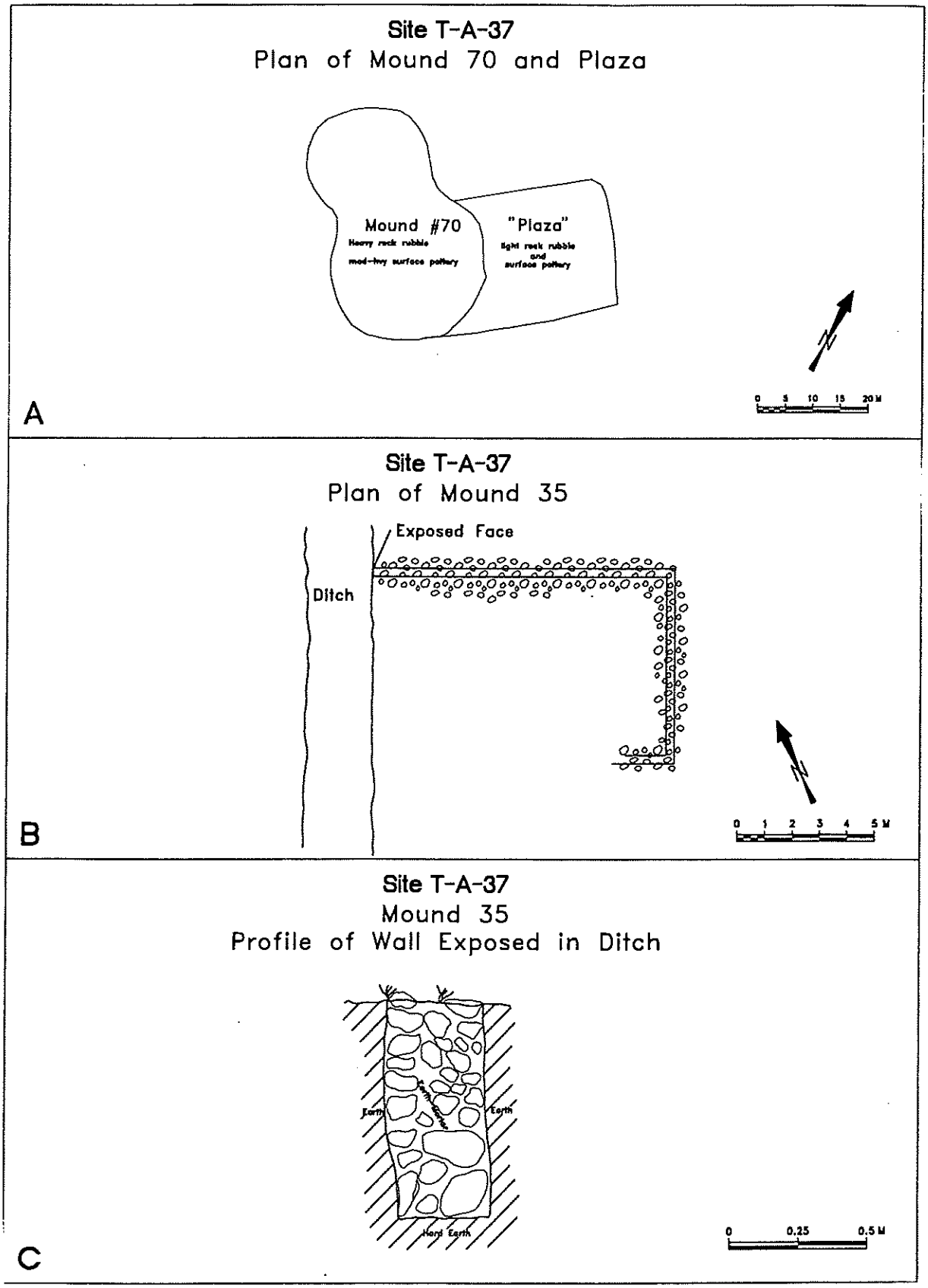
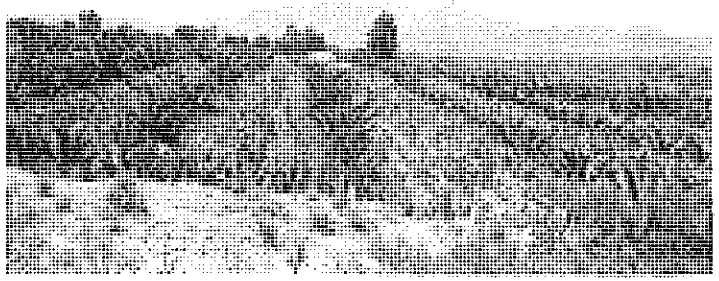

Site T-A-37
Plan of Mound 70 and Plaza
Mound #70
Heavy rock rubble
mod-hvy surface pottery
"Plaza"
light rock rubble and surface pottery
0 5 10 15 20 M
A
Site T-A-37
Plan of Mound 35
Exposed Face
Ditch
0 1 2 3 4 5 M
B
Site T-A-37
Mound 35
Profile of Wall Exposed in Ditch
Earth
Earth
Hard Earth
0 0.25 0.5 M
C

Plate 96

A



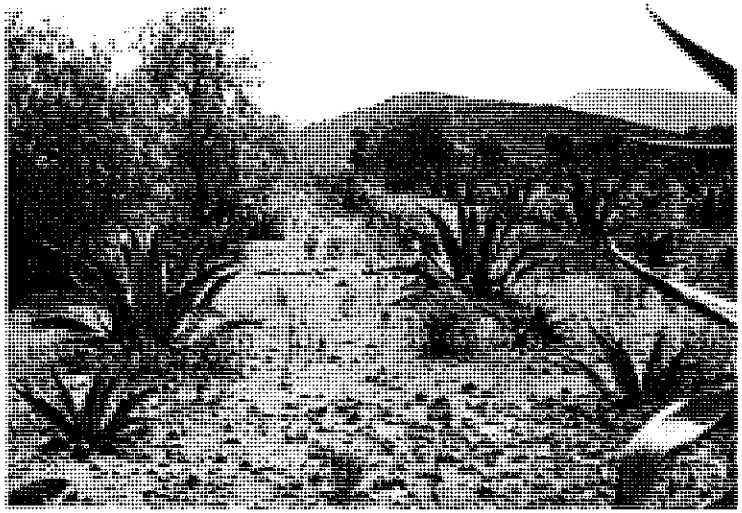
B

C

Plate 97

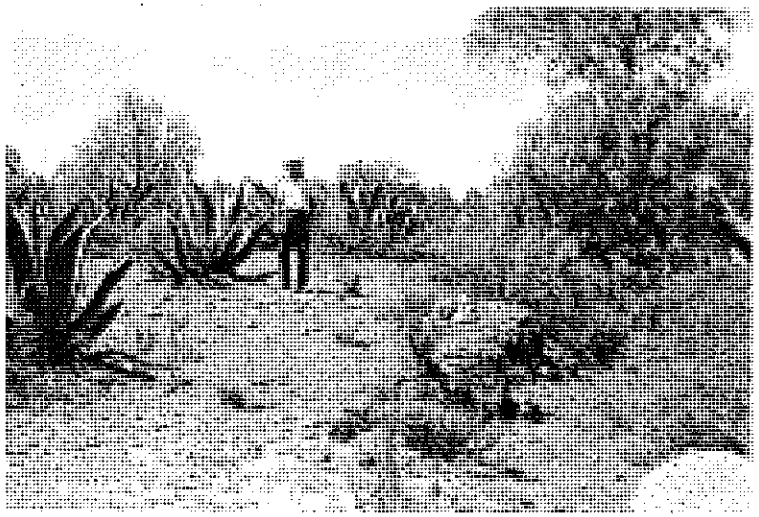
A

B

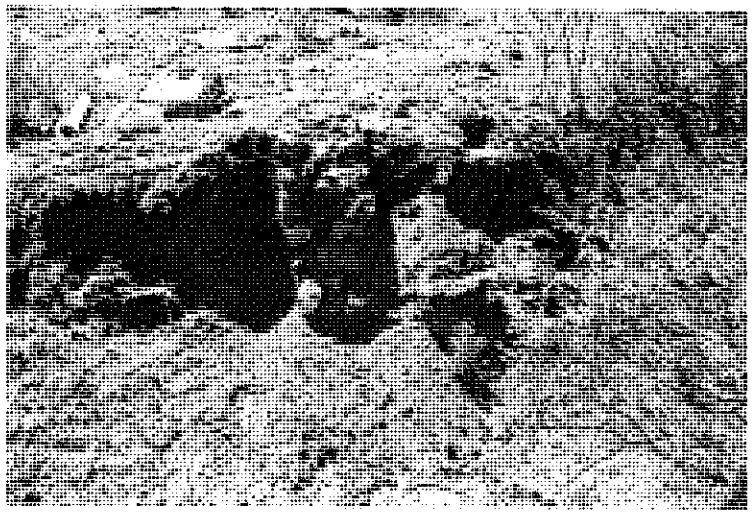


D

Plate 98



A



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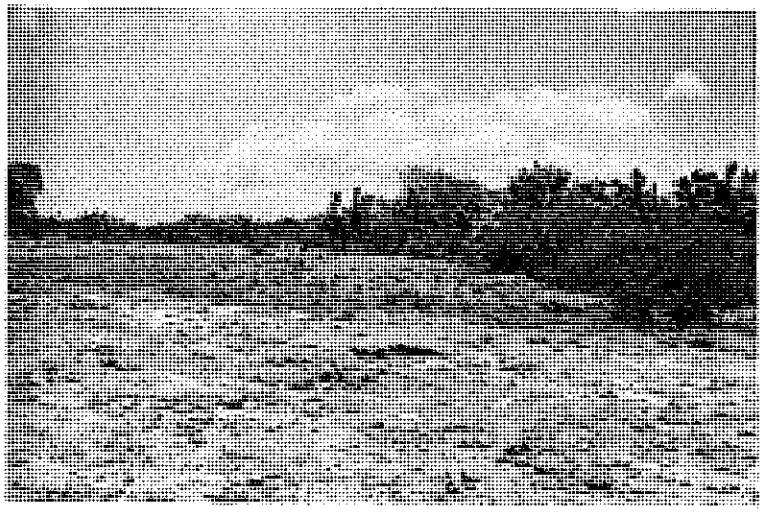

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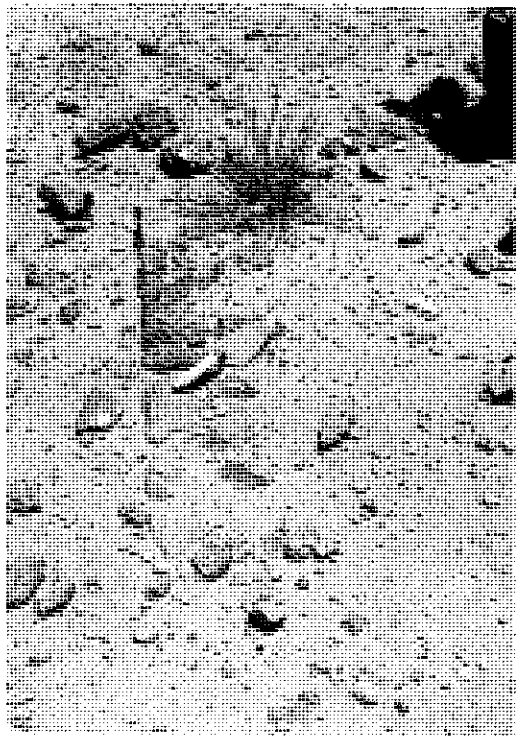

T.A. 37 (Figs. 100, 101; Plates 96-98)

Classification: Large dispersed village

Natural Setting and Modern Land Use: This site is located on an interfluve between two major barrancas which run southeast-northwest along the western and eastern margins of this site. They vary from 20-60 m in width, and 10-25 m in depth. Their tributaries are 3-15 m wide and up to 15 m deep. Numerous wash areas were present where tepetate was exposed and which run generally south-north. The areas adjacent to the barranca also have large zones of exposed tepetate. Within the site and its north central area are the buildings of the Hacienda Tepa and a large jagüey is associated with them. Near Mound 78 is an abandoned jagüey that may be ancient. It is 30 m in diameter and 3-4 m deep. Most of the site is occupied by maguey occurring in a series of complex bancal-ditch systems. Some floodwater irrigation was noted near the hacienda where maize and barley are intercropped on the bancals. Elevation 2450-2500 m.

Archaeological Remains: The survey identified 44 mounds in various stages of preservation. Sherd and rock concentrations are numerous, however, in the severely eroded areas marking the location of destroyed mounds. The vast majority of them occur in two dense clusters, one in the center of the site, the other in the west central portion; all but Mounds 59, 70 seem to be typical small Aztec residential structures. Mound 59 is 2 m high and 25-30 in diameter, Mound 70 is 1.5 m high and 25-30 m in diameter. Their appearance suggests a ceremonial function but they may be high status residences judging from the surface refuse. A small plaza seems to be attached to Mound 70 on its east side measuring 25 x 20 m. The other mounds vary from 15-40 m in diameter, and vary from 0-50 cm in height but the better preserved ones, i.e. those that have not been scattered through erosion, average 15-30 m in diameter. A ditch has cut through Mound 35 revealing a stone wall 85 cm high and 35 cm thick, resting on an earth floor. Total area 102 ha.

A heavy concentration of obsidian blades, chips, flakes and scrapers was located southeast of the hacienda which may be the remains of a workshop. Scattered appearance of Mazapan occupation (T.T. 303) is noted in the central area of the site. T.A. 37 may be the center of a large rural community that includes T.A. 36 and T.A. 38.

Table 15 T.A. 37 Western Cluster of Mounds - Observations

Mound #	Prob. Function	Height (cm)	Size (m)	Sherd	Rock	Comment
435	Res.	25	15-20	L-M Az	Medium	
436	Res.	25	15	L Az	Heavy	Questionable
437	Res.	20-25	15	L-M Az	Heavy	
438	Res.	15-20	10-15	M Az	Heavy	
439	Res.	25-30	15-	M Az	Heavy	
440	Res.	25	20	M Az	Heavy	
441	Res.	15-20	15-20	L-M Az	Heavy	
442	Res.	0-20	15	L-M Az	Medium	

443	Res.	15-20	20	L-M Az	Heavy	
444	Res.	25-50	20-25	M Az	Heavy	
445	Res.	0-20	20-25	L-M Az (3,4)	Heavy	Badly Eroded
446	Res.	Imp	10-15	H Az	Heavy	Badly Eroded
447	Res.	75	20	M-H Az (3,4)	Heavy	Badly Eroded
448	Res.	0-75	25	M Az	Heavy	Badly Eroded
449	Res.	25-50	25-30	M Az	Heavy	Badly Eroded
450	Res.	25-50	15-20	M Az	Heavy	Badly Eroded
451	Res.	Imp	10-15	M Az	Heavy	Badly Eroded
Loc. Q	20x20 m Area of Heavy Rock Rubble, L-M Az, L Mazapan					

Ethnohistoric Information: This may be the 16th century community of San Mateo Tepan, a sujeto of Otumba.

T.A. 77 (Fig. 102; Plate 99)

Classification: Small dispersed village.

Natural Setting: Gentle slope. Soil is tan to gray-brown sand loam. Erosion is moderate to very severe. Soil depth varies over site area. Lower lying fields to the north average 30-75 cm; in higher country to the south the fields average 20-40 cm of soil. Much of the site is badly eroded, and reduced to bare tepetate, particularly along the western margin. The site lies between 2450-2550 m.

No permanent streams or springs. No major barrancas in immediate vicinity of site area. Two small barrancas run southwest-northeast in south-central part of site area, both averaging about 2-6 m deep, 8-10 m wide, deepening to the north. The whole western margin of the site area has been badly washed. Small washes occur over all the site area.

Pirul common over site area. Maguey occurs in most fields. Some thorn bush and wild nopal are found along the small barrancas, and on steeper hillslopes to SE of site area.

Modern Land Use: the village of San Marcos (a dispersed line village) begins at the NW end of the site. Four modern occupied house lots occur at the NE end of the site. Two modern ruins occur in this same area. Three occupied house lots and 3 abandoned houses occur just outside the northern site boundaries. Ruins of a large building complex, perhaps a hacienda, occur to the SW of Mounds 369 and 370. Another large ruined building complex occurs to SE of SE end of site, on land belonging to Rancho de las Papas.

One functioning jagüey occurs to the south of Mound #409 in the northern part of the site. Two abandoned jagüeys occur NE of Mound #410. A second functioning jagüey is located outside the site area,

to the west of mound #378. A third functioning jagüey just north of site area, to NW of Mound #408.

The southern portion of the site is predominantly maguey and pasture. The western margin of site is a badly eroded wasteland, the northern part is primarily devoted to temporal cultivation (with slight use of floodwater irrigation) of maize, barley, and beans, plus maguey. Haba beans occur as a significant secondary crop. Squash and peas occur as minor crops. State of growth in 1964 was variable, with maize ranging from 0.15-1 m; barley 5-20 cm; beans 10-15 cm. Bancals occur as field boundaries all over site. Some maguey terracing in the area of Mound #405, and around #408, 409. Drainage ditches are usually associated with bancals around field borders. A few small stone dams across barrancas and washes for purposes of diverting floodwater into cultivated fields. Municipio: Otumba; village: San Marcos

Archaeological Remains: A total of 13 mounds were located. All appear to be domestic structures except for #366, and possibly #379. Occupation is dispersed, with only a slight degree of concentration in the SE portion of the site. Site runs linearly southeast-northwest. Mounds are in a fair to poor state of preservation, varying from little more than rock rubble on bare tepetate, up to 1.5 m high, with an average of 50 cm Visible deposits show uniform earth and rock rubble, with one exposed stone wall. Erosion has been particularly severe in western margin of site. No excavation noted. Mound #366 badly pitted; #369 slightly pitted, as is #410 (which has an exposed stone wall remnant). The site area is approximately 24 ha. Other occupations on the site include traces of Cuanalan, coded as T.F. 291, and traces of Patlachique, coded as T.F. 292, and a definite Mazapan occupation, T.T. 188.

Pottery is sparse to moderate, localized and variable. Obsidian tools were fairly common, particularly blades and scrapers. Several manos and metates noted, as well as a few figurines, spindle whorls, and pottery disks. Obsidian is concentrated to the south of Mound #407.

Ethnohistoric Information: See page 368

Table 16 T.A. 77 Mound Observations

Mound #	Prob. Function	Height	Size	Sherd	Rock	Comment
336	Cerem.	1-1.5 m	ca. 25 m	L-M Aztec; L Modern	Heavy	Ceremonial?; Badly Pitted
367*	Res.	0.5-1 m	ca. 20 m	M Aztec	Heavy	Severe erosion in area may have exaggerated ht of the mound
368	Res.	v. low	20-25 m	M Aztec	Heavy	Badly Eroded
369	Res.	0.5-1 m	25-30 m	M Az; (3 &4)	Heavy	
370	Res.	50 cm	ca. 15 m	M Az; (4)	Heavy	
378	Res.	50-75 cm	ca. 25 m	L-M Aztec; L Maz; ^% cream slipped	Heavy	
379	Cerem.	50-75 cm	ca. 15 m	L Az	Heavy	Ceremonial: questionable; on a steeper slope than usual for structures
405*	Res.	v low	ca. 30 m	M Aztec	Heavy	Badly Eroded
406*	Res.		ca. 50 m	M Aztec	Heavy	Badly Eroded. Cut thru by road-wash
407*	Res.		ca. 25 m	L-M Aztec; L Maz	Heavy	
408	Res.	v. low	ca. 50 m	M Aztec	Heavy	Badly Eroded
409	Res.	v. low	ca. 25 m	L-M Aztec	Heavy	Badly Eroded
410	Res.	0-0.2 m	ca. 10 m	L-M Aztec	Heavy	Ill-defined; pitted in center; exposed stone wall

Figure 102

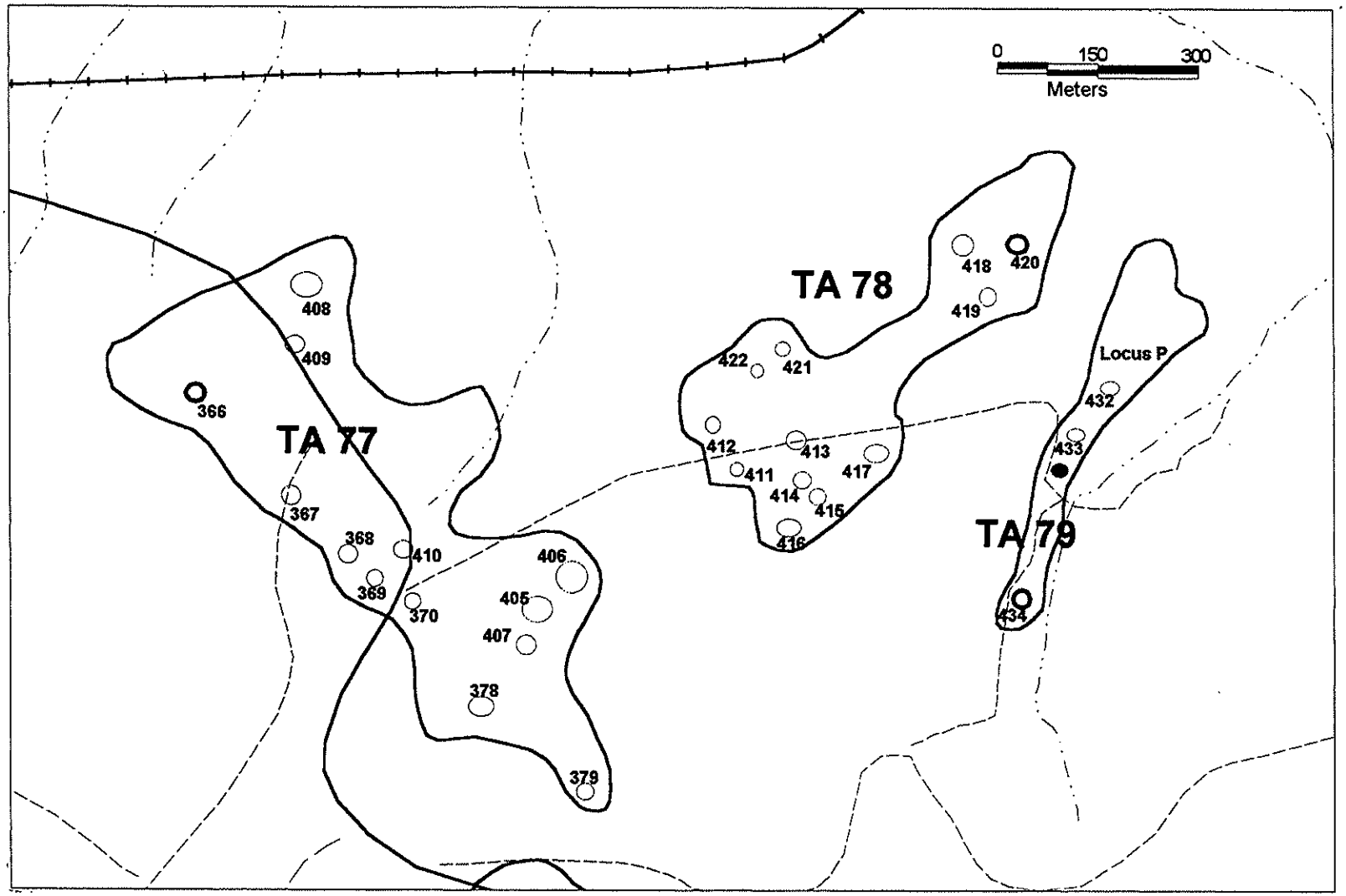
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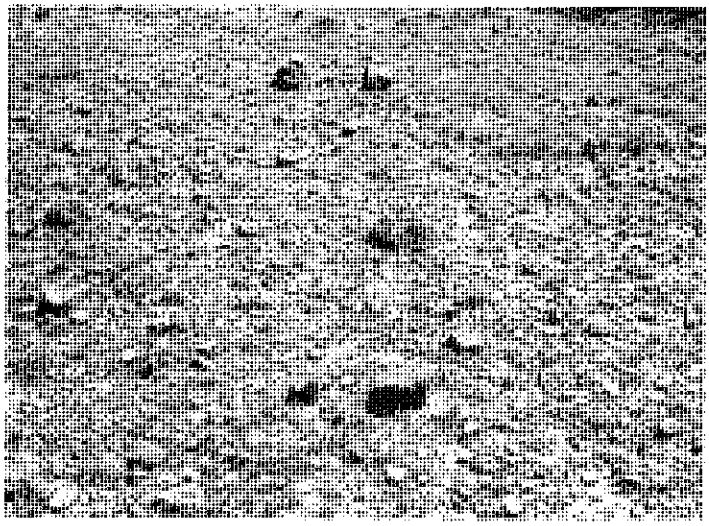
Plate 99



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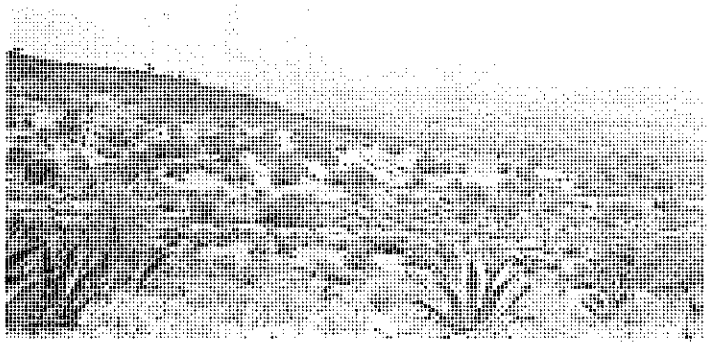

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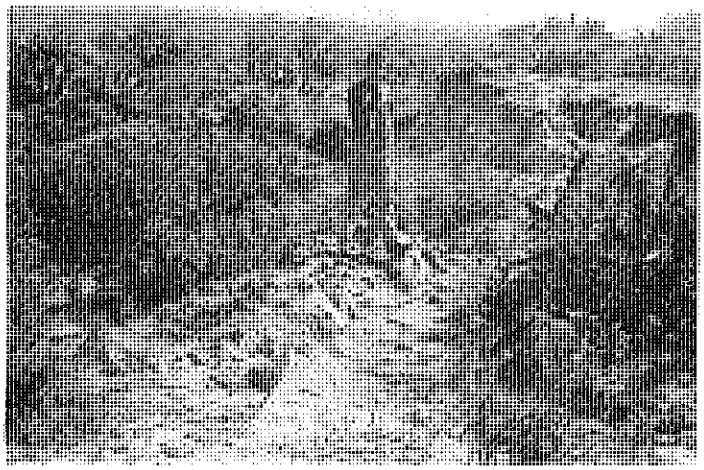

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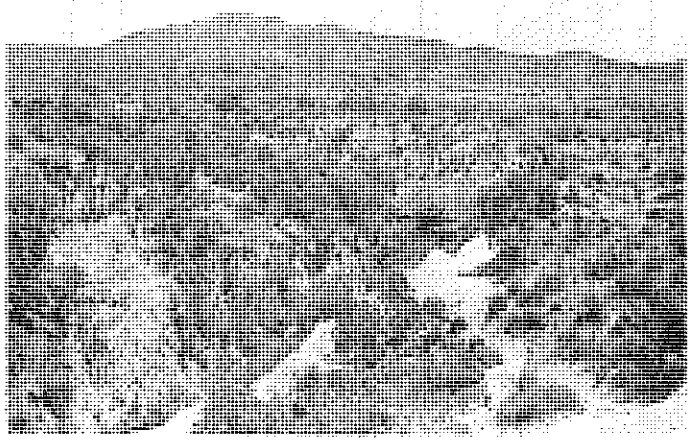
Plate 100

A



B

C

T.A. 78 (Fig. 102; Plate 100)

Classification: Hamlet or small dispersed village

Natural Setting and Modern Land Use: Upper valley, gentle slope. Soil is tan to gray-brown sand loam. Erosion is moderate to severe. Soil depth is generally shallow over site area, seldom exceeding 50 cm, and averaging about 20 cm. Sizable areas of bare tepetate. Profile on small barranca to northeast of Mound #421 shows about 1.5 m of alluvial soil at this point. Elevation 2500-2550 m.

No permanent streams or springs. No major barrancas occur in the immediate vicinity of the site area. Two small barrancas run southeast-northwest across the southwest end of the site, about 2-3 m deep and 8-10 m wide. A very large barranca runs east-west, about 250 m to the north of site boundary--averages about 50-75 m deep and 75-125 m wide. The entire site is a large wash area, with two distinct washes cutting across the north-central part of the site. Pirul is common over the site area. Maguey occurs in most fields. Some thorn bush and wild nopal are found along the small barrancas, and on steeper hillslopes to the southeast of site area. Municipio: Otumba; village: San Marcos; owner: Rancho de las Papas.

Archaeological Remains: Twelve mounds are found on this site, fairly evenly distributed. All but one (420) are probably residential structures. Some Mazapan was found at Mound 414 and all mounds generally have significant erosion. Several possible Aztec stone/earth terraces were noted, particularly above Mounds 415, measuring 50-75 cm high, and 8-10 m. wide, and Mound 415 lies on a terrace 1-1.5 m high, and 30 m long. Obsidian outcrops and buried deposits occur on the hill northeast of the site and heavy obsidian concentrations, cobbles and flakes, occur over the northern part of the site. Surface area 12 ha.

Table 17 T.A. 78 Mound Observations

Mound No.	Prob. Function	Height (cm)	Size (m)	Sherd	Rock	Comments
411	Res.	20-40	15-20	L-M Az (3)	Heavy	Poorly Defined
412	Res.	40	10	L-M Az (3)	Medium	
413	Res.	75-100	30	L-M Az, L Maz	Heavy	
414	Res.	0-30	20	M Az, Tr Maz	Heavy	Badly Eroded
415	Res.	25	15	L-M Az	Heavy	Resting on a Stone Terrace 1-1.5 m High and 30 m Wide
416	Res.	25-50	20-25	L-M Az	Heavy	On a Steep Slope
417	Res.	15-30	20	L-M Az	Heavy	Poorly Defined
418	Res.	0-75	35-40	L-M Az	Heavy	Severely Eroded, Poss. Remains of 2 Structures
419	Res.	50-75	30	L-M Az	Heavy	Badly Eroded
420	Cerem.	150	15	L Az	Heavy	
421	Res.	0-50	35	M Az (3)	Heavy	Badly Eroded
422	Res.	25-50	25	M Az (3,4)	Heavy	

Ethnohistoric Information: See page 368

T.A. 79 (Fig. 102; Plates 101, 102)

Classification: Hamlet

Natural Setting: Most of the site occupies on a linear band of gently sloping terrain south of a small hill but extending north, up the hilltop and slopes at 2500-2550 m. Much of the soil has been eroded over the site and exposed tepetate and washes are common. A major barranca runs along the east edge of the site, 30-40 m deep, and 50-70 m wide at its northern edge; and 5-15 m wide, and 2-5 m deep at its upper southern edge. In the profile of the barranca are many obsidian cobbles. The site area is covered by scattered pirul, wild nopal, and thorn bush, particularly along the barrancas and on the hill summit.

Modern Land Use: Maguey is very common over most of the site area, as are the remnants of maguey bancals. Much of the site, however, is used for pasture. There are no buildings and a silted small jagüey is found south of Mound 437. Lands of the Rancho de las Papas, Ahuatepec.

Archaeological Remains: Obsidian debris is heavy over the entire site area but particularly on the upper slopes and on the summit of the hill at location P. Three mounds were defined, one of which, 434, may be a ceremonial structure. Most of the obsidian consists of cobbles and chips with only minor production of cores and blades indicated by the refuse. The raw material almost certainly came from the adjacent barranca. Associated with locality P was a substantial concentration of ceramics and rock rubble which would seem to suggest that in this area a number of residential mounds were associated with workshops. Almost certainly, in its original state, there were at least twice, possible three times as many residences as those preserved, but even with this consideration. Total surface area 4-5 ha.

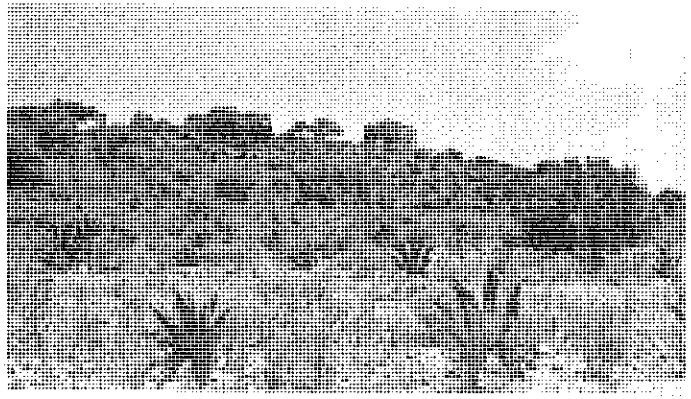
Table 18 T.A. 79 Mound Observations

Mound No.	Prob. Function	Height (cm)	Size (m)	Sherd	Rock	Comments
432	Res.	0-30	20	M Az	Heavy	Badly Eroded, Heavy Obsidian Chips and Flakes
433	Res.	25-50	20	M Az	Heavy	Remains of a Stone Terrace on East Side
434	Poss. Cerem.	100-125	15-20	L Az	Heavy	Extensively Pitted, Stone Wall 75 cm High was Exposed and Thick Ceramic Drain Pipes

Location P: An area 30x30 m on the upper slopes and summit of the hill at the north end of the site above Mound 432, very heavy surface obsidian, light to medium Aztec sherd densities, and medium to heavy rock rubble. Obsidian consists of miscellaneous cobbles and chips, with very few core and blade remains. This is probably a combination residential and workshop area.

Ethnohistoric Information: See page 368

Plate 101



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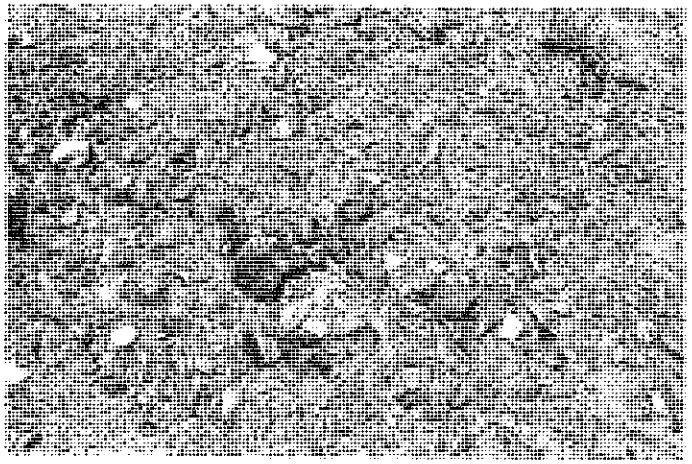

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Plate 102

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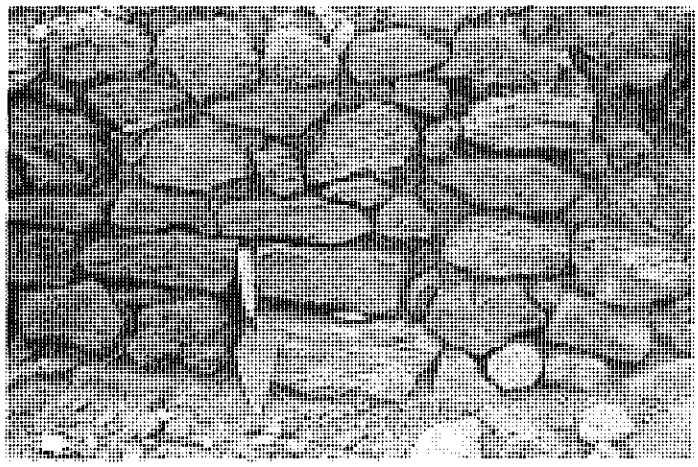

B

T.A. 118

Classification: This is a ceremonial precinct on the summit of Cerro Sombrerete, a cone-shaped hill, that is set in the center of a cluster of sites that occupy virtually all of its lower flanks. T.A. 73 and 74 occupy the south slope of the hill, 77-78, and 82 to the east and southeast, and along the north slope is the 20th century village of San Marcos Ahuatepec, a linear settlement, very comparable in layout and appearance to Aztec sites. The village itself was not surveyed but almost certainly T.A. 77 extends westward through the modern village.

Natural Setting and Modern Land Use: The summit and upper slopes of the hill today are used primarily as pasture with some maguey and nopal. Several ruined modern structures probably are recent ceremonial structures, are found on the hill summit. Elevation 2630 m.

Archaeological Remains: The hill summit is relatively flat, and the modern house ruins along with an Aztec ceremonial precinct are located there. The precinct consists of three mounds arranged around a trianguloid-shaped plaza. Mound 1 is 10 m high and 25 m in diameter. The center of the mound has an excavation, apparently done to obtain building stone. On top of the mound is a U-shaped formation which is probably modern. Mound 2 is about 5 m high and smaller in diameter. Mound 3 is much smaller than either of the two, only 1 1/2 to 2 m high and may be, a residential structure with some connection with the functioning of the ceremonial precinct.

Ethnohistoric Information: N.D.

T.A. 72 (Fig. 103)

Classification: Ceremonial precinct

Natural Setting: Hilltop (Cerro San Pedro). Soil is shallow (0 - 20 cm) reddish gray-brown sand loam, with moderate erosion. No streams, springs, barrancas, or washes. Vegetation includes pirul, wild nopal, and thorn bush. There is abundant tezontle gravel, but no evidence of mining, except possibly for a shallow cave directly below Mound #315. Elevation of the site area is approximately 2670 m.

Modern Land Use: temporal cultivation (barley, beans, and maguey). No structures, jagüeys, terraces or canals. Municipio: Otumba; Village: Ahuatepec.

Archaeological Remains: An isolated ceremonial site, not part of any residential community. A similar site with a larger building complex occurs on the next hill to the north, referred to as Cerro El Sombrerete (T.A. 118) on the Cetenal Map. T.A. 72 may be a ceremonial focal point for scattered village populations around the hill-flanks, although T.A. 118 would appear to be a more important ceremonial site. Occupation seems to have been only Aztec. The site is badly destroyed, probably by pitting. One mound (rock-rubble and earth construction) measures 20 m in diameter, and 1 - 1.5 m high, with L - M Aztec pottery on the surface, and abundant in ceremonial ware; mound, heavily obscured by vegetation, was probably a ceremonial structure. No specialized features. Pottery was sparse to moderate, localized and variable. A few obsidian tools were noted; no ground stone tools, no figurines, spindle whorls, or pottery discs.

A local man said that numerous "idolos" and tepalcates had been taken from this site by local villagers.

Figure 103

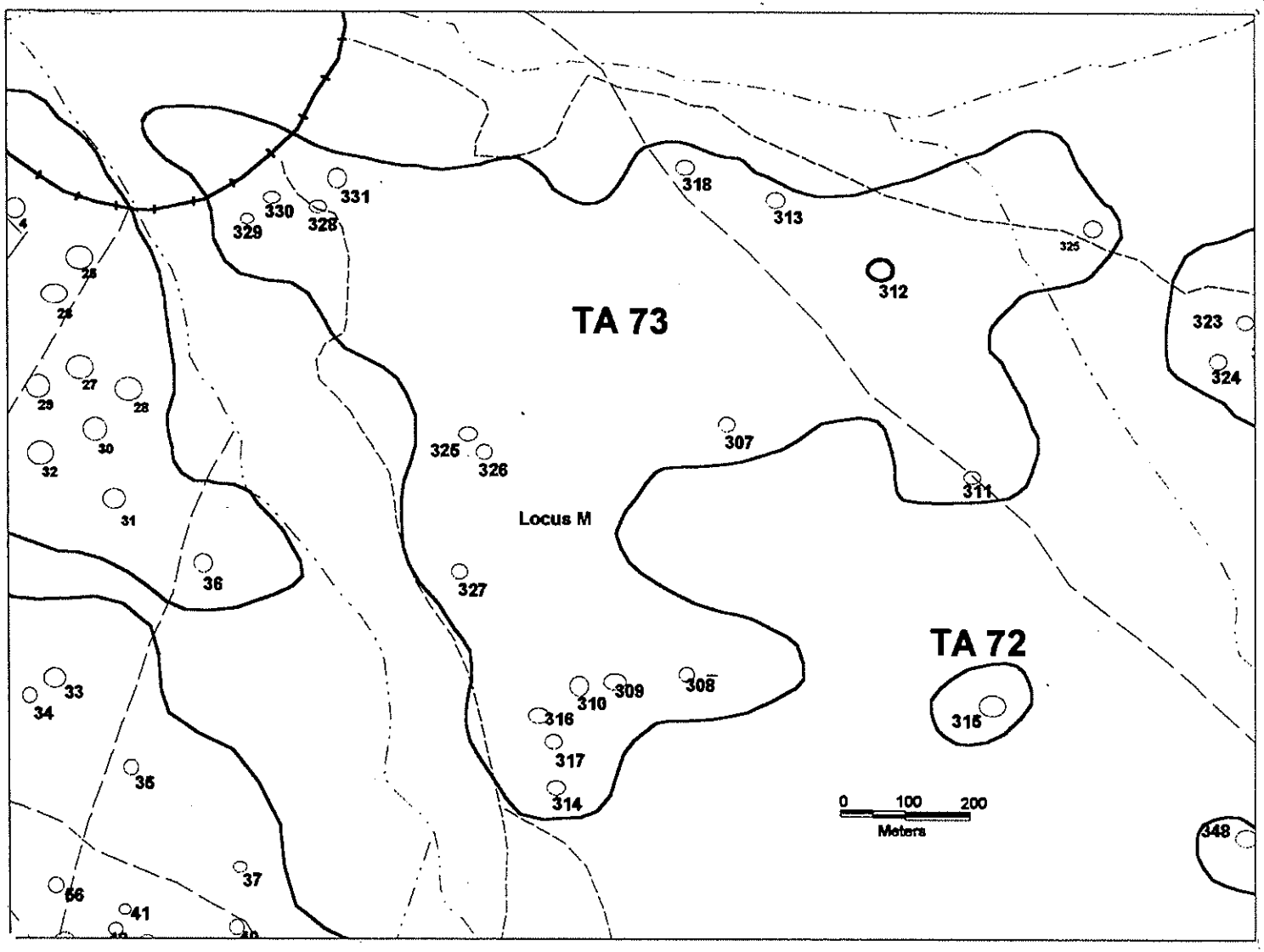
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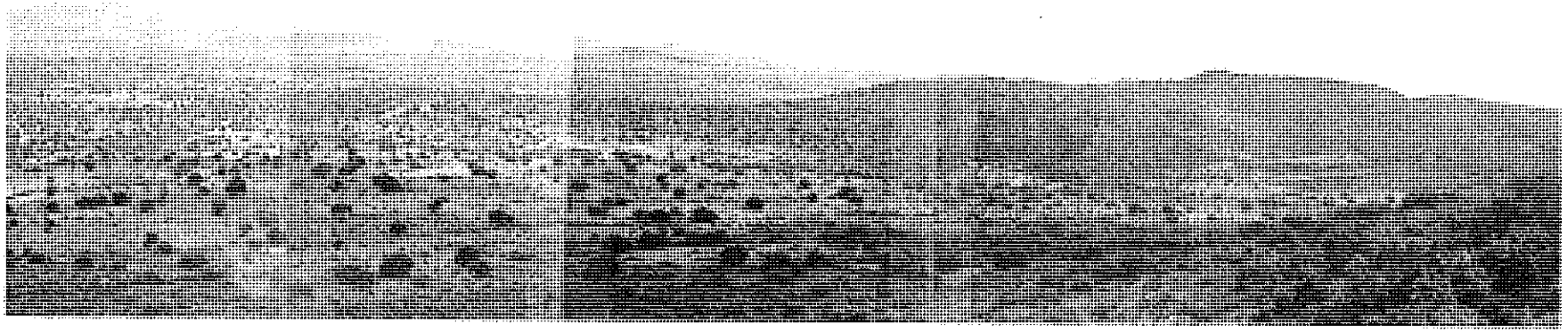
Plate 103



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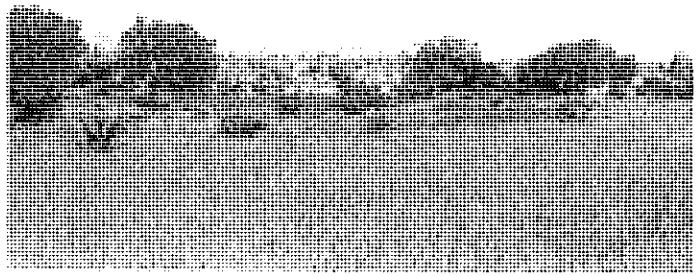

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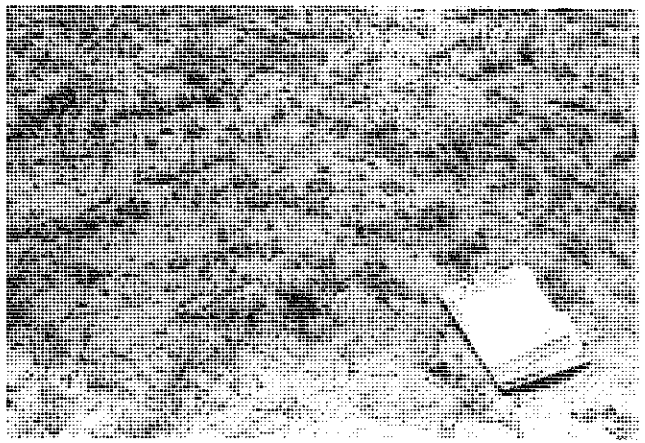

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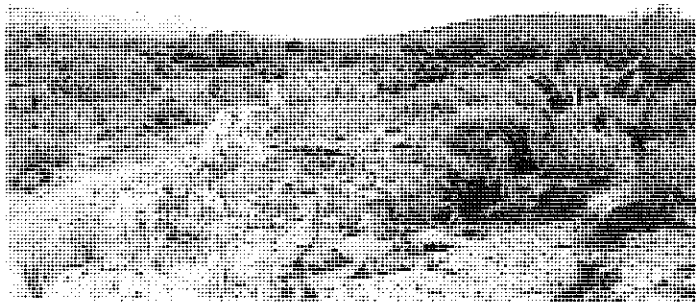
Plate 104



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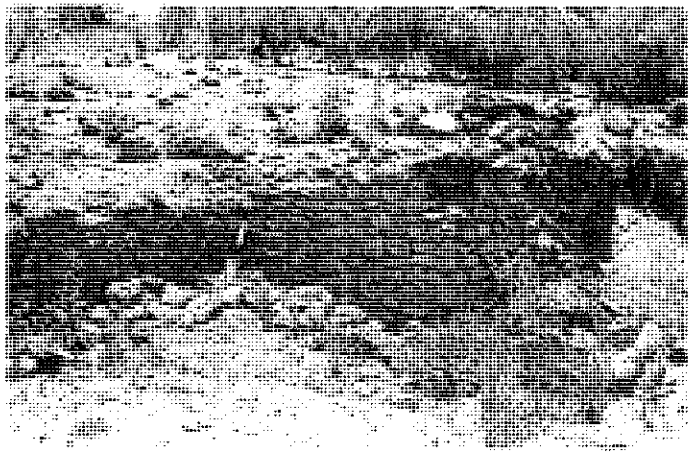


D

A shallow cave, about 15 m deep, 8 m high, and 5 m wide occurs just below the mound in the cliff face. No evidence of prehispanic occupation occurs in the cave. A small modern altar has been constructed within the cave (floor of cave is littered with broken soft-drink bottles).

Ethnohistoric Information: N.D.

T.A. 73 (Fig. 103; Plates 103, 104)

Classification: Small dispersed village.

Natural Setting: Gentle slope, soil varies considerably over the site, ca. 50 - 75 cm deep in cultivated fields. Soil is tan to gray-brown sand loam, erosion is moderate to severe. No streams or springs. Two major barranca systems cut through the area: to the west, Barranca Ahurapa (30 m deep and 45 m wide); along the northern edge of the site, a barranca 10-15 m wide and 2-3 m deep, increasing to a maximum of about 75 m wide and 30 m deep. Washes abound, particularly at the eastern end of the site. Vegetation includes pirul, maguey, wild nopal, and thorn bush in uncultivated area. Chunks of obsidian (up to the size of a football) were noted, embedded in the tepetate on the side of the northern barranca, as well as round and oval holes in the barranca walls, indicating the former presence of embedded obsidian. 2450-2500 m.

Modern Land Use: About two-thirds of the site was cultivated (temporal, perhaps with minor use of floodwater irrigation in the recent past), planted in maize, beans, barley, haba beans and also squash, peas, and potatoes scattered among the major crops. Maguey is almost ubiquitous, occurring over most of the site area except for badly eroded areas along barrancas. State of crop growth was variable (height of maize varied from 20 to 100 cm in height, barley from <10 cm to 50-75 cm, beans from 10 to 30 cm, with some plants in blossom (1964). Drainage ditches are common. A large modern stone-concrete dam occurs in the main barranca to the north of the site, to the east of the bridge which seems to have once diverted water into cultivated fields to the north of the barranca. Crop stands are generally fair in condition, with some desiccation observed. The only modern structures on the site area are three small jacales (field huts) in cultivated fields in the northern part of the site. An occupied house lot occurs just outside the site area, to the northwest of Mound #318. No jagüeys. Municipio: Otumba; Village: Ahuatepec.

Archaeological Remains: Site area has relatively dispersed settlement, with some concentration in the south, northwest, and northeast. T.A. 73 (along with T.A. 74, 75, and probably 76, 83, and 36) is probably related to the hilltop ceremonial center T.A. 72. Mound #312 may have been a secondary religious focus, if it is ceremonial in function. Obsidian working as a specialization is indicated by surface debitage in northern half of the site. The total site area is 74 ha.

Nineteen mounds were located and plotted, all residential, with the possible exception of #312. Occupation occurs as scattered clusters, with major concentrations in the southern, northwestern, and northeastern areas of the site.

Maximum depth of archaeological deposit is about 1.5 m, with average less than 50 cm. In all cases, consistent rock rubble, with an occasional stone wall exposed. Mounds 309 and 310 are large structural remains, but do not appear to have had ceremonial functions. They were possibly the residences of important people in the community. Near Mounds 309 and 310 are possible old earth terrace remnants (20-50 cm high, 6-8 m wide), possibly associated with the mounds. Severe erosion makes it difficult to be sure. Stone walls were exposed in Mounds #310 and 325.

Pottery was sparse to moderate, localized and variable. Obsidian tools and blades were noted (blades and scrapers were most common). Manos and metates were fairly common, and there were a few figurines, spindle whorls, and pottery discs. Areas of relatively heavy surface obsidian were noted all across the northern part of the site. The obsidian was primarily miscellaneous chips and pieces, with relatively few tools or cores. This possibly indicates a local specialization in obsidian working. A small area of Cuanalan phase (T.F. 65) occupation occurs in the central part of the site (Location M). A few Chiconauhtla sherds were recorded here as well (T.F. 209). Also found on the site is T.T. 234, a Mazapan occupation

Table 19 T.A. 73 Mound Observations

Mound No.	Prob. Function	Height (cm)	Size (m)	Sherd	Rock	Comments
307	Res.	20	25	L-M Az	Moderate	Questionable Structure
308	Res.	50	15	Moderate Az	Moderate	
309	Res.	100	20-25	L-M Az	Heavy	
310*	Res.	150	20-25	Moderate Az	Heavy	N end very pitted, shows one wall 5m long & .9 high, with corner
311	Res.	50-75	20	L-M Aztec (4 Noted)	Heavy	
312	Cerem?	150	25	L Az	Heavy	Light Pitting - Poss. because ceremonial in function
313	Res.	10-15	15	L Az	Heavy	Questionable structure
314*	Res.	75-100	20-25	Moderate Az	Heavy	
316	Res.	Trace	20	Moderate Az (4 noted)	Heavy	Badly eroded, rests on bare tepetate
317	Res.	Trace	20	Moderate Az	Heavy	Badly eroded
318	Res.	50	20	Moderate Az	Heavy	
325	Res.	75	20	L-M Az	Heavy	Top pit reveals stone wall+corner, .8m high
326	Res.	100	20	L-M Az	Heavy	
327	Res.	25	10	L-M Az	Heavy	
328	Res.	30	25	Moderate Az (2,3, fairly heavy obsid, 4 noted)	Heavy	
329	Res.	50	20	Moderate Az (3 noted)	Heavy	
330	Res.	Trace	30	Moderate Az	Heavy	Badly eroded
331	Res.	25-40	25	L-M Az	Heavy	

Loc M*				L-M Ticoman, L Az		15x15 m area
Loc N*				M-H Az	Heavy	Lots of Black/Red SE of Mound 328; 15x15 area

Ethnohistoric Information: See page 368

T.A. 74 (Fig. 104)

Classification: Small dispersed village.

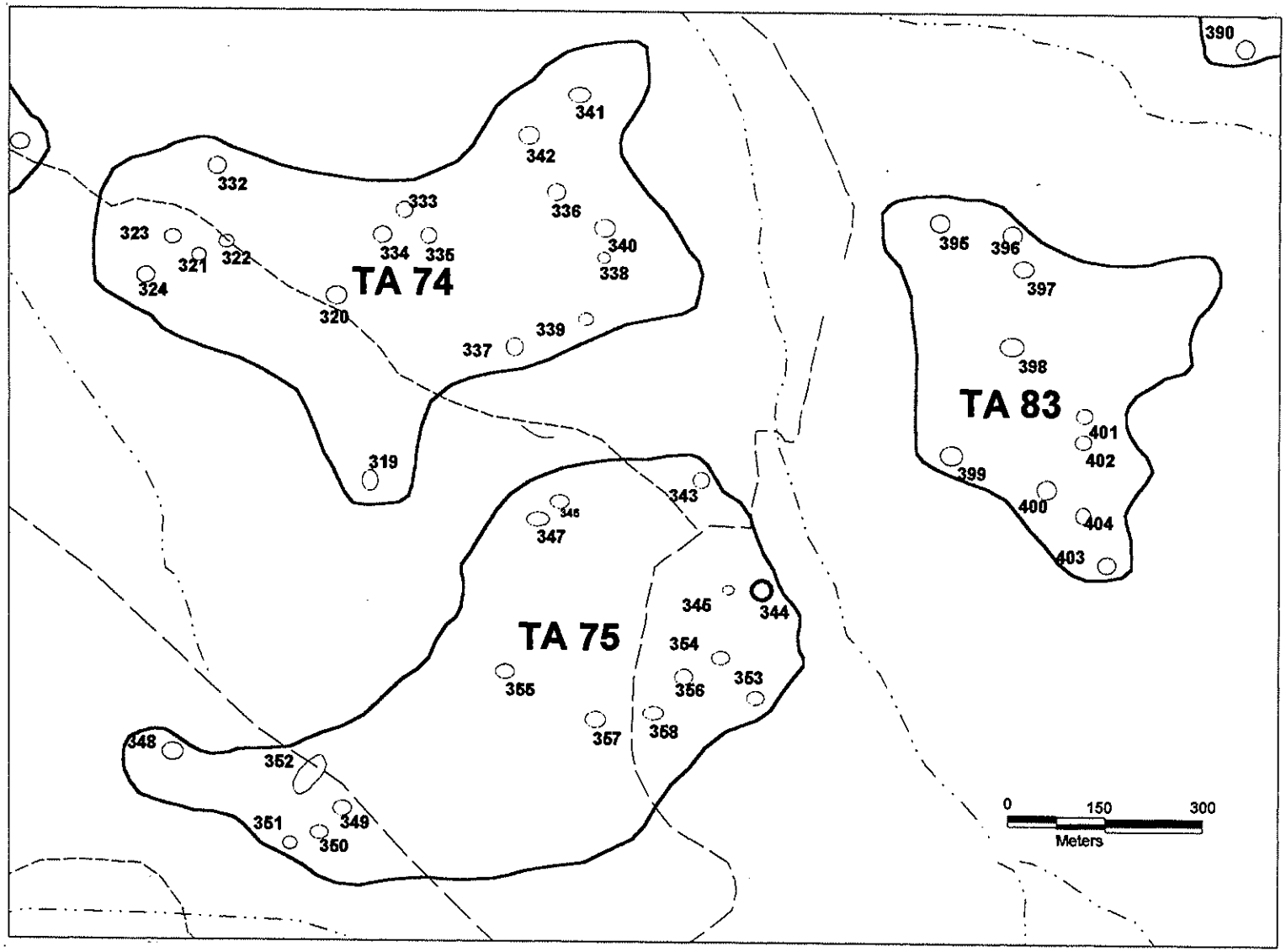
Natural Setting: On gently sloping terrain. Soil is tan to gray-brown sand loam, erosion is moderate to very severe. No streams or springs. Two major barranca systems cut through the area: on the northern and eastern margins of the site area, with a maximum depth of ca. 30 m and maximum width of about 75 m; the second, smaller barranca runs southeast-northwest along the western margin of the site, averaging about 3-5 m deep and 10-15 m wide. Washes abound, particularly at the northern end of the site; two major washes run southeast-northwest across northern and central parts of the site area. Vegetation includes pirul, maguey, wild nopal, and thorn bush in uncultivated areas. A large tezontle-gravel quarry occurs just NE of the site, across the barranca. Deposits of gravel are numerous in this area. Numerous chunks of obsidian were noted along the large barranca just north of site area--both loose at the edge of the barranca and embedded in the tepetate. There were also round holes in the barranca walls, indicating the former presence of embedded obsidian. The northern barranca profile exhibits evidence of two phases of downcutting. Elevation of the site area is 2500-2550 m.

Modern Land Use: The southern two-thirds of the site is cultivated (temporal), the rest of the site is badly eroded pasture land. Maize, barley, and beans are the most common cultivated crops, haba beans and also squash, peas, and potatoes scattered among the major crops. Maguey is almost ubiquitous, occurring over most of the site area. State of growth is variable (height of maize varied from 15 to 100 cm in height, barley from 5 cm to 50 cm, beans from 15 to 30 cm, with some plants in blossom). Bancals are common as field borders. No terracing observed. Drainage ditches are common. Crop stands are generally fair, with some desiccation observed.

There are no inhabited structures. Only modern structure noted is an abandoned house lot in the central part of the site, SE of mound #335. One small jagüey, no longer functioning, occurs near the abandoned house lot. A large silted jagüey occurs on the SE margin of site, now devoted to maize cultivation. Municipio: Otumba; Village: Ahuatepec.

Archaeological Remains: The site has fairly dispersed occupation, with three small clusterings, one in the NW, one in the north-central area, and the third occupying the eastern quarter of the site area. The apparent lack of ceremonial structures indicates that this was an entity of secondary local importance, dependent ceremonially, politically, and economically upon adjacent sites. Mounds are moderately to severely eroded. No pitting or excavation observed, except in Mound #320 where a small pit was noted. Seventeen mounds were located and plotted, all apparently domestic residential structures. Settlement pattern is relatively dispersed, with some relative concentration in NW and east-central sections. The total site area is 33 ha.

Figure 104


TA 74
TA 75
TA 83
390
341
342
332
333
336
323
340
334
335
321
322
338
324
320
339
337
319
343
345
347
346
344
354
355
353
356
357
358
348
352
351
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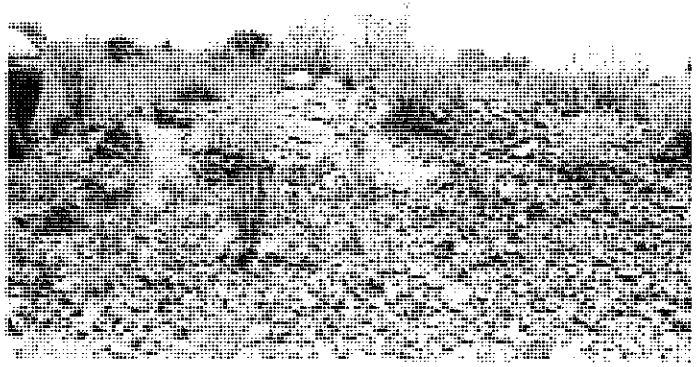
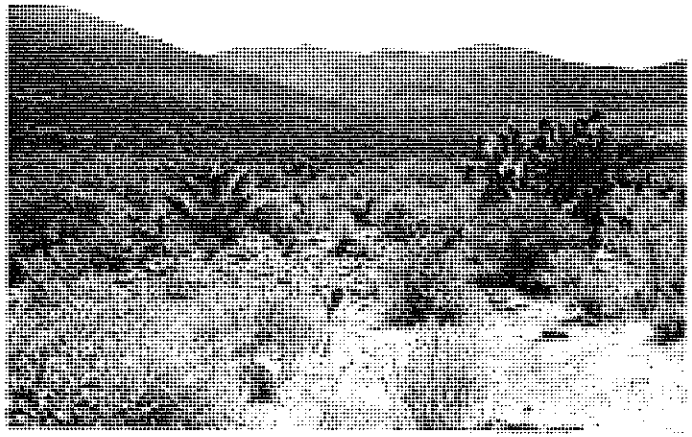
350
395
396
397
398
401
402
399
400
404
403
0
150
300
Meters

Plate 105

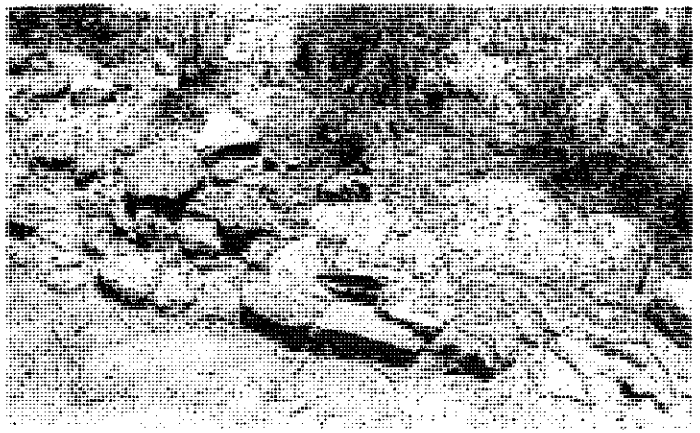
A



B



C



D

Table 20 T.A. 74 Mound Observations						
Mound No.	Prob. Function	Height (cm)	Size (m)	Sherd	Rock	Comments
319	Res.	25	30	L-M Az	Heavy	Rel abundant Thick Ware (drains?)
320	Res.	25-50	25	L-M Az	Heavy	Top pitted, int earth + rock rubble
321	Res.	25-75	20	Moderate Az	Heavy	Badly eroded
322	Res.	25-75	20	L-M Az	Heavy	Slight trace of stone wall
323	Res.	50	20	Moderate Az	Heavy	
324	Res.	75-100	20	Moderate	Heavy	
332	Res.	Trace	10	L Az;; L Toltec	Heavy	Very eroded, most washed downslope
333	Res.	50	20	L-M Az (3 noted)	Heavy	Well-defined str., badly eroded area
334	Res.	75	25	Moderate Az	Heavy	Badly eroded area
335	Res.	Trace	10	Moderate Az	Moderate	Questionable str; badly eroded
336	Res.	Trace	10	L-M Az	Heavy	Badly eroded
337	Res.	15-20	20	L-M Az	Heavy	Poorly defined
338	Res.	50	20	L-M Az	Heavy	Obscured by heavy vegetation
339	Res.	25	15	L-M Az	Heavy	
340*	Res.	25-30	30	Moderate Az	Heavy	
341	Res.	0-75	20	Moderate Az	Heavy	Badly eroded
342	Res.	10-50	20	Moderate Az	Heavy	Badly Eroded

Slight traces of stone walls were exposed on the surface of Mounds #322.

Pottery was sparse to moderate, localized and variable. Obsidian tools and blades were noted (blades were most common). Manos and metates were fairly common, and there were a few figurines, spindle whorls, and pottery discs. Areas of relatively heavy surface obsidian were noted in the eastern part of the site, in the vicinity of mounds #336, 340, and 338. The obsidian, primarily miscellaneous chips and pieces, this possibly indicates a local specialization in obsidian working.

Ethnohistoric Information: See page 368

T.A. 75 (Fig. 104; Plate 105)

Classification: Small dispersed village.

Natural Setting: Site is on gently sloping terrain, soil is tan to gray-brown sand loam, erosion is moderate to very severe. Depth averages about 50 cm to 1 m over the site area, although fields in NE part of site have

been very severely eroded, and large areas of bare tepetate are common there. No streams or springs. Two major barranca systems cut through the area: running southeast-northwest on the eastern margin of the site area, with a maximum depth of ca. 20 m and maximum width of about 50 m, averaging about 10-15 m and 30-40 m wide; the second ran E-W along the southwestern margin of the site, measuring about 10-20 m deep and 20-30 m wide. The whole NE section of the site is a large wash area. A large wash runs southeast-northwest across the SW end of the site--the remains of a road which led to the Hacienda Cuauhtengo. Vegetation includes pirul, maguey, wild nopal, and thorn bush in uncultivated areas along the major barrancas. Elevation of the site area is 2500-2550 m.

Modern Land Use: Except for the badly eroded NE section of the site area, most of the site is devoted to temporal cultivation of maize, barley, haba beans and also squash, peas, and potatoes scattered among the major crops. State of growth is variable. Bancals occur as field borders all over the site, even in badly eroded, non-cultivated area. Drainage ditches around and through many of the cultivated fields. There are no permanent modern residential structures. The only modern structures are 3 small jacales scattered widely in the cultivated portion of the site. The remains of the Hacienda Cuauhtengo occur 400 m SE of the site. One small jagüey was located east of Mound #348.

Archaeological Remains: Sixteen mounds were identified - generally very eroded. Occupational debris in the northeastern part of the site in areas where no mounds were identified indicated other destroyed mounds once existed there. The site presents a certain nucleation in the very eroded northeastern area. All identifiable mounds are small residential structures with the possible exception of Mound 344. The south central part of the site has light to medium Cuanalan phase (T.F. 69) occupation; a light Mazapan (T.T. 187) occupation was noted near Mound 348, and a trace of Tzacualli (T.F. 290). The total site area is 36 ha.

Ethnohistoric Information: See page 368

Table 21 T.A. 75 Mound Observations

Mound No.	Prob. Function	Height (cm)	Size (m)	Sherd	Rock	Comments
343	Res.	75	20	Moderate Az	Heavy	Stone wall remnants
344	Cerem	1.5-2	15	L-M Az (1 coarse Thin Orange)	Heavy	Badly eroded-poss earth core, w/ rock rubble
345	Res.	1	10	Moderate Az (3 noted)	Heavy	
346	Res.	25	15	L-M Az (2 coarse Thin Orng)	Heavy	
347	Res.	25	15	L-M Az	Heavy	
348	Res.	25	15-20	M Az; L Maz (1 coarse Thin Orange)	Heavy	
349	Res.	Trace	20	M Az (3,4 noted)	Heavy	
350*	Res.	50	15	M Az	Heavy	
351	Res.	75	25	L-M Az	Heavy	
352	Res.	25	30x60	L-M and M Az	L-M	Questionable if a md.

353	Res.	Trace	10	L-M Az	Heavy	Badly eroded, on bare tepetate
354	Res.	15-20	10	L-M Az	Heavy	Badly eroded, on edge of barranca
355	Res.	50	20	L-M Az	Moderate	Questionable str
356	Res.	25	20	L-M Az	Heavy	
357	Res.	25-30	20	L-M Az	Moderate	
358	Res.					No data recorded

T.A. 76 (Fig. 105)

Classification: Hamlet or small dispersed village.

Natural Setting: Site on gently sloping terrain, soil is tan to gray-brown sand loam, with moderate to severe erosion. Soil depth is extremely variable, ranging from ca. 0.5-1.0 m in cultivated fields in the northern part of the site to large stretches of bare tepetate in the badly eroded southern part of the site. In this latter area, erosion remnants from 1-2 m high indicate that soil depth in this wasteland area was once considerable. No permanent springs or streams. Two major barranca system occur: 1) runs N-S near the eastern margin of the site, averaging ca. 8-10 m deep, 30-40 m wide; 2) runs N-S through the western end of the site, with several smaller tributaries to the south. Main barranca ca. 10-20 m deep and 20-30 m wide. This barranca shows two definite erosional stages. Smaller tributary barranca to south of Mound #361 averages about 2 m deep and ca. 10 m wide. Elevation of the site area is 2550-2600 m.

Two large jagüeys, no longer functioning, are located adjacent to the Hacienda Cuauhtengo in the north-central part of the site.

The site area is completely surrounded on the east and south by a large continuous wash area. Two well-defined major washes run N-S and NW-SE across the central part of the site. Small washes are common over the site.

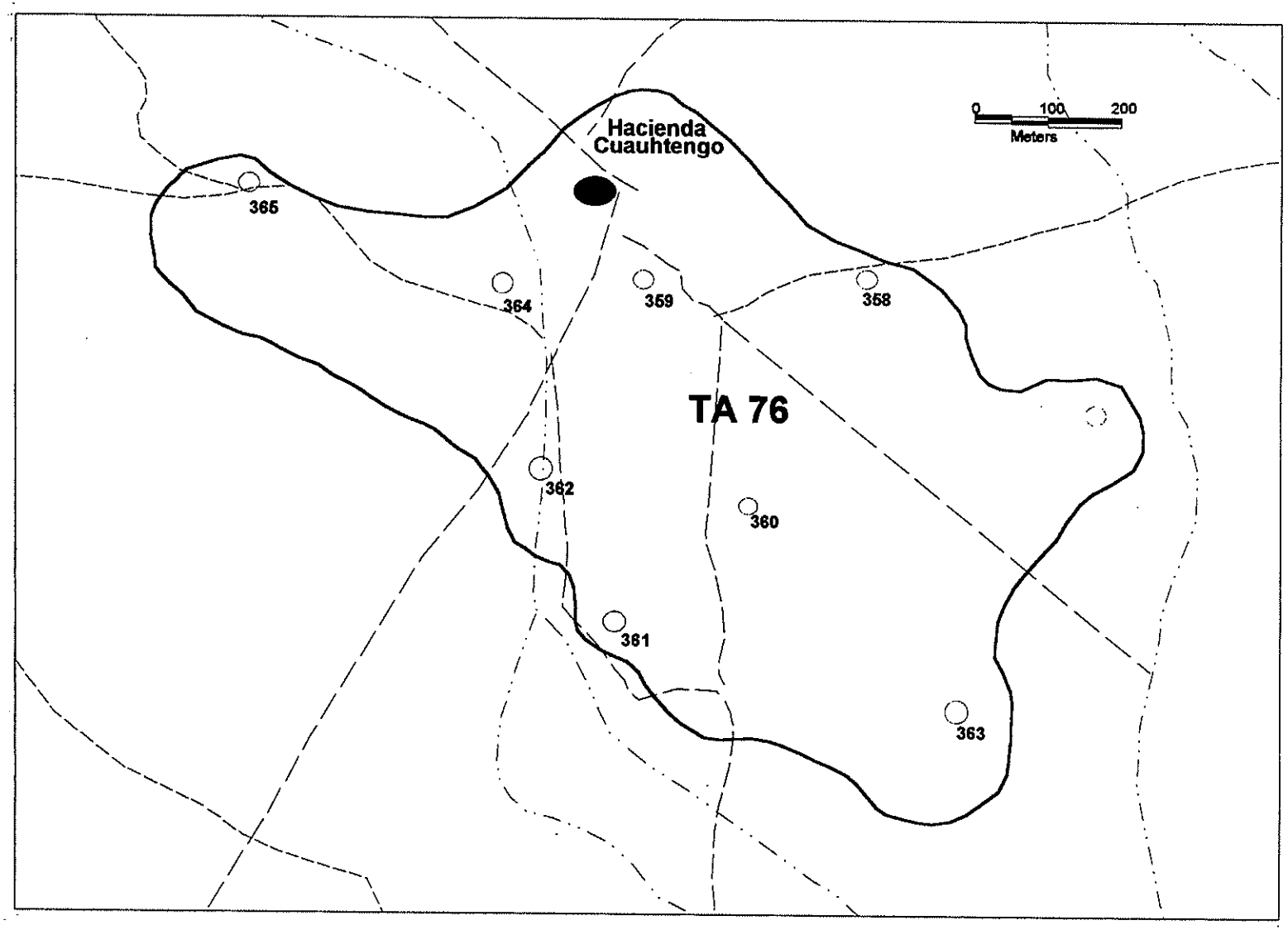
Pirul trees are common over most of the site, as is maguey. Wild nopal and thorn bush are abundant at the western end of the site area and along smaller barrancas in the SW corner of the site. Eastern and southern margins are nearly wholly devoid of vegetation of any kind.

Modern Land Use: Temporal cultivation; major crops are maguey, maize, barley, and beans, with haba beans a significant secondary crop, and squash and potatoes as minor crops interplanted with the others. Growth was variable, as of August 3 and 4, 1964, maize ranged from 15-75 cm; barley ca. 30 cm, beans ca. 15 cm, with some in blossom. Maguey is in all stages of maturity. Some pasturage of sheep and goats.

A few bancals occur as field borders; most fields are surrounded by and cut through by drainage ditches.

Ruins of Hacienda Cuauhtengo occur in north-central part of site area--a large complex. A small modern house lot occurs near the southern margin of the site. A ruin of a modern stone structure occurs ca.

Figure 105


Hacienda
Cuauhtengo
0
100
200
Meters
365
364
359
358
TA 76
362
360
361
363

200 m northeast of the occupied house lot. Municipio: Otumba; village: Ahuatepec and Buenavista

Archaeological Remains: Light to moderate Aztec and traces of Tzacualli (T.F. 290) surface pottery occur in the badly eroded wash area to south of site area. I have not included this in the site area, because most of it seems to be washed in from the hilly region to the south. Maximum depth about 1.5 m, with average less than 50 cm. Uniform earth-rock rubble composition in all cases.

The southwest boundary of site is quite problematical - we were unable to define the site boundary in this direction because of lack of time. The site area is approximately 65 ha.

Eight recognizable mounds were located and plotted. All appear to be domestic, but two very large structures (#361, 362) are somewhat perplexing. Settlement pattern is a very dispersed one, with only slight concentrations of occupation occurring in the western and southwest portions of the site.

Pottery was sparse to moderate, localized and variable. Obsidian blades and scrapers are fairly common; no cores noted. Several manos and metates noted; a few figurines, spindle whorls, and pottery disks.

Table 22 T.A. 76 Mound Observations

Mound No.	Prob. Function	Height (cm)	Size (m)	Sherd	Rock	Comments
358		V. low	ca. 15	L-M Az	Medium	Questionable
359		V. low	ca. 20	M Az	Heavy	Questionable
360*		ca. 50	25-30	L-M Az	Heavy	
361		1.5-2 m	40	L-M Az	Heavy	Poss high status res.
362		1m	35-40	L-M Az	Heavy	Poss high status res.
363		25	ca. 15	M Maz;	Heavy	Badly eroded; poss remains of tezontle gravel block wall, poss modern
364		20	10	L-M Az	Heavy	Questionable
365*		.5-1.5 m	ca. 15	L-M Az	Heavy	Built on gentle hillslope

Ethnohistoric Information: See page 368

T.A. 82 (Figs. 106, 107 A; Plates 106-108 A, B)

Classification: Small dispersed village.

Natural Setting: The site is found on an interfluve of gently sloping terrain. The site has been almost denuded of soil with only a few pockets of soil left. The entire site appears as a single great wash. Where soil is preserved, it is generally about 20 cm in depth, occasionally as much as 30 cm. A major barranca flows along the south edge of the site. It is 15 m deep and 50 m wide, in its upper portion, 20 m in width

Figure 106

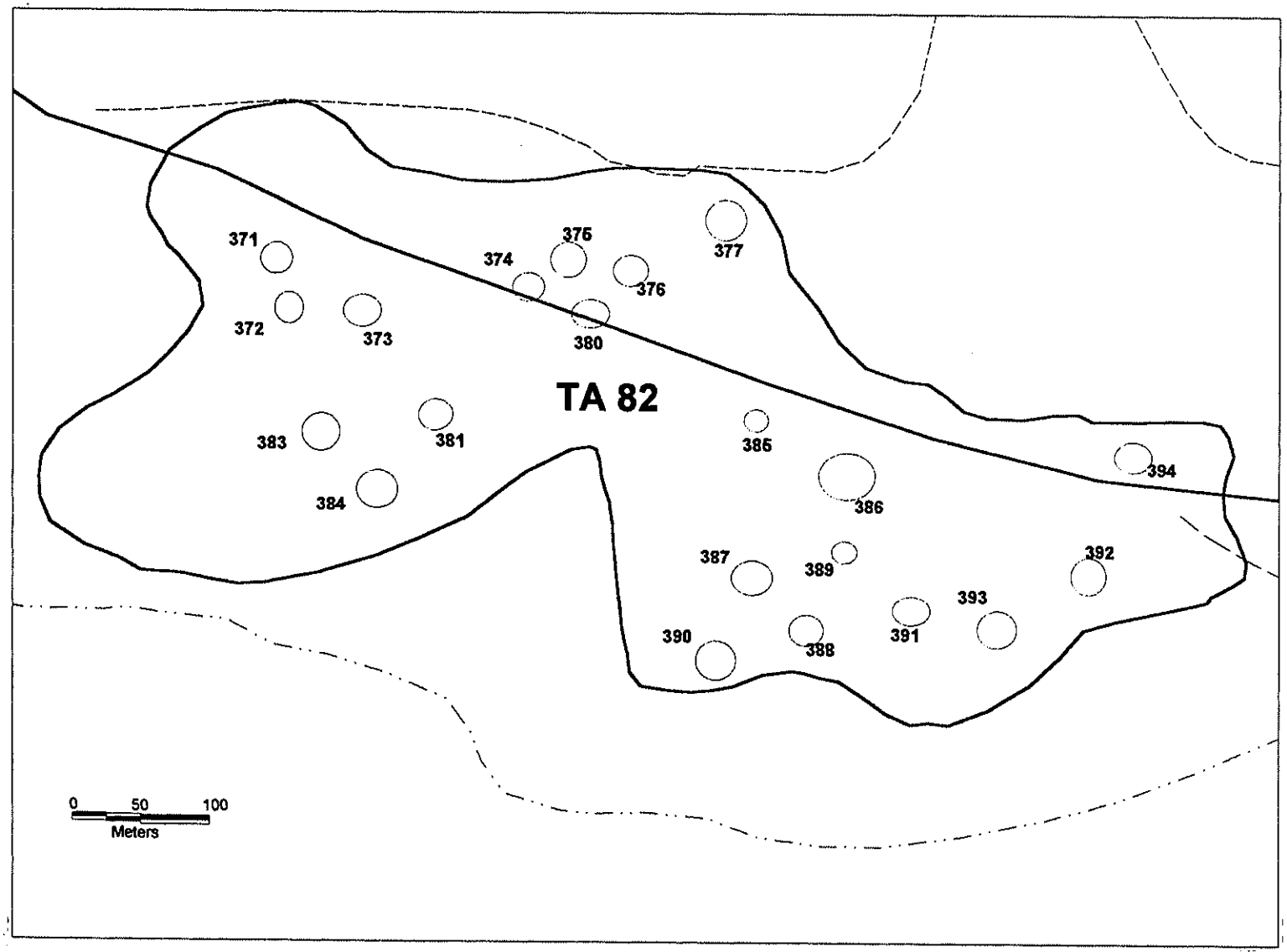

371
372
373
374
375
376
377
380
TA 82
381
383
384
385
386
387
389
390
388
391
393
392
394
0
50
100
Meters

Figure 107

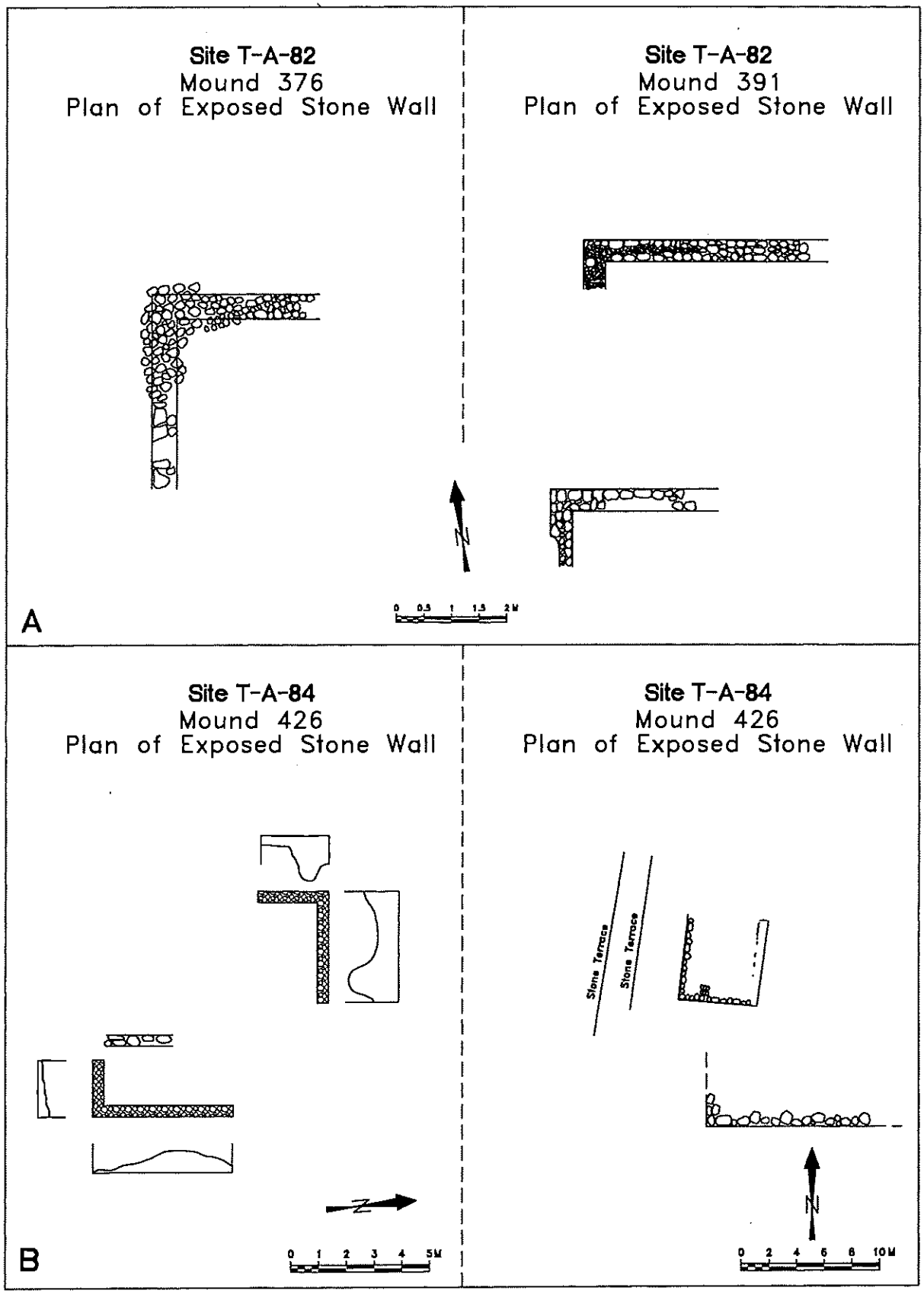
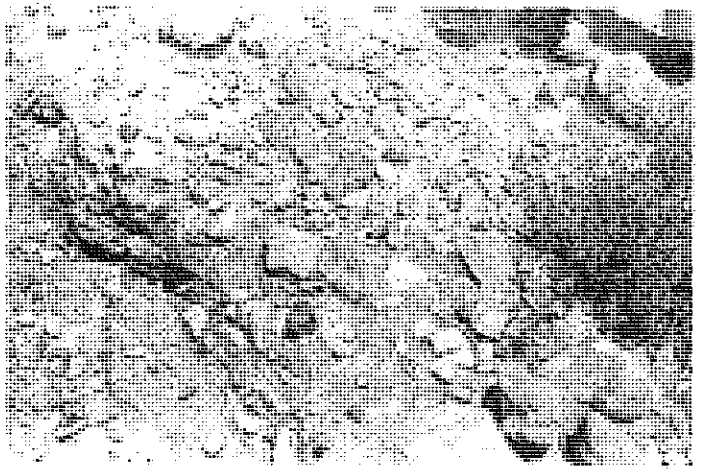

Site T-A-82
Mound 376
Plan of Exposed Stone Wall
Site T-A-82
Mound 391
Plan of Exposed Stone Wall
N
0 0.5 1 1.5 2M
A
Site T-A-84
Mound 426
Plan of Exposed Stone Wall
Site T-A-84
Mound 426
Plan of Exposed Stone Wall
Stone Terrace
Stone Terrace
N
0 1 2 3 4 5M
0 2 4 6 8 10M
B

Plate 106

A

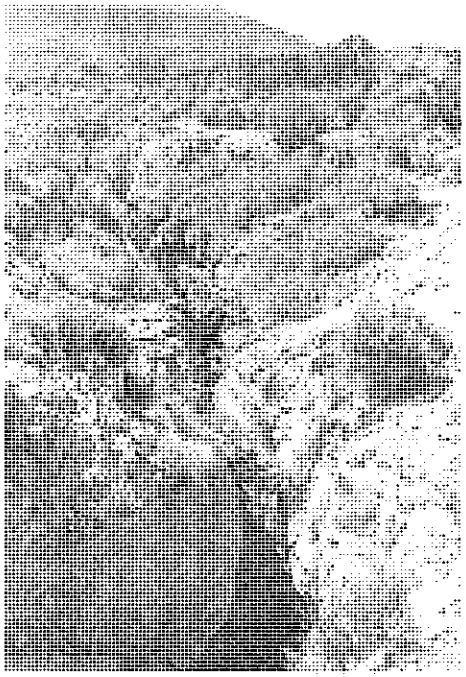
B



C

Plate 107

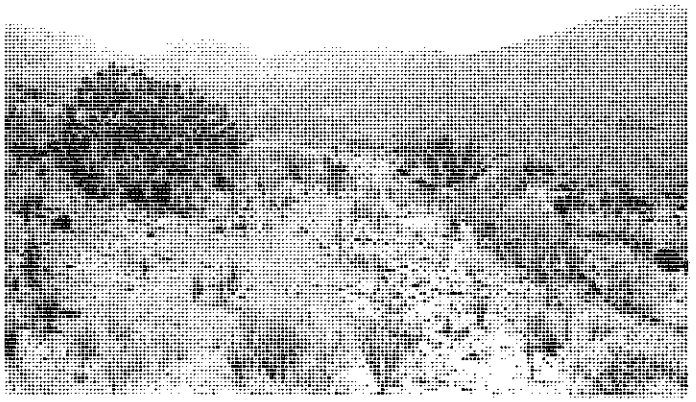
A



B

C

D



E

and only 4-10 m deep in its lower western segment. Obsidian cobbles were found imbedded in tepetate along the edge of the barranca. Surface obsidian in the form of chip flakes and cobbles was also abundant just to the north of the barranca in the southwestern portion of the site. Pirul was scattered over much of the site with nopal and thorn bush concentrated to the east and numerous magueys to the west. Site is located between 2580-2650 m.

Modern Land Use: Primarily marginal pasture with some maguey cultivation, no structures or jagüeys found on the site. Most of the cultivated maguey is found in the western portion. Badly eroded bancals were noted in the southern, uncultivated portions of the site, 4 m wide and 50 cm high.

Archaeological Remains: Approximately 22 mounds were found preserved on the site and all appear to be domestic structures. There are evenly dispersed throughout the site area but evidence of destroyed additional mounds is evident and the original number may have been as high as 30. Preserved stone walls were found on 376, 384, 391, and a tepetate block wall was found on Mound 375. The obsidian concentration noted above was probably the remains of a workshop area. Southwest of the site border is a Mazapan hamlet. Southwest of Mound 383 there is clear evidence of two phases of downcutting of the barranca bed. The total site area is 21 ha.

Table 23 T.A. 82 Mound Observations

Mound #	Poss. Function	Height (cm)	Size (m)	Sherd	Rock	Comment
371	Res.	40	20	M Az (3)	Heavy	
372	Res.	20-30	20	M Az (3,4)	Heavy	SW End Heavily Eroded
373	Res.	10-40	25	M Az, L Mod	Heavy	
374	Res.	100	25	M Az	Heavy	Cut by Wash on East Edge
375	Res.	30-50	20	M Az	Heavy	Exposed Tepetate Rock Wall+Earth Floor
376	Res.	0-50	20	M Az	Heavy	Heavily Eroded, Wall Exposed
377	Res.	50-75	20	M Az	Heavy	
380	Res.	0-50	35	M-H Az	Heavy	Poss. Remains of 2 Heavily Eroded Mds.
381	Res.	0-50	35-40	M-H Az	Heavy	Heavily Eroded
382	Res.	Imp.	5	L-M Az	Heavy	Heavily Eroded, Prob. Once Much Larger
383	Res.	0-75	35	M-H Az (4)	Heavy	Heavily Eroded
384	Res.	25-75	30	H Az	Heavy	Exposed Stone Walls
385	Res.	10-15	5	L-M Az	Heavy	Heavily Eroded
386	Res.	Up to 100	35	M Az, L Maz	Heavy	Poss. Several Mds. Heavily Disturbed by Bancals
387	Res.	Up to 50	25	M Az (4), L Mod	Heavy	
388	Res.	0-30	10	M Az (3,4)	Heavy	Detached Remnant to East, Prob. a Much Larger Mound

389	Res.	0-25	6-7	M Az (3,4)	Heavy	
390	Res.	0-30	15	M-H Az (3,4), 1 Huastec B/W Sherd	Heavy	
391	Res.	0-50	15-20	M Az (3,4)	Heavy	Exp. Stone Walls
392	Res.	50-75	30	M Az (3), Tr Maz, L Mod	Heavy	
393	Res.	Imp.	?	M Az, Tr Mod	Heavy	Cut Up by Bancals
394	Res.	0-50	25	M Az (3)	Heavy	Heavily Eroded

Ethnohistoric Information: See page 368

T.A. 83 (Fig. 104)

Classification: Hamlet or small village.

Natural Setting and Modern Land Use:: The site is located on gently sloping terrain. Exposed tepetate covers much of the site and, in effect, the entire site could be described as an extensive wash. A major barranca runs south-north, west of the site, is 30-40 m wide and 20-30 m deep in its northern section, becoming much shallower and narrower to the south. No modern structures or jagüeys were found on the site and virtually no cultivation. It is primarily used as very marginal pasture. Elevation 2550-2600 m.

Archaeological Remains: The total of ten severely eroded mounds was recorded. Because of the condition of the site, mounds were difficult to locate on the aerial photograph, and to define in terms of their surface extent. They appear to be widely dispersed around these site area. One mound, 398, has an exposed wall remnant and Mound 402 may have been a ceremonial structure. The total site area is 18 ha. A Cuanalan phase hamlet was located within this site (T.F. 69).

Table 24 T.A. 83 Mound Descriptions

Mound #	Height (cm)	Size (m)	Sherd	Rock	Comment
395	0-50	15	Medium Aztec (3)	Medium	Questionable
396	0-25	15	Heavy Aztec	Heavy	Severely Eroded
397	25-50	20	Light-Medium Az	Heavy	Heavily Vegetated
398	0-50	20-25	Medium-Heavy Az (3)	Heavy	Heavy Eroded - Stone Wall Exposed
399	10-75	15-20	Medium Az (3,4)	Heavy	Heavily Eroded
400	0-50	15-20	Medium Aztec (3)	Heavy	Heavily Eroded

401	50-75	20	Medium Az (3,4)	Heavy	
402	100	25	Light-Medium Az	Heavy	
403	0-50	20	Medium Aztec	Heavy	On a Steep Slope
404	50	20	Medium Aztec	Heavy	Heavily Vegetated

Ethnohistoric Information: See page 368

T.A. 84 (Figs. 107 B, 108, 109: Plate 108 C, D)

Classification: Problematical (incomplete survey)

Natural Setting and Modern Day Land Use: This is not a site in terms of the usual site definition used in the survey. It is an area of dense natural cover of wild nopal, thorn bush, and palm groves on very rugged, undulating terrain with a general slope angle that could be called gentle. Because of the vegetation erosion is modest. The average depth of the soil is 50-75 cm. A major barranca flows south of the area, 50-75 m wide and 30-40 deep. There are numerous obsidian cobbles in the barranca walls and at the southwestern portion of the site, near the barranca, is a concentration of cobbles and chips that suggest a workshop. The only cultivation in the area occurs to the southwest where maize, beans, and maguey are planted. No structures were found and the area is used today as primarily as pasture. 2480-2550 m.

Archaeological Remains: Because of the difficulty of survey much of the area delimited in Fig. 109 was unsurveyed. A circular band around the area was examined, with the most intensive surveys at the west and eastern end of the circle. Occupation, however, was noted outside of the surveyed band, particularly to the northeast. Within the band the survey located nine mounds, five in the western portion, and four in the east. One of them, 425, is a ceremonial structure; the rest appear to be residential. An obsidian workshop was associated with the west group. Other occupations on this site include T.T. 190 (Mazapan).

It is unfortunate that more survey was not conducted since the best preservation of residential structures in the entire survey was found on this site, with numerous wall outlines on those mounds located. In one case, Mound 426, preserved walls were 1 m high.

Ethnohistoric Information: See page 368.

Figure 108

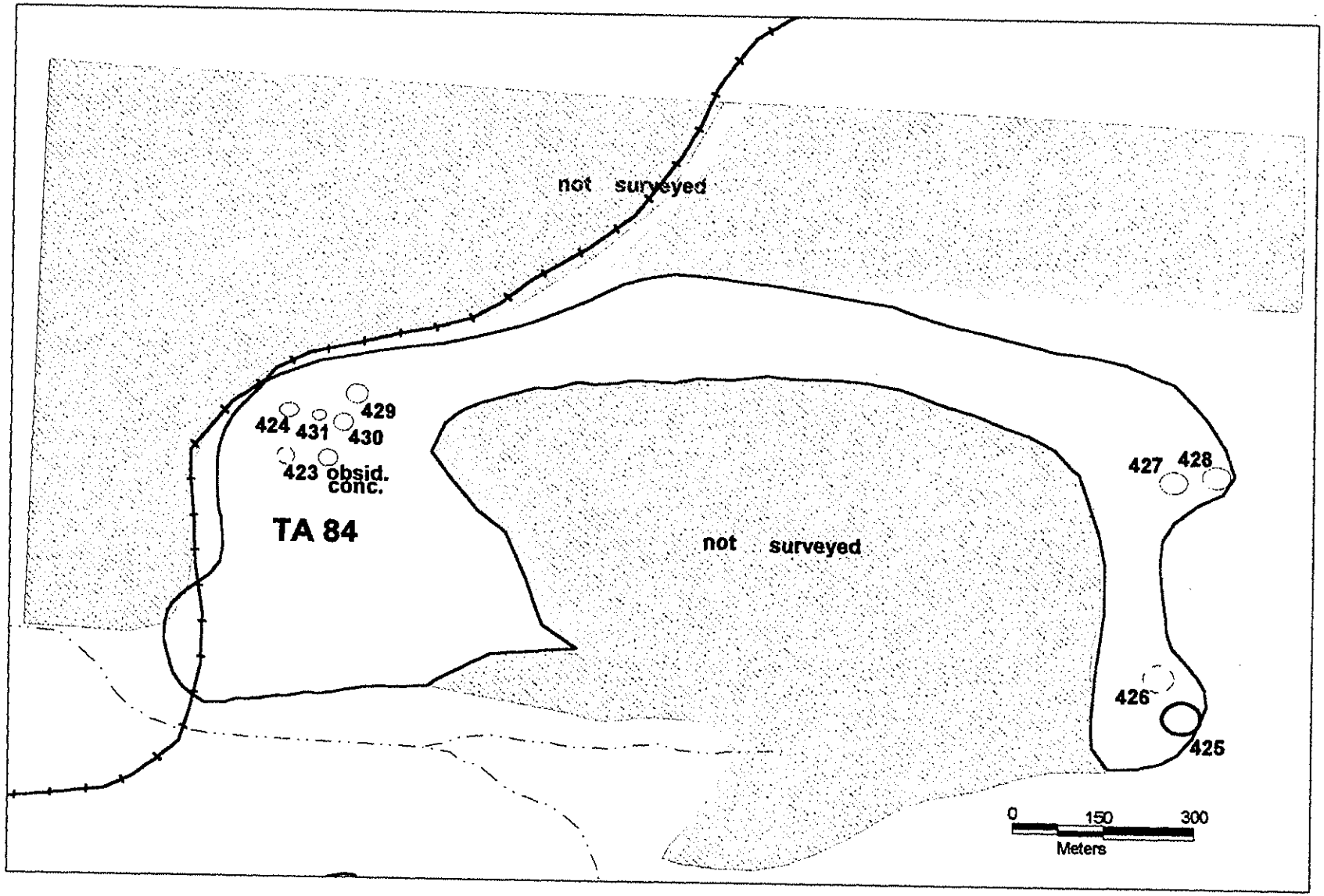

not surveyed
424
431
429
430
423 obsid. conc.
TA 84
not surveyed
427
428
426
425
0
150
300
Meters

Figure 109

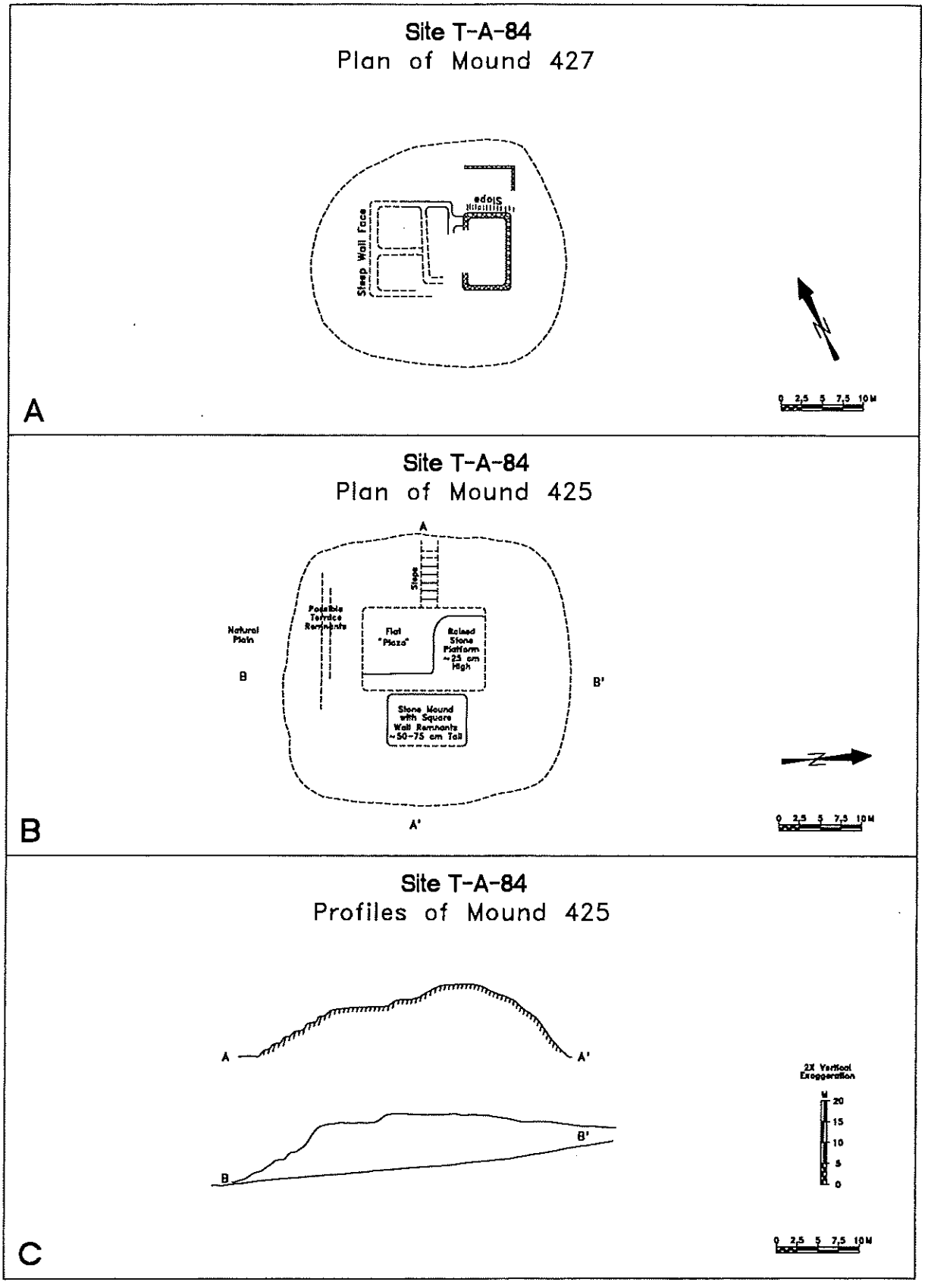
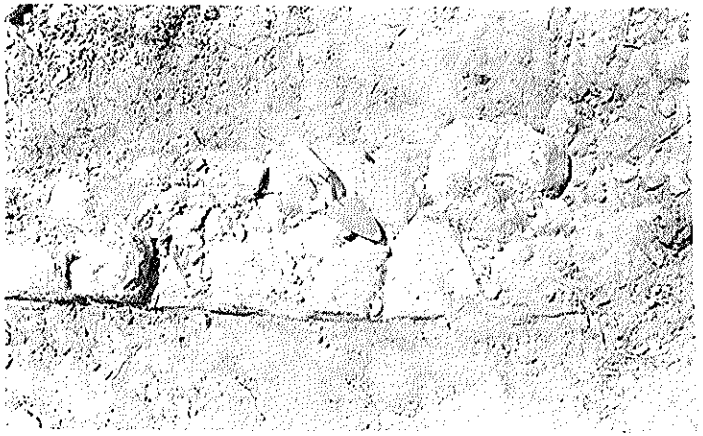

Site T-A-84
Plan of Mound 427
Step
Wall Face
Slope
0 2.5 5 7.5 10M
A
Site T-A-84
Plan of Mound 425
A
Slope
Possible Terrace Remnants
Natural Plain
B
Flat "Plaza"
Raised Stone Platform ~25 cm High
B'
Stone Mound with Square Wall Remnants ~50-75 cm Tall
A'
0 2.5 5 7.5 10M
B
Site T-A-84
Profiles of Mound 425
A
A'
B
B'
2X Vertical Exaggeration
M
20
15
10
5
0
0 2.5 5 7.5 10M
C

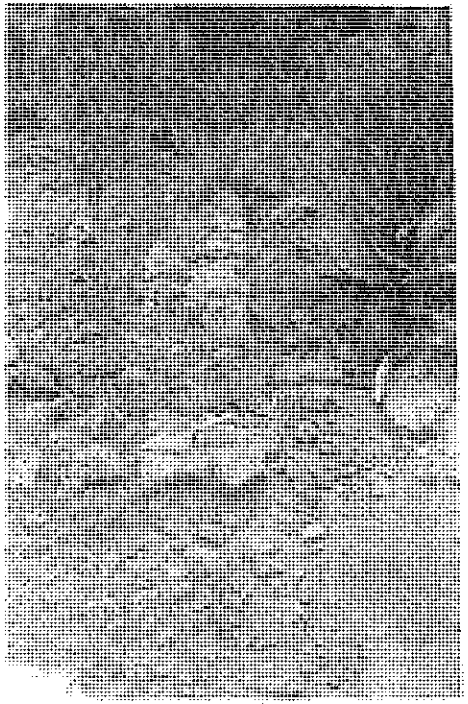
Plate 108



A

B

C



D

Figure 110

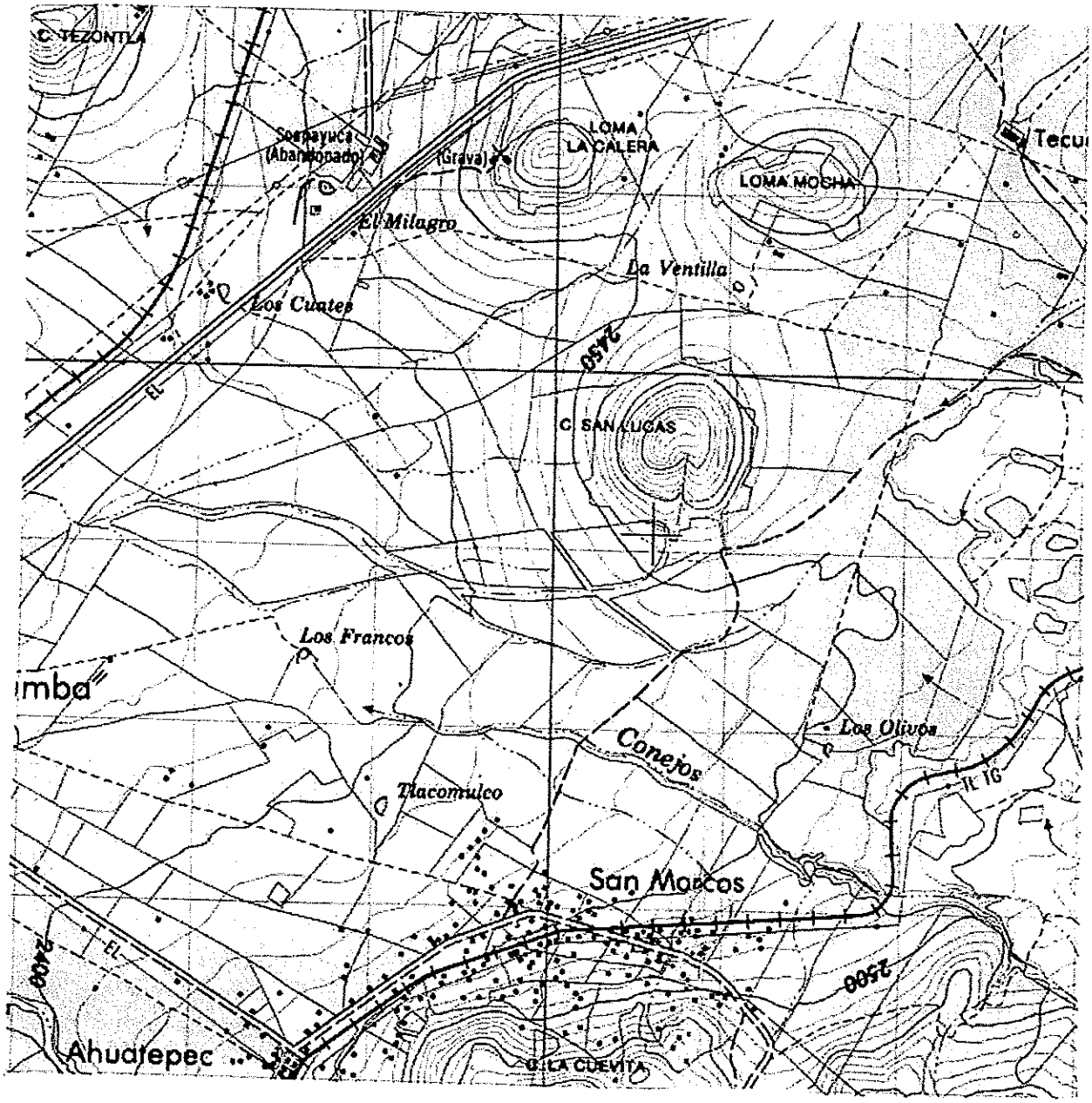

C. TEZONTLA
Soapayuca
(Abandonado)
(Grava)
LOMA
LA CALERA
LOMA MOCHA
El Milagro
La Ventilla
Los Cuates
2450
C. SAN LUCAS
Los Francos
Los Olivos
Conejos
Tlacomulco
San Marcos
2400
2500
Ahuatepec
C. LA CUEVITA

Figure 111

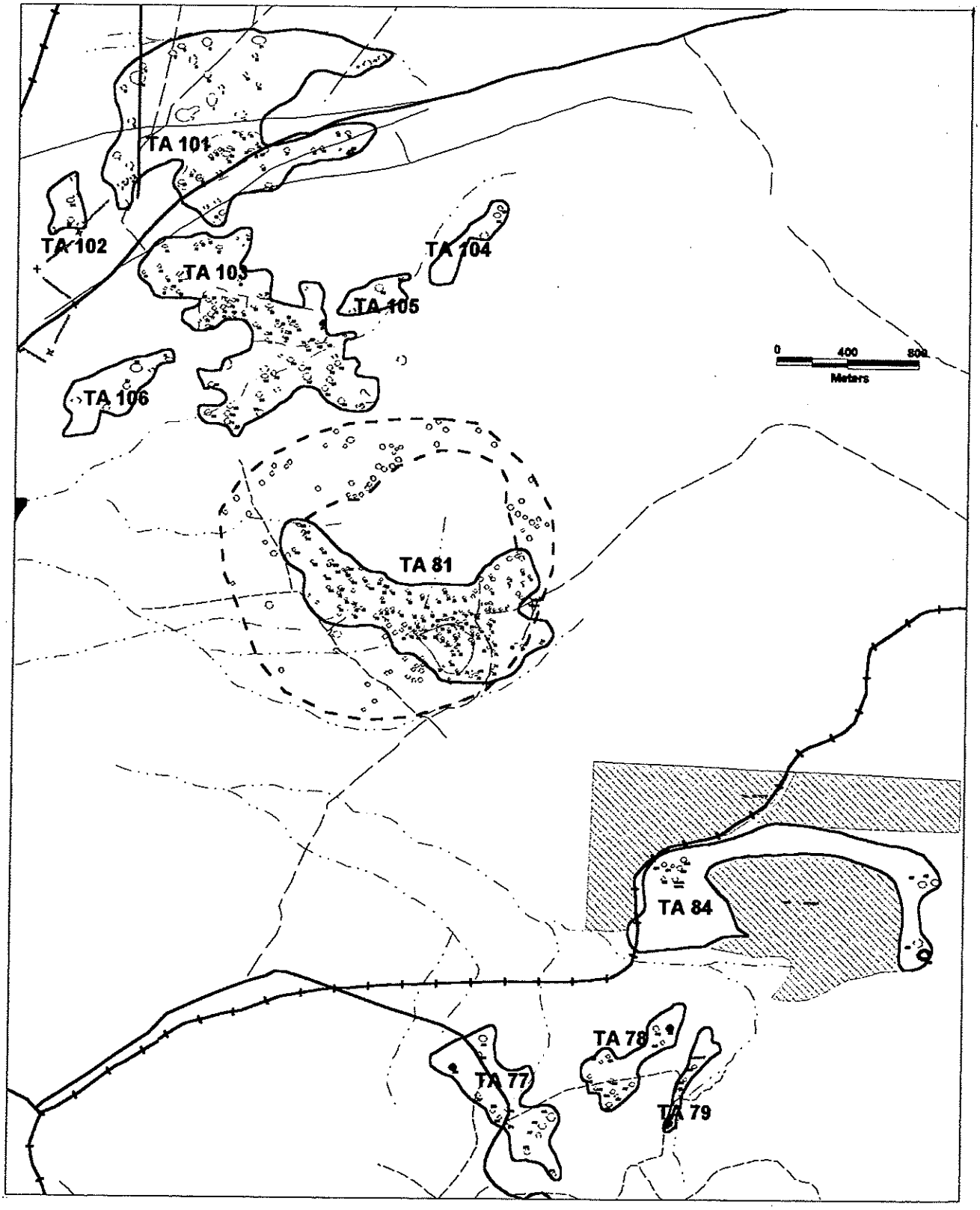

TA 101
TA 102
TA 103
TA 104
TA 105
TA 106
TA 81
TA 84
TA 78
TA 77
TA 79
0
400
800
Meters

Plate 109

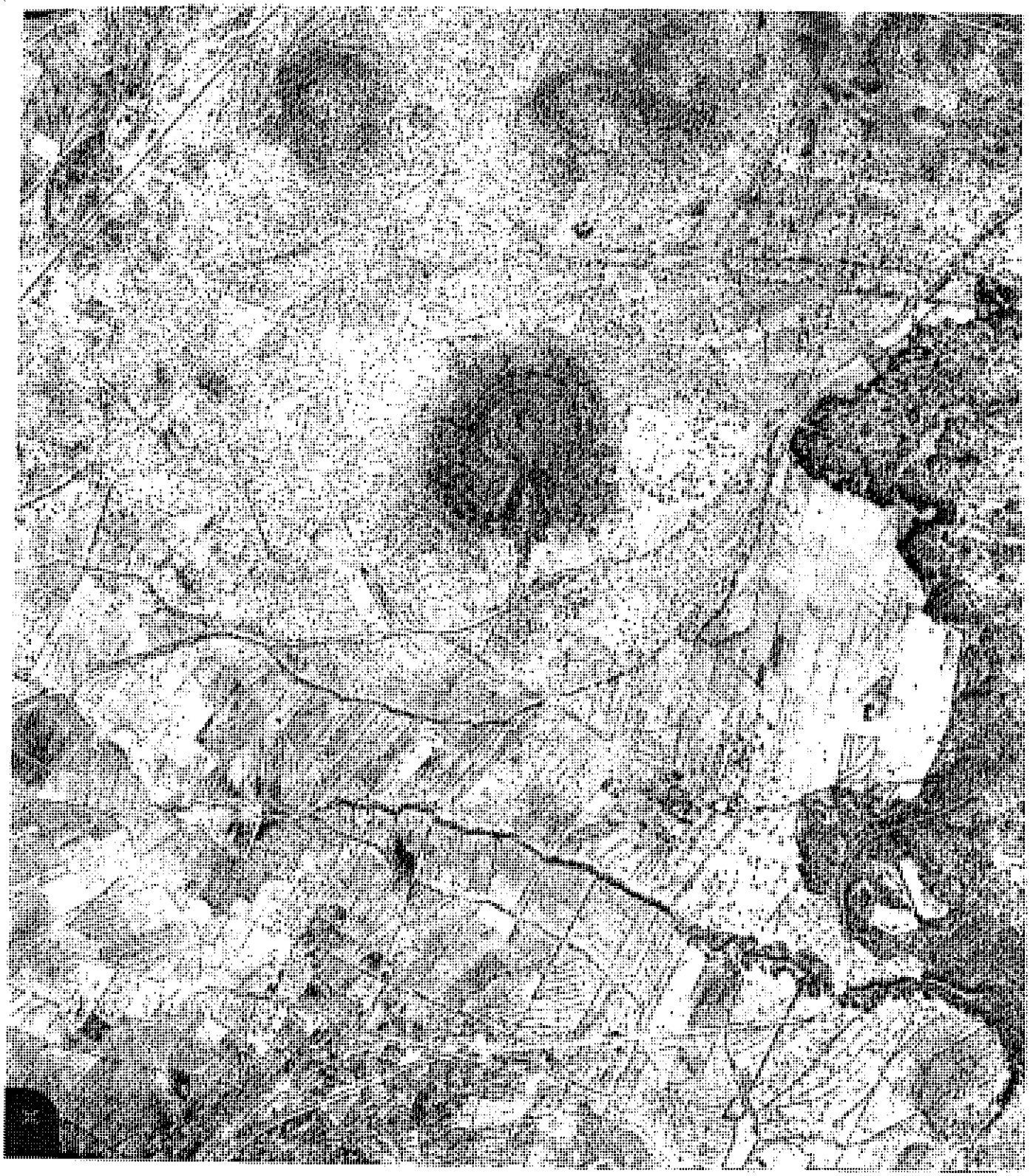


Table 25 T.A. 84 Mound Observations						
Mound #	Poss. Function	Height (cm)	Size (m)	Sherd	Rock	Comment
425	Cerem.	450	30	L-M Az	Heavy	Built on the Slope of Natural Rise, Traces of Steps and Terracing Assoc.
426	Res.	25	30	L-M Az, Tr. Maz	Heavy	Complex of Platforms 25 cm High, Associated with Terraces up to 1 m High on One, a Preserved Wall 1 m High
427	Res.	100-150	25	L-M Az	Heavy	Preserved Walls Reveal a Room Complex + a Stone Wall Str. 2.5 sq. to its North
428	Res.	100	25	L Az	Heavy	Similar to 427 in that Walled Complex is Visible on Surface
429	Res.	75	10	L-M Az (3)	Heavy	Platform - 10 m to a Side
430	Res.	75	10	L Az	Heavy	Like 429
431	Res.	25-50	20x30	L-M Az	Heavy	Poorly Defined
423	Res.	15-25	20	L-M Az (3)	Heavy	Trace of Wall
424	Res.	50	15	L-M Az	Heavy	

15. ZONE 16: THE NORTHEAST PIEDMONT (Figs. 110, 111; Plate 109)

The slopes of the north piedmont have very thin soils that are relatively unproductive. The lower section of the very gently inclined piedmont has some deep soils and regularly traps enough water, during good years, to raise good maize crops; the remaining two-thirds of the middle and upper range of the area, however, has very thin soil, is badly eroded, and suffers from a lack of attention to floodwater and soil conservation controls. Much of the productive agricultural activity of the campesinos is carried out with the limits of the sprawling, low density (20.2 per ha) village of San Esteban Axapusco with its house lot gardens, all of which are enclosed by either stone, adobe, nopal or organ cactus.

Turkeys and chickens are kept in these gardens and the goats are corralled in them at night. The red xoconoxtle, or cardenche tunas, and the large tapon tuna, or tuna blanco, are also grown here. The most productive milpas of this piedmont zone are found within, and adjacent to, the village.

Sites here occur in two clusters, one to the east, on the lower flanks of Cerros La Calera, Loma Mocha, and Cerro San Lucas, the other to the west, around the interconnected hills San Miguel and Tezontla. Unfortunately our survey did not include the dispersed cabecera of Axapusco to the south on the thin soil alluvial plain. This site may have been a cabecera and small town during at least parts of the Aztec period. We suspect that the Aztec settlement was similar in size and plan to Axapusco in 1960.

The southeast cluster of sites was surveyed during the Teotihuacan Valley Project. In 1975 Charlton surveyed the northwest cluster of sites and his survey results are included here. Both surveys revealed heavy Aztec occupation of the zone, a fact which surprised us because of its present-day marginal appearance with respect to agricultural productivity. The Aztec period population was considerably larger than the present and, with the exception of Axapusco, consisted of linear bands of settlement that virtually encircled the cinder cones that define the area on its northern and eastern edges. The modern village of San Miguel Atepoxco provides a startlingly close analogue to the Aztec settlement in the area with respect to its density, linear form, and topographic association. With the exception of T.A. 81, a sujeto of Otumba, the sites in this area were probably sujetos of San Sebastian Axapusco (see Chapter 12).

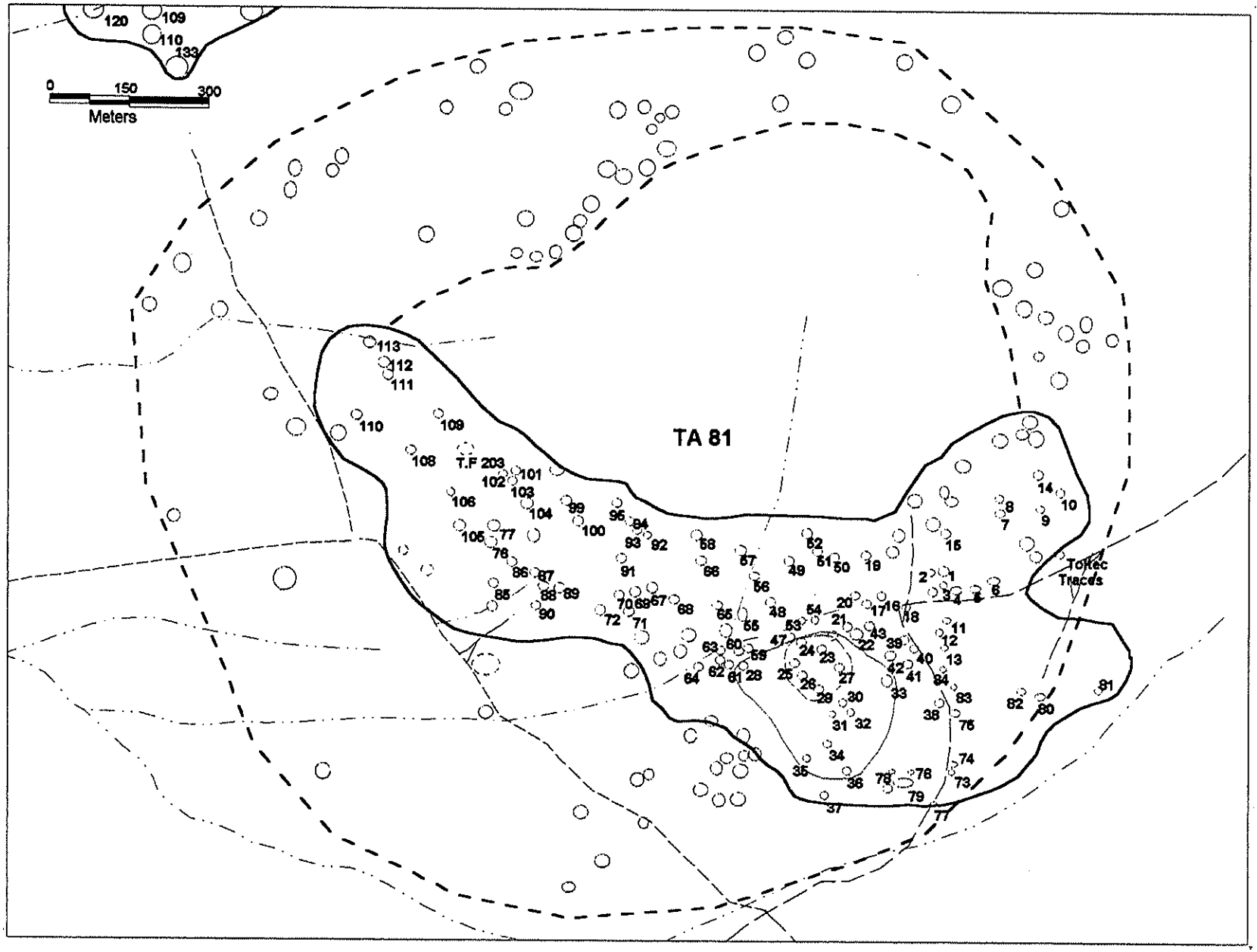
T.A. 81 (Fig. 112, for other figures and plates see Chapter 10)

Classification: This site can be characterized as a large dispersed line village with a nucleated core. There is, at present, no terracing on the northern part of the site; the southern part below the main barranca road has modern terracing. This site is located on the slopes of an isolated cinder cone called Cerro San Lucas. It was resurveyed and extensively excavated by Susan Evans in 1984, the results of which are presented in Chapter 6.

Natural Setting: The settings is on gentle to medium sloping terrain on the flanks of Cerro San Lucas. Soil is very shallow gray sandy loam, with extensive erosion. No permanent streams or springs, many barrancas and washes. Vegetation includes pirul, huizache, huixcolote, palo dulce, nopal, abrojo, cardon, various weeds and grasses; vegetation is rather sparse up to the point where steeper slope begins. No special resources noted. Elevation of the site area is between 2430-2470 m.

Modern Land Use and Cultural Features: Municipio of Otumba, Village of San Marcos Ahuatepec, owned by the ejido. No structures except for a few jacales. A jagüey in the southeastern corner of the site.

Figure 112



Agricultural use: pasture, temporal cultivation in part of the site (i.e. between the upper and lower barrancas which run approximately east-west, parts of the northwestern and northeastern quadrants). Maize and barley had already been harvested at the time of the 1964 survey. Maguey is exploited. Extensive terracing in the area between upper and lower east-west barrancas. Also bancales in this area. Area above upper east-west barranca is in poor condition erosion extensive.

Humidity control: there are several canals and ditches in the area above the upper east-west barranca, but they have fallen into disuse.

Mound 61 at the intersection of the barranca-road running W-SW - ENE and a north-south barranca: on the north side of the mound are remains of "empedrado" or cobblestone pavement. This indicates that the present day barranca road, now impassable to wheeled traffic, was destroyed probably only within the last 50 years. At this particular spot the barranca is about 2 m deep and 7 m wide. At Mound 62, "empedrado" also visible, and barranca is ca. 14 m wide.

Archaeological Remains: The following description is from the 1964 survey - for more detailed and expanded information on this site see Chapter 6. The mound numbers are from the 1984 survey {1964 survey numbers, if different are in brackets} Most of the site is on land presently being cultivated. Most of the site is in good condition. Some mounds in the north-west quadrant have been eroded. Recent pitting is evident on Mounds 40 {8}, 29, 48, 55. A number of mounds were leveled in the strip between the lower east-west barranca and Mounds 31, 32, 38 during the period between 1964 and 1984.

In 1964, 113 recognizable mounds were located (the 1984 resurvey, which included unsurveyed areas on the north slope of a hill identified 206 mounds in all). The largest mound according to the 1964 survey is Mound 55, measuring about 40 m in diameter, and possibly 3 m high. This mound is on a slope, so it is difficult to estimate height. Other large mounds are Mound 47 and 48. Mound 13 [27] and 33, which are almost 2.5 m high, may be at opposite ends of a ceremonial platform.

Based on the 1964 notes, an extensive obsidian workshop area was located in and around the following mounds 13 [27], 14 [25], 15 [23], 16 [26], 29, and 59 [24], this area is found in the core of the site, which also includes 28, 30-36.

Table 26 T.A. 81 Mound Observations

00#	Dimensions	Remains	Notes
1 [11]	1 m high, 9 x 16 m	Medium Aztec ceramics; heavy rock	1984: Excavated: 5 room house
2 [12]	1 m high, 11 x 16 m	Medium Aztec ceramics; heavy rock	1984: Excavated: 5+ room house
11N [59]			On edge of barranca, one side of mound has been destroyed by barranca
11S [60]			See 11N; wall running ca. N-S is exposed in barranca edge
13 [27]	2 m high, 15 m diameter	heavy obsidian cover of chips and tools, between 16 [26] and 13 [27]	May form end of plaza, with 33; badly eroded
15 [23]			Photo

18 [42]	1.5 m high		Pitted on top; exposed Wall runs nearly NS
21 [4]	.75 m high, 14 m x 7 m	Medium Aztec ceramics, very heavy rock, heavy basalt	
22 [5]	1.75 m high, 22 m x 15 m	Medium Aztec ceramics, trace Toltec; heavy rock, heavy basalt	
23 [6]	1.75 m high, 28 m x 15 m		
25 [1]	1.5 m high, 12 m x 10 m	MH Aztec ceramics, very Heavy rock, very heavy basalt	
26 [2]	.75 m high, 9 m x 7 m	Medium Aztec ceramics, very heavy rock, heavy basalt	
27 [3]	.2 m high, 9 m diameter		
31			1964: has been dug; several walls trenched along, H-4{?}. Preel figurine body in area
33	2.5 m high, 20 m diameter	Fragments of elaborate censers	Appears to be a pyramid mound; pitting on top exposed only rock fill; several pieces of plaster, cf. Mound 13 [27]
34		Pottery: 1 Tzacualli sherd, a few Toltec found near this mound	
38			Badly eroded by plowing
39 [7]	1.25 m high, 22 m diameter	Heavy Aztec ceramics; heavy rock, heavy basalt	
40 [8]	1 m high, 23 x 12 m		Trench dug into southeast corner
41 [9]	.75 m high, 9 m diameter	Light Aztec ceramics	
42 [10]	1 m high, 18 m diameter	Medium Aztec ceramics	
47	1.5 - 2m high, ca. 20 m in diameter		Pitted in center. Lime plaster tezontle stucco floor, ca. 10 cm thick, overlying hard packed earth surface. E-W wall is exposed.
48			Pitted in center, no features exposed
50			Photo
55	3 m high, 40 m diameter		Largest mound per 1964 survey, pitting in center exposed an E-W wall
59 [24]		photo shows heavy obsidian	
61			Badly eroded by water action on E, W, & S sides. See notes on barranca-road in Modern Land Use
62	2.5 m, top of mound to bottom of barranca		Also cut down by water action. Wall running N-S exposed in barranca edge.
64 [13]	.7 m high, 22 m diameter	MH Aztec ceramics; heavy rock	

79 area		Heavy Aztec ceramics; heavy rock	Area of severely eroded mounds
88-90		Tzacualli occupation as well as Aztec	Heavy washing in #90; Photos show wash area
92-95		Very sparse pottery, not collected, but not on mounds - worked down & mixed	#95 has exposed walls.

Pottery is moderate to very heavy on mounds, localized and variable. Noted presence of obsidian tools, cores, many blades and scrapers, fair numbers of manos and metates, some celts, and sparse figurines, spindle whorls, and pottery disc. The original survey area was 65 ha., expanded in later surveys to 120 ha.

Fired bricks were found on most of the mounds in the central area of the site.

Along with T.T. 65, other Mazapan sites within and the general area of the site include T.T. 63, 64, 66-69. Some rock, slight mounding, in a rather badly eroded area. Southwest slope of C. San Lucas. Medium slope. A few pirules, jarilla de la china, other weeds, vegetation otherwise scanty. Site and surrounding area planted in barley, harvested at the time of the survey. A pole and brush dam built to stop erosion on the north side of site. A road-ditch runs northwest-southeast along lower edge of site. The bancal is pierced by brick-lined culverts which supply water for irrigation of the maize below. At the south end of the ditch there are two substantial jacales constructed of earth, stone, and adobe, roofed with brush and earth. Ejido de San Marcos, Municipio de Otumba.

Ethnohistoric Information: This is the village of San Lucas Cihuatepec, a sujeto of Otumba in the Early Colonial period.

T.A. 101 (Figs. 113, 114)

Classification: A large dispersed village with a nucleated core.

Natural Setting: Municipio of Otumba, owner: Hacienda Zoapayuca. Piedmont, gentle slope. Soil: sandy light brown, varying in depth from 0 to 100 cm, much of the site area is eroded down to tepetate. No permanent streams or springs. Major barranca is on the north side of the site, partially canalized, 5 - 10 m wide and 4 m deep at deepest point. Washes are numerous throughout the site. Vegetation consists of pirul, thornbush, maguey, nopal. The hill is composed of red volcanic ash, and modern cascajo (gravel) and tepetate quarries were opened for new highway construction needs. Elevation 2430-2480 m.

Modern Land Use: Structures on the site: several hacienda buildings are located on the west edge of the site. There are also some house lots {2) and semi-subterranean earth-covered lodges, for storage of harvests. Jagüeys: there are 3 large jagüeys, one is stone-lined, belonging to the hacienda. Another smaller one is associated with the house lot. Crops: temporal cultivation of barley, fair to medium, harvested maguey, some corn. Erosion control: new maguey bancales; ditches and terraces present; creating new fields in very heavily eroded areas. Old terraces are also present. Canals, dams, and drainage ditches are present, most are of the hacienda period.

Figure 113

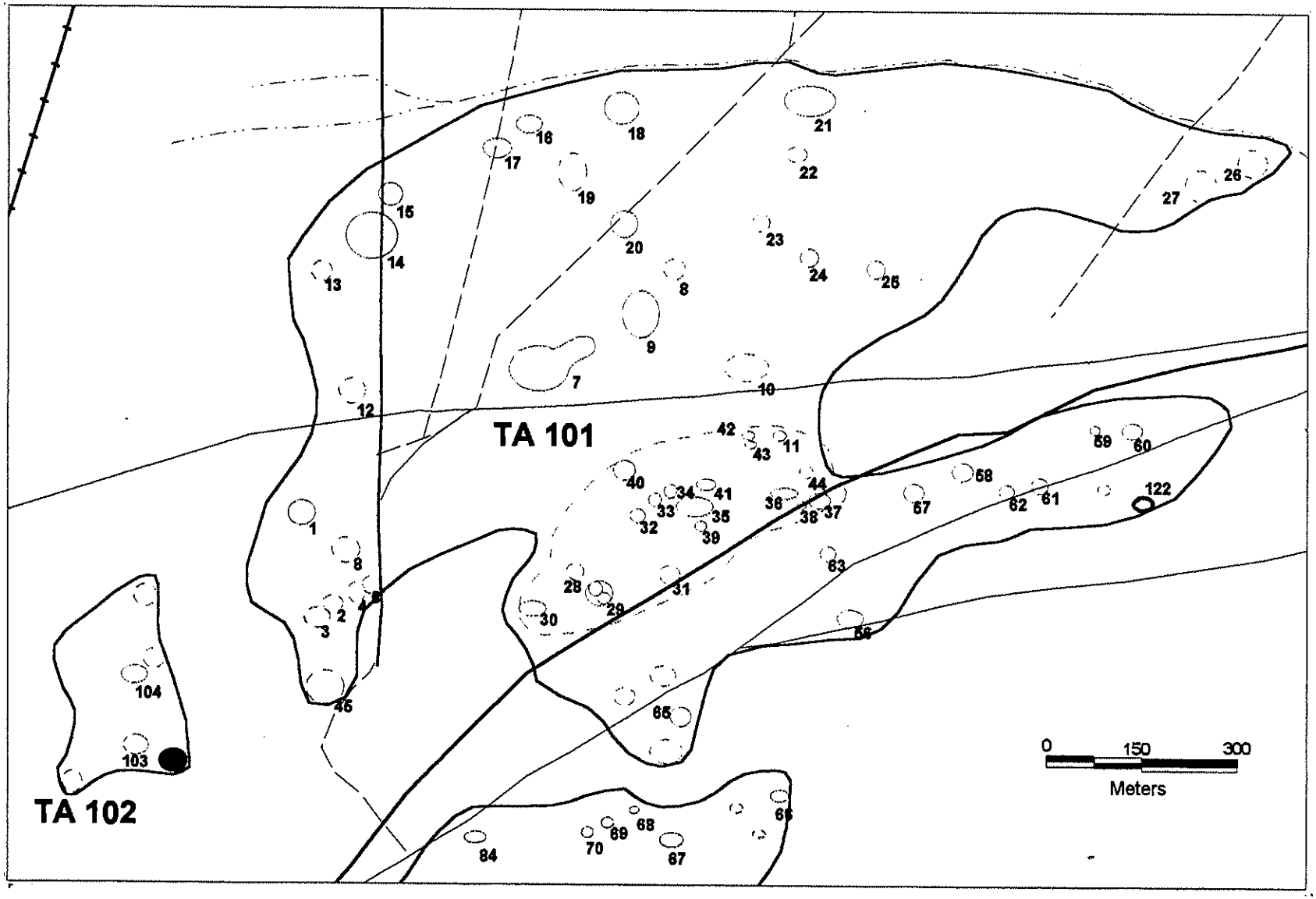
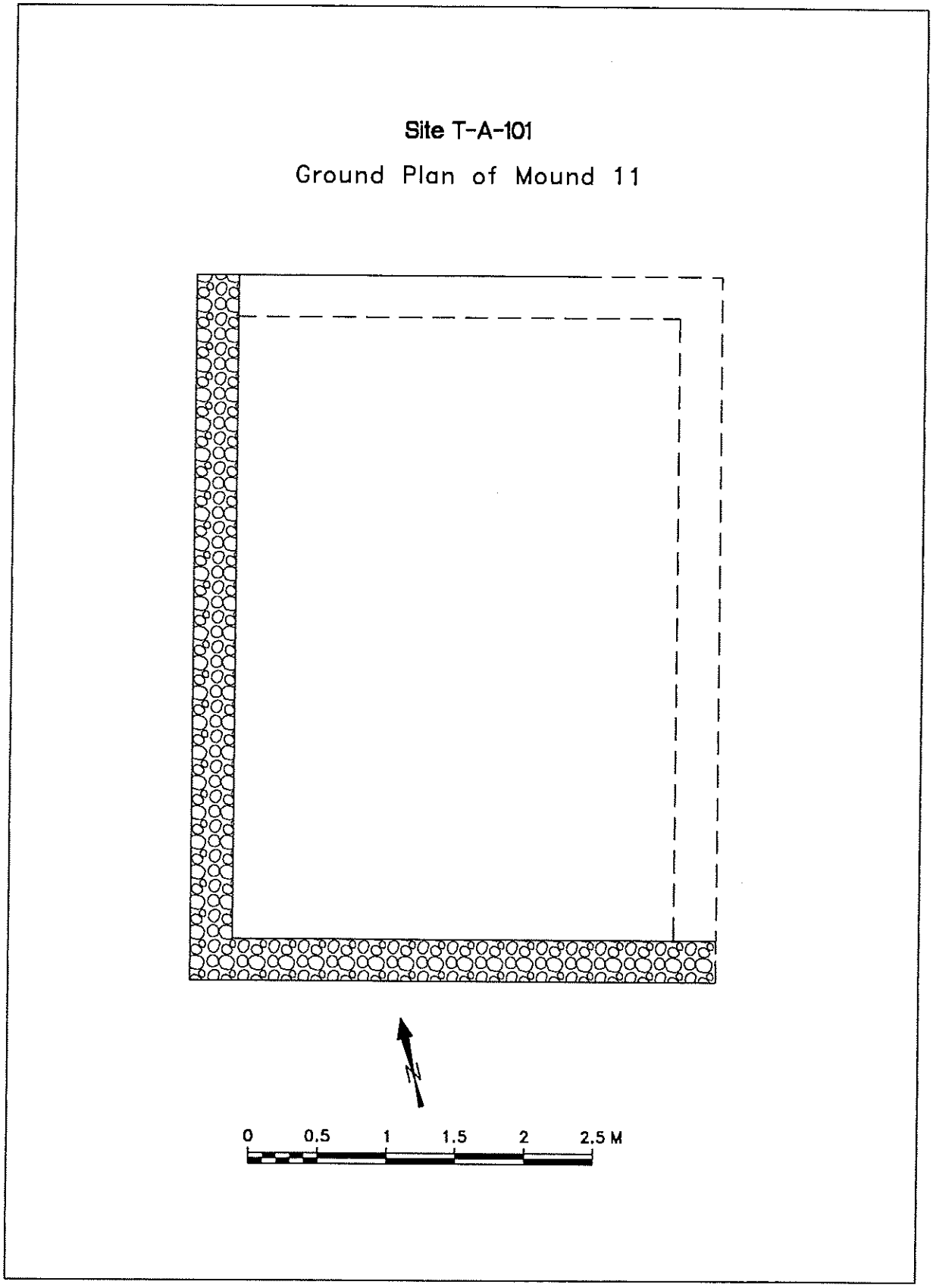


Figure 114



Archaeological Remains: The site is very badly eroded; no pitting noted. Fifty-five mounds or probable mounds were noted; all appear to be domestic in nature. As indicated on the map there is a clustering in a band-around the hill with scattered mounds on the slope to the barranca in the north.

Mounds 28-45, are all located in a badly dissected area with much erosion. Isolated non-eroded sections occur as well, from which very heavy pottery is eroding out. This whole area appears to be the oldest part of the Aztec site and pottery from phases 2-4 is present. It probably was the center of the community. These mounds (1/3 of all mounds on the site) are probably remnants of a heavily settled central section of the village.

Mounds 56-63, 122, lie in an area of medium to heavy occupation with terraces and erosion has destroyed many other mounds, as indicated by pottery concentrations found in a badly eroded area. Possibly the nucleated zone should include these mounds. The total site area is 102 ha. It has enough Mazapan occupation (T.T. 191) present to suggest a hamlet.

Table 27 T.A. 101 Mound Observations

Mound #	Dimensions	Remains	Notes
1	50 cm, slight rise	Heavy ceramics, heavy rock	
2-6	slight rise	Heavy ceramics, heavy rock	Pottery washing out of ground
7	rise - 50 cm	Heavy ceramics, heavy rock	Pottery washing out
8		Heavy ceramics, heavy rock	
9	rise - 50 cm	Heavy ceramics, heavy rock	
10		Heavy ceramics, heavy rock	
11	rise	Heavy ceramics, heavy rock	Walls visible (see diagram)
12-13		Heavy ceramics, heavy rock	
14	50 cm	Heavy ceramics, heavy rock	
15	slight rise	Heavy ceramics, heavy rock	eroding out of wash area
16	rise	Heavy ceramics, heavy rock	Mound 16 had tiles associated
17		Heavy ceramics, heavy rock	
18		MH ceramics, Medium rock	Trace of Toltec
19		Heavy ceramics	Sherds eroding out of new terrace
20	50 cm rise	Heavy ceramics, heavy rock	Trace of Teotihuacan & Toltec
21	50 cm	Heavy ceramics, heavy rock	Edge of bridge & barranca
22	50 cm	Heavy ceramics, medium rock	Eroding out of bank
23		Medium ceramics, medium rock	Washing out of bank
24	50 cm rise	Heavy ceramics, heavy rock	
25	slight rise	Heavy ceramics, heavy rock	

26	slight rise	Heavy ceramics, heavy rock	
27	slight rise	Heavy ceramics, heavy rock	eroding
28	50 cm high	Heavy ceramics, heavy rock	eroding from barranca
29	50 cm high	Heavy ceramics, heavy rock	eroding from old land surface above present tepetate
30	35 cm high	MH ceramics, heavy rock	large uneroded area, ashes (?)
31	35 cm high	Heavy ceramics, heavy rock	
32	50 cm soil-old surface	Heavy ceramics, medium rock	between washes-badly eroded
33	60 cm uneroded area	Heavy ceramics, medium rock	
34	50 cm earth, non eroded	Heavy ceramics, heavy rock	
35	1 m ht.	Heavy-very heavy ceramics, very heavy rock	eroding, Aztec 4 noted
36	1 m ht.	Very heavy ceramics, very heavy rock	Aztec 2,3,4
37	1 m ht.	Very heavy ceramics, heavy rock	very badly eroded
38	50 cm, non eroded	Heavy ceramics, medium rock	
39	50 cm	Heavy ceramics, heavy rock	uneroded
40	50 cm	Heavy ceramics, little rock	eroding
41	50 cm	Heavy ceramics, medium rock	eroding
42	50 cm	Heavy ceramics, medium rock	eroding
43	50 cm	Heavy ceramics, medium rock	eroding
44	50 cm	Heavy ceramics, heavy rock	uneroded
45	50 cm	Medium ceramics, very heavy rock	large rock area
56	m. rise	Heavy ceramics, heavy rock	
57	1-1.5 m rise	Heavy ceramics, heavy rock	
58	.75 m	Heavy ceramics, heavy rock	eroded soil remnant {?}
59	1 m	Heavy ceramics, heavy rock	eroded soil remnant {?}
60	1 m	Heavy ceramics, heavy rock	eroded soil remnant {?}
61	1m	Heavy ceramics, heavy rock	eroded soil remnant {?}
62		Heavy ceramics, heavy rock	eroding fr old terrace
63	.75 m	Heavy ceramics, medium rock	eroded area
127	1.5-2m; 36' x 30' {sic}	MH Aztec, Toltec ceramics, very heavy rock	large residence or pyramid?

Ethnohistoric Information: Probably a sujeto of Axapusco in the Early Colonial period.

Problems: The survey of the site was not completed. However, some conclusions may be drawn. The site is large, 55 mounds and undoubtedly more to be recorded, a good-sized village. Much Huastec pottery was noted, perhaps indicating a trade center. The area has Mazapan (T.T. 91) occupation, and Aztec 2-4.

Generally the site follows the contours of the hill, girding it, horseshoe-like. There are less densely packed mounds on the gentle slopes to the north, towards the barranca. Nowhere are houses located on steep slopes, only on medium and gentle slopes.

Probably the flat bottom lands to the west were used, as well as the hill slopes above, for agricultural purposes. The site overlooks the low pass out of the Teotihuacan Valley to the east and could have functioned for trade purposes. The railroad and highways both follow the same route out of the valley.

T.A. 102 (Fig. 113)

Classification: A small hamlet. Possibly not a separate site, but joined to T.A. 101, and now perceived as separate due to erosion. Significant site destruction from hacienda activities.

Natural Setting: Municipio of Axapusco, owned by Hacienda Zoapayuca. Upper valley, gentle slope at 2420-2430 m, sandy light brown soil, ca. 25-100 cm in depth, with erosion from a wash area leading to a jagüey. Hydrography: one wash cuts through the site; 2 m wide, 1 m deep. Vegetation is maguey and pirul. No special resources.

Modern Land Use: Within the site area are the ruins of the hacienda's residence for workers. There is one large jagüey, now dry, and planted as humedad land. Site is mainly maguey fields. Humidity control consists of a dam on the ditch draining into the jagüey; this was once a complicated system to get water to the jagüey.

Archaeological Remains: The archaeological deposit varied with soil depth; no stratification noted. This small site's remains have been destroyed or obscured by erosion (down to tepetate in part of the site), by the hacienda building, and by construction of the jagüey. There are four pottery concentrations, and two definite mounds. The total site area is 5 ha. A Teotihuacan occupation (T.C. 34) is found on the site.

Table 28 T.A. 102 Mound Observations

Mound #	Dimensions	Remains	Notes
103	1 m high	MH Aztec ceramics, heavy rock	modern occupation; temple model figurine found; possibly colonial occupation
104	50 cm rise	Heavy Aztec, ceramics, heavy rock	badly eroded

Pottery is sparse to heavy, localized and variable. Noted presence of obsidian blades and cores, and figurines. Noted that no manos, metates, celts, pestles, spindle whorls or pottery discs were seen.

Ethnohistoric Information: See T.A. 101.

T.A. 106 (Fig. 115)

Classification: The site was probably a hamlet and/or colonia of T.A. 103 during its entire occupation.

Natural Setting: Municipio of Axapusco, Village of San Miguel Ometusco; no owner noted. Upper valley, gentle slope, sandy light brown soil, ca. 50 cm in depth, with moderate to heavy erosion. Hydrography: one wash cuts through part of the site. Vegetation is barley, maize, pirul trees, nopales. No special resources. The site is located between 2400-2430 m.

Modern Land Use: No structures or jagüeys. Temporal cultivation. Part of the site is in pasture, part in moderately concentrated agriculture. Surveyed prior to planting, barley and maize were planted last year. Erosion control consisted of terrace with maguey, and ditches. A drainage ditch was present at the site.

Archaeological Remains: General condition of the site was moderately eroded, in some places to tepetate; no excavations or pitting were noted. Mounds are all residential: The total site area is 14 ha. Other occupations on the site include Mazapan (T.T. 60), and traces of Tzacualli (T.F. 240), and Cuanalan (T.F. 294).

Table 29 T.A. 106 Mound Observations

Mound #	Dimensions	Remains	Notes
75	50 cm rise	Heavy Aztec ceramics, heavy rock	Aztec 3-4
130	50 cm rise	Heavy Aztec ceramics, heavy rock	
131	50 cm rise	Medium-Heavy Aztec ceramics, light rock	
132	1 m rise	Medium Aztec ceramics, medium rock	Manos and comales noted

Also, two possible mounds in area of heavy rock-Aztec.

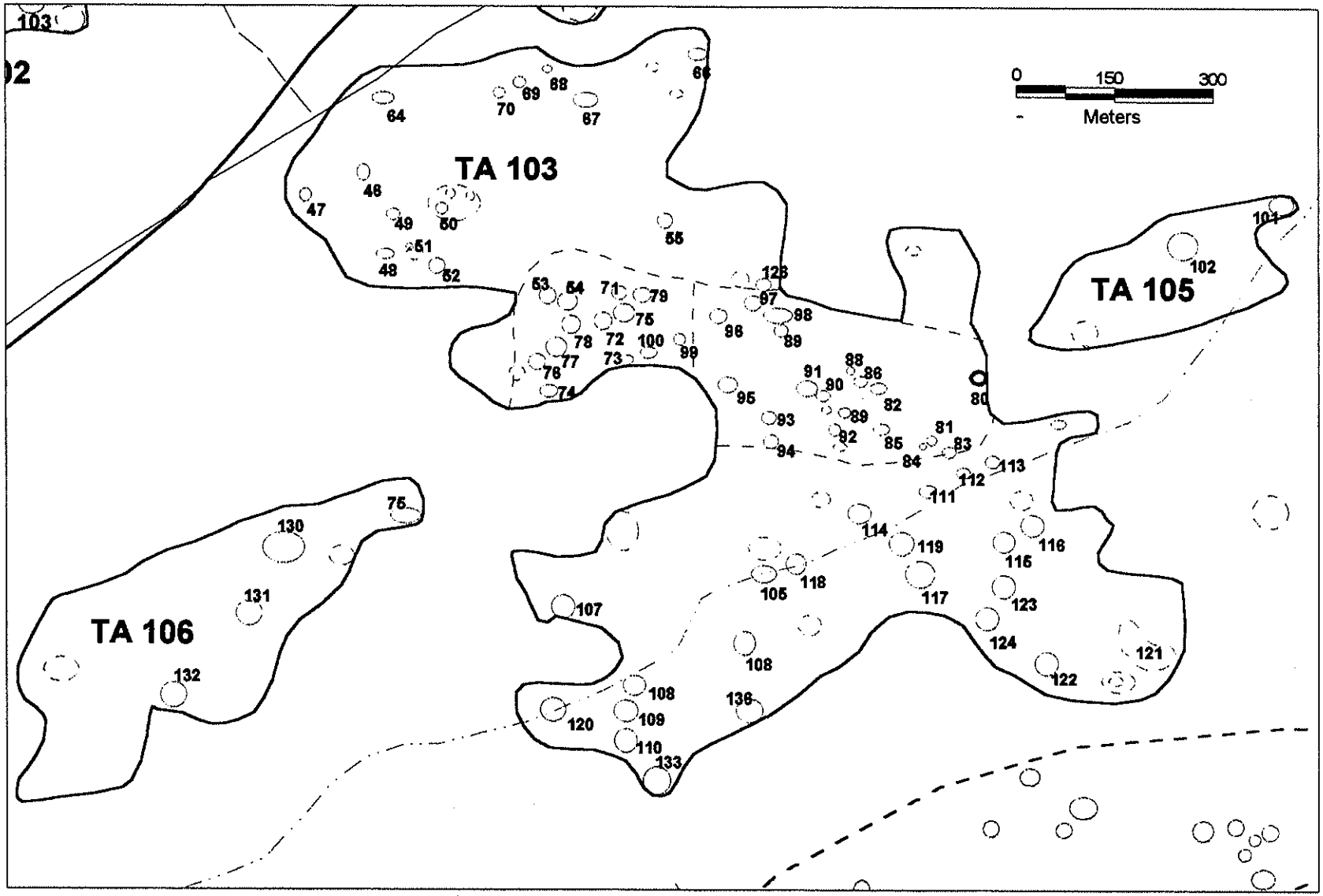
Pottery is moderate to heavy, localized and variable. Noted presence of obsidian tools, blades, cores, manos and metates, and figurines. Noted that no celts, pestles, mortars, spindle whorls, or pottery discs were seen. No photos taken.

Ethnohistoric Information: See T.A. 101.

T.A. 103 (Fig. 115)

Classification: Site is a large dispersed village with a nucleated core, comprising a plaza and possible pyramid and other mounds, up and downslope from it. It may be part of an extensive community that included sites T.A. 101, 102, 106, 104, and 105. The boundaries between the sites are very arbitrary. It is also possible, because they are comparable in size, that T.A. 101 and T.A. 103 and adjacent smaller sites formed two separate communities. Following this interpretation, in all probability T.A. 104, 105, and 106 had a social relationship to T.A. 103. Lands below the site were probably used for agricultural purposes.

Figure 115



No planning noted, though as indicated, there is a great concentration of mounds near the plaza-pyramid area. Problem seen here, as with T.A. 101, is the extent of erosion, and possibility of destruction of a great amount of the site in places. Population was minimally 400-500, thus classifiable a large semi-nucleated village. Presence of Huastec Black on White suggests that this might have been a route for the entry of trade goods into this valley from the coast. The problem with our data is that none of the mounds sampled; nor was the test-pitting needed to confirm the suggestion carried out.

Natural Setting: Municipio of Axapusco, Village of San Miguel Ometusco; no owner noted. Upper valley, gentle slope, sandy light brown to black soil, ca. 0 cm to 1 m in depth, with moderate erosion, some exposed tepetate. Hydrography: A barranca on the east edge of the site, ca. 2 m deep, 3 m wide. Several washes cut through the site, which is badly eroded on the west side. Vegetation is barley, maize, beans, grass, pirul trees, nopales, and magueys. No special resources, but the hill above the site has a pure tezontle core, and is an old cinder cone. Also potentially useful is the basalt outcrop above T.A. 104; T.T. 67; but there is no evidence that these were worked in prehistoric times. Site occurs between 2400-2460 m.

Modern Land Use: Site includes areas of intensive as well as marginal land use, but primarily {the site} is in tepetate or pasture areas. One cuescomate (granary) was noted near Mound 53, a dug out earth-covered log structure for sleeping in when harvesting. No jagüeys. Temporal cultivation. Crops at time of survey: harvested, or being planted. At end of June, corn was up to 10-20 cm high, also barley, beans had ca. 10 cm growth. Erosion control: terraces on the north part of the site, some of which have eroded, new terraces near Mound 51, and 52. Drainage ditches throughout site, as noted on map.

Archaeological Remains: Site is moderately eroded with some pitting in the mounds. There are 68 mounds on the site; 21 mounds in the nucleated area. Thirteen more mounds (53-54, 71-79, 98-100) appear to be an extension of the nucleated area to the west and thus a total of 34, 50% of the total, are in the central area. At T.A.101, 33% of the mounds were in the central area, thus T.A. 103 is more nucleated. One nucleated area has an upper status residential mound and a possible pyramid arranged around a plaza: 21 mounds, 8 of which are connected directly with the plaza ceremonial-residential complex; the others appear to be more in the outer edge: northern edge is ill defined, probably being where the present road is; eastern edge of plaza is framed by pyramid (80); western edge of plaza is framed by Mounds 82, 85, and large substructures (92); southern edge of plaza is framed by Mounds 81, 83, 84; southern edge of this nucleated zone around plaza is defined by Mounds 111, 112, 113. The rest of the nucleated group includes 86-97. The total site area is 103 ha.

Central Nucleated Group (21 Mounds)	Table 30 T.A. 103		Mound Observations
Mound #	**Dimensions**	**Remains**	**Notes**
80	35' x 25' downslope end, 3 m high	Medium Aztec ceramics, very heavy rock in an area 25' N-S, 25' E-W	Probable pyramid, located against slope of hill to N, a platform-like mound, also to the west an area with light pottery, probably a plaza; 35 m N-S, 25 m E-W. The N end is upslope, the downslope end is 3 m high;
81	50 cm high	L-M Aztec ceramics, M rock	
83	10' x 15', 1 m high	H Aztec ceramics, H rock	Possible pyramid
84	50 cm high	H Aztec ceramics, H rock	
82	75 cm high	H Aztec 3-4 ceramics, H rock	

85	25 cm high	H Aztec ceramics, M-H rock	Mounds 82,84,85 are located on an area which might be remains of large mound - sherds and stone rise 25 cm above the surrounding area
111	50 cm rise	M Aztec ceramics, L-M rock	
112	50 cm rise	M Aztec ceramics, M rock	
113	50 cm rise, 5 m diam	M-H Aztec ceramics, M rock	Large mound with Huastec trade ware
89	25-40 cm	H Aztec ceramics, L rock	25-40 cm earth remnant in eroded terrace; pottery eroding out
90	25-40 cm	H Aztec ceramics, L-M rock	cf 89
91	25-40 cm	H Aztec ceramics, L-M rock	cf 89-90; 89-91 = part of group of mounds clustered near the plaza but stretching west
92	1-1.5 m	H Aztec ceramics, H rock	Badly eroded; no wall visible; metate present; 92 seems to be a partial extension of 82-85 substructure; 89-91
93	1-2 m	H Aztec ceramics, H rock	badly eroded; possible ceremonial mound
94	.5-1 m	H Aztec 2-4 ceramics, H rock	
86	1-2 m	L-M Aztec ceramics, H rock	Large mound [??] possible extension of 82-85 around W edge of plaza
88	50 cm rise	M Aztec ceramics, M rock	
95	.5-1 m hi	H Aztec ceramics, H rock	
96	1 m	M Aztec ceramics, H rock	Large mound
97	.25 m soil remnant	M-H Aztec ceramics, H rock	Eroding from side

The semi=nucleated group (13 mounds):

Mound #	Dimensions	Remains	Notes
53	50-75 cm high	H Aztec ceramics, H rock	Located in wash area where almost all soil has eroded away
54	50 cm high	H Aztec ceramics, H rock	cf 53
71	25 cm rise	H Aztec ceramics, M rock	Huastec trade ware
72	50 cm high	H Aztec ceramics, M rock	area of H erosion
73	50 cm high	H Aztec ceramics, M rock	Some erosion
74	50-75 cm	H Aztec ceramics, L rock	Appears [?] H ceramic zone to S edge of mound
75	25-50 cm	H Aztec ceramics, H rock	
76	50 cm	H Aztec ceramics, H rock	Eroded mound; one wall on N side 30 cm wide, of small rocks; 1 m in length runs E-W, 120^0 E of N

77	50 cm rise	H Aztec ceramics, H rock	
78	50 cm	H Aztec ceramics, H rock	Eroding out
79	50 cm	H Aztec ceramics, H rock	H Huastec tradeware, Mound cut by ditch on N side
98	50 cm	H Aztec ceramics, M rock	
99	50 cm	H Aztec ceramics, H rock	
100	50 cm	H Aztec ceramics, H rock	

The dispersed group (15 mounds); to the west and north of the nucleated area these 15 mounds stretch downhill to T.A. 101 and T.A. 102. They are located in relatively badly eroded areas. They are relatively scattered, probably residential mounds but with some groups, such as 48 through 52, 55, 64 and 66 through 70, and 126.

Mound #	Dimensions	Remains	Notes
46	25-50 cm high	A Aztec ceramics, L rock	
47	50 cm high	vH Aztec ceramics, L rock	
48	50 cm rise	H Aztec ceramics, M rock	eroding out
49	50 cm high	H Aztec ceramics, M rock	eroding out
50	50 cm high	H Aztec ceramics, M-H rock	badly eroded, possibly once greater extension to N
51	50 cm	H Aztec ceramics, H rock	
52	50 cm	H Aztec ceramics, H rock	burial associated, - young about 18-20 years old, radius, mandible, seve. vertebrae
55	50 cm	H Aztec 2-4 ceramics, M rock	
64	50 cm rise	M-H Aztec ceramics, L rock	in eroded area cut by ditch
66	50 cm rise	vH Aztec ceramics, H rock	
67	50 cm rise	H Aztec ceramics, H rock	Large mound remnant in eroded area
68	50 cm rise	H Aztec ceramics, H rock	eroded area
69	50 cm rise	H Aztec ceramics, H rock	eroded area
70	50 cm	H Aztec ceramics, H rock	
126	50 cm	M-H Aztec ceramics, H rock	badly eroded

Another dispersed group of 15 residential mounds stretches to the south and east, across the barranca and partway up the slope of Cerro San Lucas, with subgroups of 115, 116, 123, 124, and 114-117-119.

Mound #	Dimensions	Remains	Notes
105	50 cm high	L-M Aztec ceramics, H rock	
106	50 cm high	L-M Aztec ceramics, H rock	badly eroded by plowing
107	50 cm rise	H Aztec ceramics, H rock	
114	50 cm high	M Aztec ceramics, H rock	
115	50 cm high	M-H Aztec ceramics, M rock	eroded mound on edge of barranca
116	50 cm	M-H Aztec ceramics, L rock	eroded area
117	50 cm	H Aztec ceramics, H rock	
118	50 cm	L-M Aztec ceramics, H rock	
119	50 cm rise	M-H Aztec ceramics, H rock	
121	50 cm rise	M-H Aztec ceramics, M-H rock	large area, several concentrations of rock and pottery, possibly several destroyed mounds
122	1.5-2 m rise, 30' sq.	M-H Aztec ceramics, vH rock	possible pyramid? badly eroded by plowing
123	1 m rise	M-H Aztec ceramics, H rock	Miccaotli censer base present
124	50 cm rise	M Aztec ceramics, H rock	badly eroded
136	.5-1 m	M Aztec ceramics, L rock	

Another dispersed group of residential mounds is somewhat separate from the site, and the fields between this group and the rest of T.A. 103 have very little pottery; except for the immediate vicinity of the mounds themselves there is little pottery in the fields around them. These mounds were possibly upper status residences, or perhaps had some quasi-ceremonial function. Mounds 108, 109, and 110 are in a north-south line, and Mound 120 is slightly to the west.

Mound #	Dimensions	Remains	Notes
108	50 cm high	H Aztec ceramics, H rock	10-15 m diameter
109	50 cm high	H Aztec ceramics, H rock	10-15 m diameter
110	1 m rise	vH Aztec ceramics, vH rock and adobe and brick	20 m diameter
120	50 cm high	H Aztec ceramics, H rock	10 m diameter, badly destroyed
133	50 cm	M-H Aztec 3 ceramics, H rock	

Pottery is sparse to very heavy, localized and variable. Obsidian tools, blades, and cores were present in quantity. Ground stone manos, metates, celts, mortars and pestles were all noted. Figurines, spindle whorls, and pottery discs were all noted.

Ethnohistoric Information: Probably a sujeto of Axapusco in the Early Colonial period.

T.A. 104

Classification: T.A. 104 is a very small hamlet on an earlier Mazapan site probably very similar to T.A. 102, and possibly, along with T.A. 105, a mere extension of T.A. 103. If separate, it was probably under control of T.A. 103. No ceremonial architecture was noted in T.A. 104. The site is almost equivalent in area to the earlier Toltec site, suggesting a continuity of population, at least in this area.

Natural Setting: Municipio of Axapusco, Village of San Miguel Ometusco; no owner noted. Upper valley, gentle slope, sandy light brown soil, ca. 50 cm in depth, with slight erosion. Hydrography: one canalized wash on east edge of the site. Vegetation is barley, maize, pirul trees, magueys. No special resources. The site area is located between 2460-2480 m.

Modern Land Use: No structures or jagüeys. Temporal cultivation. Barley and maguey when surveyed, April 28. Barley did not appear planted, and may have invaded as a volunteer. Erosion control consisted of terraces, old and with dams, and old controlled wash present near site. Site is in area of pasture, maguey and barley, marginal land use.

Archaeological Remains: General condition: slight erosion, no pitting. Two, perhaps three low mounds, scattered over fields, no pattern of clustering. The total site area is 6 ha.

Table 31 T.A. 104 Mound Observations

Mound #	Dimensions	Remains	Notes
128	30 cm soil	L-M Aztec ceramics	ceramics eroding out
129	50 cm rise	M-H Aztec ceramics, M rock	
poss.		M Aztec ceramics	

Ethnohistoric Information: See T.A. 103.

T.A. 105 (Fig. 115)

Classification: Either a hamlet or an integral part of T.A. 103 (the latter is less likely given the gap in ceramic distribution). Aztec 2-4 was noted in fields as well as Mazapan, suggesting a continuity of population, as in the case of T.A. 104 and T.A. 103.

Natural Setting: Municipio of Axapusco, Village of San Miguel Ometusco; no owner noted. Upper valley, gentle slope, sandy light brown soil, ca. 50 cm in depth, with moderate erosion. Hydrography: one wash

on west edge of the site. Vegetation is pirul trees, nopales, magueys. No special resources. Elevation 2450-2470 m.

Modern Land Use: No structures or jagüeys. Temporal cultivation. Surveyed in winter when all cut; remains of barley, maize, and maguey. Site is in area of marginal land use.

Archaeological Remains: The archaeological deposit appears, on the basis of washes to be 30-50 cm deep, Site's general condition: moderate erosion, no excavations or pitting. Two perhaps three (or more, now destroyed) mounds, no pattern of clustering. The site area is 5 ha.

Table 32 T.A. 105 Mound Observations

Mound #	Dimensions	Remains	Notes
101	30 cm soil	H Aztec ceramics, H rock	ceramics eroding out
102	1-1.5 m rise	H Aztec ceramics, h rock	partially eroded by plowing
poss.		H Aztec ceramics, H rock	

T.A. 107

Classification: Very small dispersed village or large hamlet. The site was a direct continuation of Mazapan occupation (designated T.T. 60), as is also indicated by heavy Aztec 2 ceramics. T.A. 107 covers generally the same area as T.T. 60, but also has heavy ceramic detritus away from the mounds. The site could have been a subsidiary of T.A. 101 or 106, but probably was an independent sociopolitical unit. Additional occupation includes Teotihuacan (T.C. 34).

Natural Setting: Municipio of Axapusco, owned by Hacienda Soapayuca. Upper valley, gentle slope, sandy light brown soil, ca. 50 cm in depth, with medium amount of erosion. Hydrography: one small wash cuts. Vegetation is maguey, nopal, and pirul; area has moderate agricultural use. No special resources. Elevation 2360-2400 m.

Modern Land Use: One house near the highway at the edge of the site. Crops: temporal cultivation of maize (0.75 to 1.5 m), beans (20-30 cm), barley (40 cm) (August). Erosion control devices are low terraces. Drainage ditches catch runoff from the hill northeast of the site.

Archaeological Remains: The site has moderate erosion but no pitting; most destruction is due to agriculture. There is no apparent clustering of mounds, but there is a definite indication of a nuclear site area very densely occupied with good indication of Mazapan (T.T. 60), Aztec 2 and 3, and some Aztec 4. Also found on the site traces of Cuanalan (T.F. 295), and Tzacualli (T.F. 240, 268), and definite Teotihuacan presences (T.C. 109). The site area is 12 ha.

Table 33 T.A. 107 Mound Observations			
Mound #	Dimensions	Remains	Notes
137	1 m high	VH Mazapan ceramics, vH Aztec 2, 3, 4; vH rock	Probably several mounds
138	1 m high	L Toltec, vH Aztec 2, 3 ceramics, vH rock	Probably part of several larger mounds marked on map to south
139	Dimensions	VH Mazapan ceramics, vH Aztec 2, 3; vH rock	Part of Mound 141
140	50 cm high	L Mazapan, vH Aztec 2, 3; H rock	Area around Mound 140 has vH Aztec 2 Black on Red
141	50 cm rise	M-H Mazapan ceramics, vH Aztec 2, 3; H rock	Very large mound on ridge, possibly ceremonial center

ZONE 18: CERRO BUENAVISTA (Figs. 116, 117; Plate 110)

The hill of Cerro Buenavista was surveyed during the Teotihuacan Valley Project. Sites are located primarily in an area of gently sloping piedmont. The maximum elevation of the hill is 2,800 meters. At the time of the survey, the lower flanks were covered by maguey bancals with floodwater ditches and planted primarily in productive crops of barley.

All of the known Aztec occupation consists of reoccupation of previously existing Teotihuacan period sites, including the big Teotihuacan town site of T.C. 73 and a series of satellite hamlets, all found on the lower east flank of the hill. It was colonized during Tzacualli times, occupied throughout the various phases of Teotihuacan, abandoned during the Early Toltec Period, and then reoccupied during Mazapan times. In Aztec times virtually all of the Teotihuacan hamlets, along with the central site, were occupied. We are also including in this zone a set of five hamlets and a small village that were surveyed during the Temascalapa Project and located northwest of the hill. Two additional hamlets during the Aztec period were located, in general survey, during the Teotihuacan Valley Project, on the lower west flank of the hill. The area was probably part of the tributary domain of Aztaquemecan in the early 15th century and Early Colonial periods (see discussion in Chapter 12).

T.A. 121

Classification: Located on general survey during the Teotihuacan Valley Project, probably a hamlet.

T.A. 122

Classification: Located on general survey during the Teotihuacan Valley Project, probably a hamlet.

Plate 110

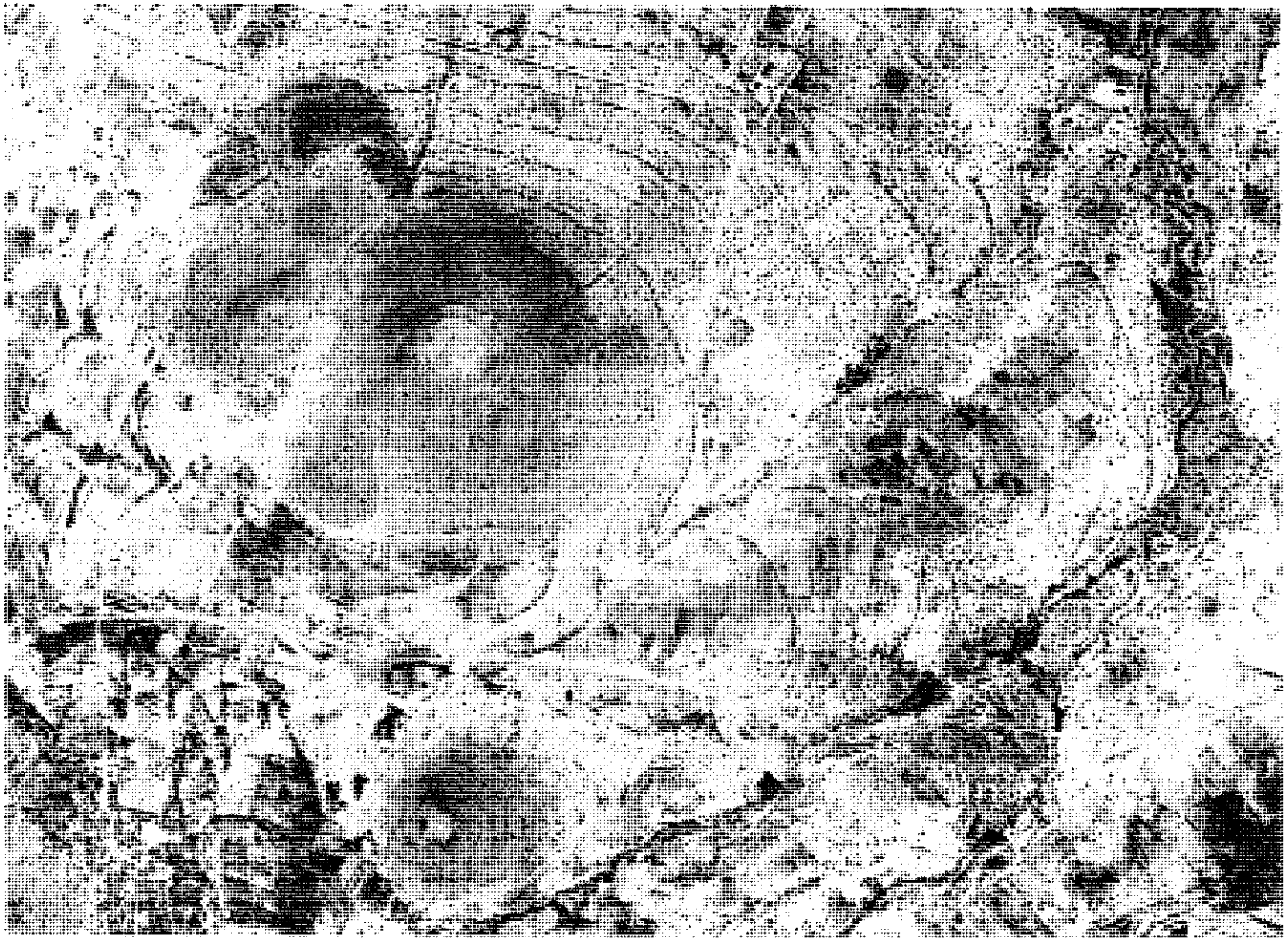


Figure 116

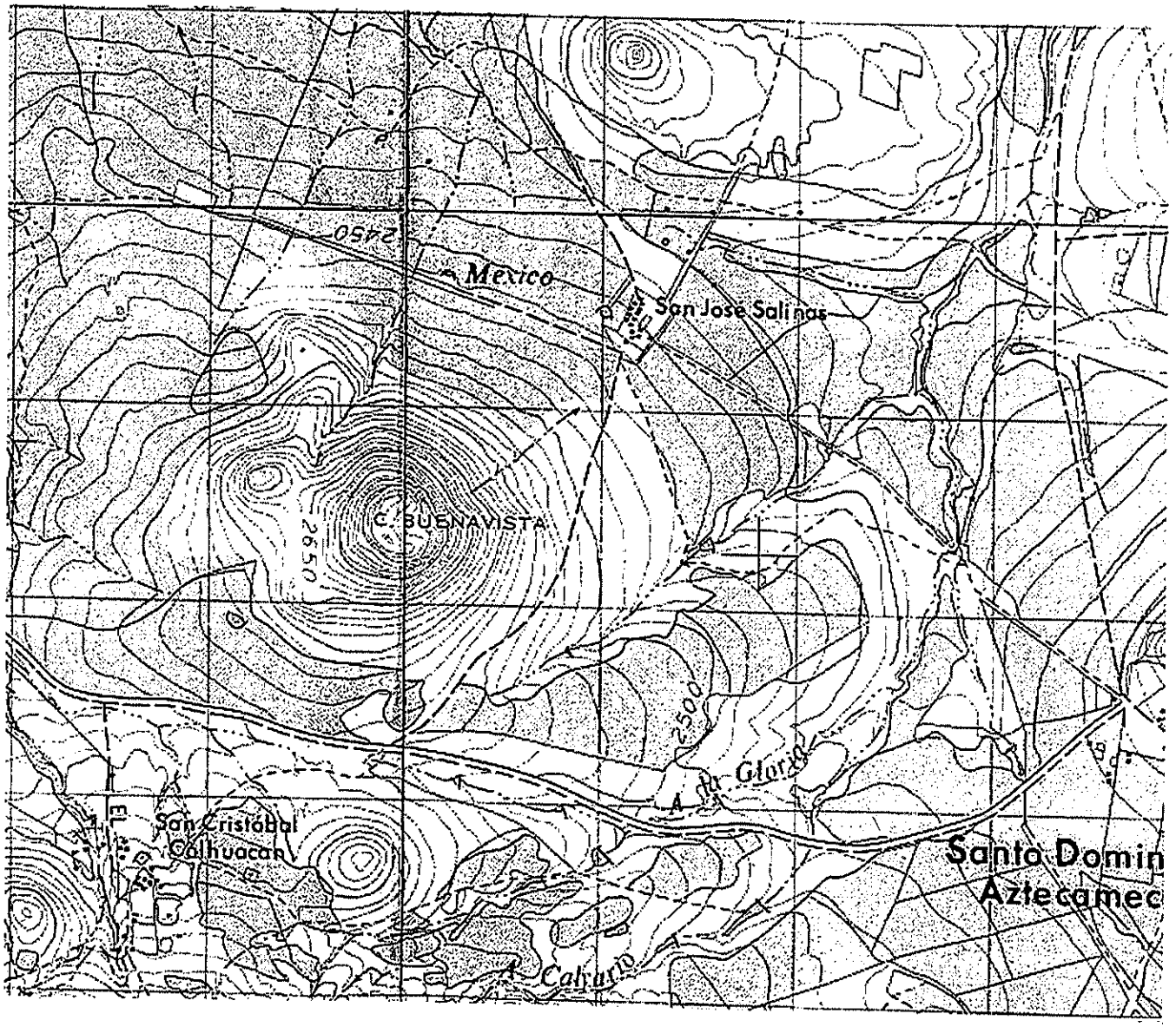
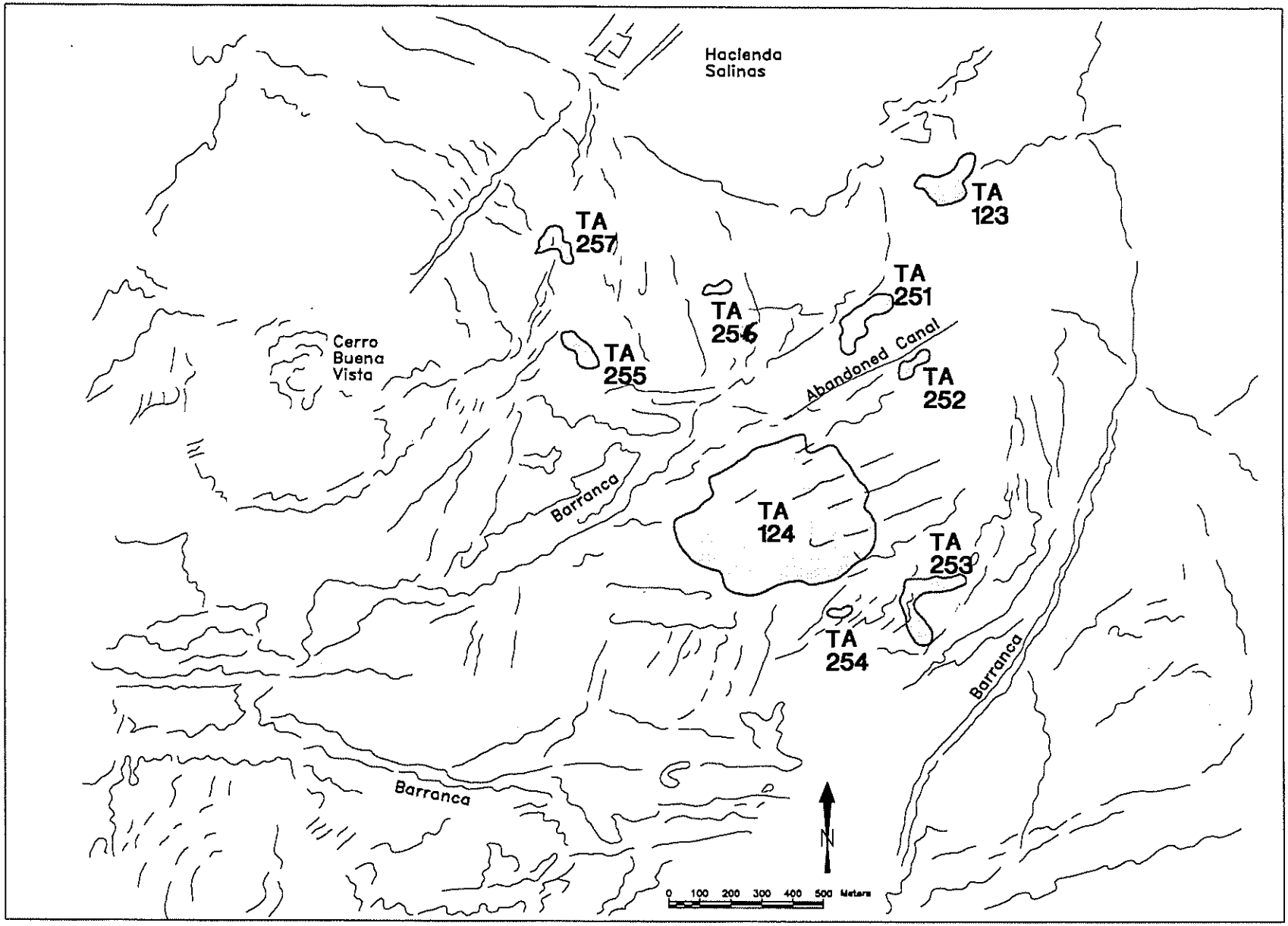

2450
Mexico
San Jose Salinas
C. BUENAVISTA
2650
2500
Sta. Glorio
San Cristóbal
Calhuacan
Calvario
Santa Domin
Aztecamec

Figure 117


Hacienda
Salinas
TA
257
TA
123
TA
251
TA
256
Cerro
Buena
Vista
TA
255
Abandoned Canal
TA
252
Barranca
TA
124
TA
253
TA
254
Barranca
Barranca
N
0 100 200 300 400 500 Meters

T.A. 124 (T.C. 73) (Fig. 118; Plate 111)

Background and Classification: This site, also known as Los Cuecillos de San Cristobal Colhuacan or Los Mogotes de Buena Vista is a multicomponent site with Tzacualli, Teotihuacan, Mazapan and Aztec occupations. It was intensively surveyed only once (by the Teotihuacan Period Team led by Marino); the artifacts collected by the Teotihuacan Period Team were processed by Kolb in 1964 and 1965 and consisted of 58 samples. Of these, 26 recorded light or medium Aztec occupation. Probably a small dispersed village in Aztec times.

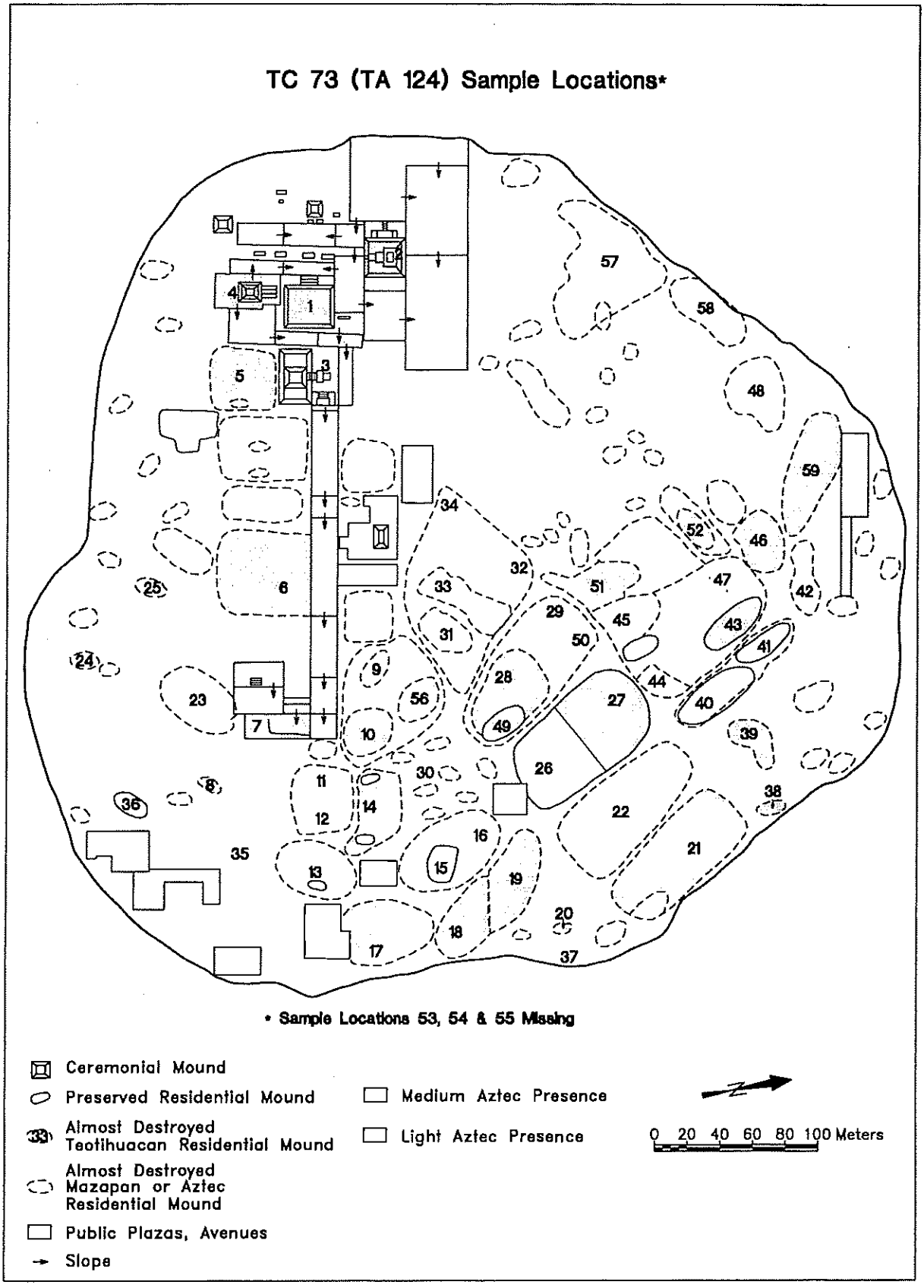
Natural Setting: Site T.A. 124 is located on the east Cerro Buena Vista, between 2,510-2,560 m. Soils in the site have a loamy texture and are medium to dark brown in color with some gray soils also recorded. Soil depths range from 0-45 cm. There is moderate erosion in the site area, and tepetate is exposed along the northern edge of the site. Moderate to heavy concentrations of rock and tezontle fragments are found throughout the area. Vegetation in the vicinity includes pirul, nopal, huizache, and various grasses. Marino indicates that the abundant vegetation at this site gives it the appearance of a park. Other natural features include a barranca to the north of the site and an incipient wash to the northeast and southeast.

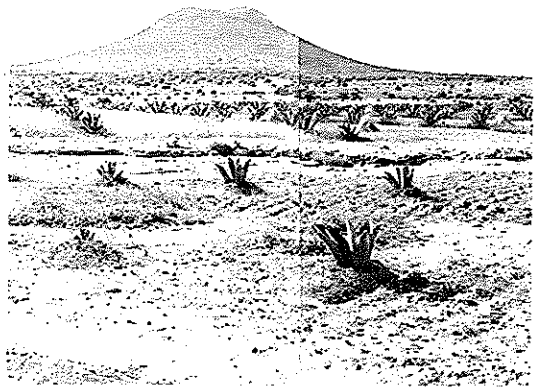
Modern Land Use: Cultural features apparently include no structures and no jagüeys. A possible abandoned silted-in jagüey is located northeast of the site. The area is used primarily for agriculture including the cultivation of maize, beans, barley, and maguey; some grazing is also conducted in the vicinity. A canal or canalized barranca segment is located northwest of the site. Remnants of stone terraces and maguey bancals are found to the south and northeast.

Archaeological Remains: The total multicomponent site occupies 21.0 ha, of which the Teotihuacan period component - the major occupation at Cuecillos-occupies 21.0 ha. One hundred and eleven mounds or spatially differentiated concentrations of archaeological remains (i.e. high density of ceramics and building stones) were identified, all of which have Teotihuacan occupation. Of the hundred and eleven localities, 20 are definite mounds with maximum elevations exceeding one meter. These are numbered as Mound 1, Mound 2, etc. in Figure 118. Mounds 1-5 exceed 3 meters in height, are high structures relative to basal dimensions, and are associated with or placed directly on large low platforms. Mounds 6-8 and Mound 20 are similar but lower in elevation. All of these are presumed to have had civic or ceremonial functions. Mounds 9-17 and Mound 19 are all approximately 1 meter in height and appear to be the remains of small residential structures. Of these 9-12, 16-17 and 19 are located on the summits of much larger areas of heavy rock debris. Mound 18 is a low mounded structure similar to the residential mounds at TC-8, and at the city of Teotihuacan. Areas numbered 21-54 in Fig. 118 are all medium to large areas of heavy rock and sherd concentrations that appear to be the remains of leveled and disturbed structures that presumably, on the basis of artifact concentrations, were residential mounds of the apartment house type. Structures 54-111 are similar but much smaller in size and were left unnumbered on the Teotihuacan Period map because many, possibly all, were originally thought to represent the remains of post-Teotihuacan houses.

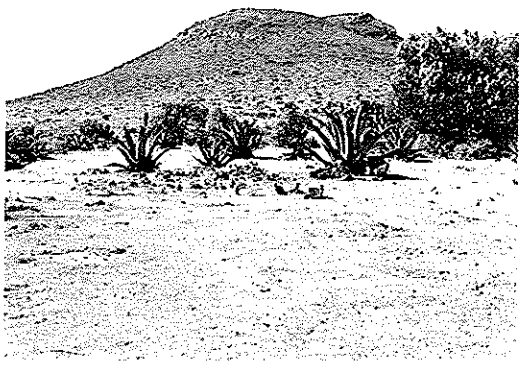
Large areas of the site exhibit definite evidence of formal planning, including perhaps a main avenue comparable to the Street of the Dead at the city of Teotihuacan. The site has two phases of the pre-Teotihuacan, three phases of the Teotihuacan, and three phases of the post Teotihuacan represented for a total of eight. Associated non-Aztec occupations include TF-145 (Tzacualli), TF-146 (Tzacualli), TT-134 (Mazapan), and TC-73. TC-73 was classified as a town or center for the Cerro Buenavista area during the Teotihuacan period. Survey revealed nearby but spatially isolated hamlets pertaining also to the Teotihuacan period. All of these had Aztec occupations as well. We have assigned Aztec numbers, therefore, to these sites.

Figure 118


TC 73 (TA 124) Sample Locations*
* Sample Locations 53, 54 & 55 Missing
Ceremonial Mound
Preserved Residential Mound
Almost Destroyed Teotihuacan Residential Mound
Almost Destroyed Mazapan or Aztec Residential Mound
Public Plazas, Avenues
Slope
Medium Aztec Presence
Light Aztec Presence
0 20 40 60 80 100 Meters



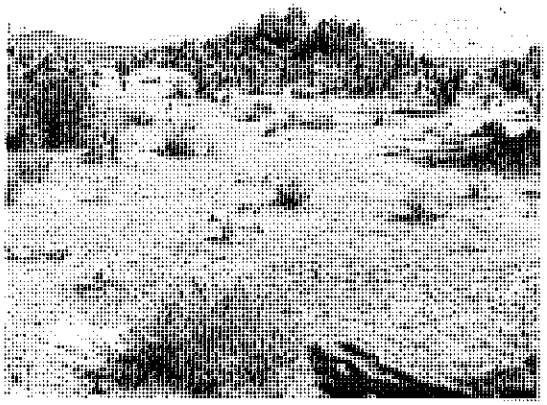
A



B

C

D



E

F

The Aztec occupation at Cuecillos, based on the surface samples collected by the Teotihuacan Period Team, occur in two loci. One is a concentration at the northern core of the site, where the major Teotihuacan period temples and elite residential structures were found. Marino interpreted this as meaning that the Aztec residents maintained the earlier platforms as substructures for their own temple and suggested that T.A. 124 was a ceremonial center for the general area during the Aztec period. The second area is band of settlement along the southern third of the site, associated with the numerous Teotihuacan period residential structures in that area.

On a reduced scale the Aztec occupation in the Buenavista area closely mirrors that of the Teotihuacan period; the Cuecillos site was presumably a village of some size during the Aztec period, surrounded by a ring of dependent hamlets. Including the small unsampled and unnumbered mounds as primarily post-Teotihuacan in date, T.A. 124 would have been a large village. The analysis of the pattern is complicated by the fact that there is a substantial Mazapan phase occupation on the site as well, and some of the small mounds may actually date from that time period. It should also be pointed out that when we examined our surface samples, we unexpectedly found Teotihuacan period occupation on the few smaller mounds that were sampled at the site, so there is a possibility that some of the other unsampled mounds may also pertain to this period. Obviously the only way to resolve this problem would be much more extensive sampling of the Cuecillos site.

The site has a sparse to moderate and uneven distribution of lithic materials including obsidian blades, cores, projectile points, and scrapers. Ground stone tools, especially manos, metates, mortars, and pestles, were also noted.

Ethnohistoric Information: T.A. 124 and its nearby hamlets are probably an extension or dependent communities of Aztaquemecan in the Early Colonial period.

T.A. 252

Background and Classification: This site is also known as los Cuecillos Centro. It was probably a hamlet in Aztec times.

Natural Setting: Site T.A. 252 is located on the east slope of Cerro Buena Vista, between 2,445-2,460 m. Soils in the site area have a sandy to loamy texture and are tan to medium brown in color, with unknown depths. There is slight to moderate erosion in the site area. Moderate concentrations of rock and tezontle fragments are found in the area. Vegetation in the vicinity includes pirul, maguey, and various grasses. Other natural features include a barranca to the west and a barranca to the southeast.

Modern Land Use: Cultural features apparently include no structures and no jagüeys. The site area is used primarily for agricultural purposes including the cultivation of maize and maguey. An abandoned canal is located immediately north of the site.

Archaeological Remains: The total multicomponent site occupies 0.4 ha. Two mounds were identified. The site has one phase of the pre-Teotihuacan, two phases of the Teotihuacan, and two phases of the post Teotihuacan represented for a total of five. Associated non-Aztec occupations include TT-217 (Mazapan) and T.C. 75. Tzacualli occupation occurs in the Aztec samples representing a site we have not numbered. Teotihuacan site TC-73 is located to the southwest and sites TC-78 and TC-82 to the north. The following mounds were sampled:

TC-75-1, 280 m^2, heavily eroded and damaged. Artifactual remains indicated medium Early Teotihuacan, traces of Middle Teotihuacan, light Mazapan, and heavy Aztec components.
TC-75-2, 250+ m^2, heavily eroded and damaged. No sample was taken.

The site has an unknown distribution of lithic materials.

T.A. 253

Background and Classification: This site is known as Los Cuecillos Suroeste. It is probably a hamlet in Aztec times.

Natural Setting: T.A. 253 is located on the east slope of Cerro Buena Vista, between 2,445-2,460 m. Soils in the site area have a sandy to loamy texture are tan to medium brown in color, with depths ranging from 0-35+ cm. There is slight to moderate erosion in most of the site area, and tepetate is exposed to the northern and eastern sections of the site. Moderate concentrations of rock and tezontle fragments are found in the area. Vegetation in the vicinity includes pirul, nopal, maguey, huizache, and various grasses. Other natural features include a barranca towards the southeast of the site and several washes toward the northwest.

Modern Land Use: Cultural features apparently include no structures and no jagüeys. The site area is used primarily for agricultural purposes including the cultivation of maize and maguey. Stone terraces and maguey bancals are found in the vicinity.

Archaeological Remains: The total multicomponent site occupies 1.7 ha. Four mounds were identified. The site has one phase of the pre-Teotihuacan, two phases of the Teotihuacan, and two phases of the post Teotihuacan represented for a total of six. Associated non-Aztec occupations include T.T. 218 (Late Toltec) and T.C. 76. One sample was taken from Mound 1.

Artifactual remains indicated medium Early Teotihuacan, medium Middle Teotihuacan, traces of Mazapan, and medium Aztec components.

The site has a sparse distribution of lithic materials including obsidian blades and scrapers. Ground stone tools, especially manos and metates, were also noted.

T.A. 254

Background and Classification: This site is known as Los Cuecillos Suroeste. It was a hamlet in Aztec times.

Natural Setting. Site T.A. 254 is located in on the east slope of Cerro Buena Vista, between 2,500-2,520 m. Soils in the site area have a sandy to loamy texture and are tan to medium brown in color, with depths ranging from 0-35+ cm. There is slight to moderate erosion in the area, and tepetate is exposed to the south and east of the site. Moderate concentrations of rock and tezontle fragments are found. Vegetation in the vicinity includes pirul, nopal, maguey, and various grasses. Other natural features include a barranca to the southeast and several washes to the north and northwest.

Modern Land Use: Cultural features apparently include no structures and no jagüeys. The site area is used primarily for agricultural purposes including the cultivation of maize and maguey. Stone terraces and maguey bancals are found in the vicinity.

Archaeological Remains: The total multicomponent site occupies 0.2 ha. Two mounds were identified. The site has apparently no phases of the pre-Teotihuacan, two phases of Teotihuacan, and two phases of the post Teotihuacan represented for a total of four. Associated non-Aztec sites include TT-219 (Late Toltec) and TC-77. The following mounds were sampled:

TC-77-1, 265+ m^2, heavily eroded. Artifactual remains indicated light Early Teotihuacan, light Middle Teotihuacan, light Mazapan, and medium Aztec components.

TC-77-2, 265+ m^2, heavily eroded. Artifactual remains indicated light Early Teotihuacan, light Middle Teotihuacan, Light Mazapan, and medium Aztec components.

The site has a sparse distribution of lithic materials including obsidian blades. Ground stone tools have not been reported.

T.A. 251

Background and Classification: This site is known as Los Cuecillos Norte. It was probably a hamlet in Aztec times.

Natural Setting: Site T.A. 251 is located on the east slope of Cerro Buena Vista, between 2,450-2,470 m. Soils in the site area have a sandy to loamy texture and are tan to medium brown in color, with depths ranging from 0-35+ cm. There is moderate erosion in the site area, and tepetate is exposed in the northern and southern section of the site. Moderate concentrations of rock and tezontle fragments are found in the area. Vegetation in the vicinity includes pirul, maguey, and various grasses. Other natural features include a canalized barranca to the southeast and several washes to the west.

Modern Land Use: Cultural features apparently include no structures and no jagüeys. The site area is used primarily for agricultural purposes including the cultivation of maize and maguey. Stone terraces and maguey bancals are also found in the vicinity.

Archaeological Remains: The total multicomponent site occupies 1.5 ha. Two mounds were identified. The site has one phase of the pre-Teotihuacan, two phases of the Teotihuacan, and two phases of the post-Teotihuacan represented for a total of six. Associated non-Aztec sites include TF-147 (Tzacualli), TT-220 (Late Toltec), TC-78. The following mound were sampled:

TC-78-1, 1,800+ m^2, heavily eroded and damaged. Artifactual remains indicated light Early Teotihuacan, medium Middle Teotihuacan, light Mazapan, and medium Aztec components.

The site has a sparse distribution of lithic materials including obsidian blades. Ground stone tools, especially manos and metates, were also noted.

T.A. 256

Background and Classification: The site is known as Los Cuecillos Noroeste. It was a hamlet in Aztec times.

Natural Setting: Site T.A. 250 is located on the east slope of Cerro Buena Vista, between 2,450-2,470 m. Soils in the site area have a sandy to loamy texture and are tan to medium brown in color, with depths ranging from 0-25 cm. There is moderate erosion in the site area, and tepetate is exposed in the southern area of the site. Sparse to moderate concentrations of rock and tezontle fragments are found in the area. Vegetation in the vicinity includes pirul, maguey, and various grasses. Other natural features include a barranca to the south of the site.

Modern Land Use: Cultural features apparently include no structures and no jagüeys. The site area is used primarily for agricultural purposes including the cultivation of maize and maguey. Stone terraces and maguey bancals found in the vicinity were at one time the periphery of the Hacienda Salinas.

Archaeological Remains: The total multicomponent site occupies 0.2 ha. One mound was identified. The site apparently has one phase of the pre-Teotihuacan, two phases of the Teotihuacan, and two phases of the post Teotihuacan represented for a total of at least four. Associated non-Aztec sites include TF-148 (Tzacualli), TT-221 (Late Toltec) TC-79. The following mound was sampled:

> TC-79-1, 600 m^2, moderate to heavily eroded. Artifactual remains indicated light Early Teotihuacan, light Middle Teotihuacan, Light Mazapan, and medium Aztec components.

The site has an uneven distribution of lithic materials including obsidian blades. Ground stone tools were not reported.

T.A. 255

Background and Classification: This site is known as Los Cuecillos Oeste I. It was a hamlet in Aztec times.

Natural Setting: Site T.A. 255 is located on the east slope of Cerro Buena Vista, between 2,560-2,580 m. Soils in the site area have a sandy to loamy texture and are tan to light brown in color, with unknown depths. There is moderate erosion in the southern area of the site, and tepetate is exposed. Sparse to moderate concentrations of rock and tezontle fragments are found in the area. Vegetation in the vicinity includes pirul, maguey, and various grasses. Other natural features include a barranca located to the south of the site and a wash to the northwest.

Modern Land Use: Cultural features apparently include no structures and no jagüeys. The site area is used primarily for agricultural purposes including the cultivation of maize and maguey. Stone terraces and maguey bancals are also found in the vicinity.

Archaeological Remains: The total multicomponent site occupies 0.7 ha. One mound was identified. The site has one phase of the pre-Teotihuacan, two phases of the Teotihuacan, and two phases of the post-Teotihuacan represented for a total of five. Associated non-Aztec sites include TF-149 (Tzacualli), TT-222 (Late Toltec), and TC-80. The following mound was sampled:

TC-80-1, 2750 m^2, heavily eroded and damaged. Artifactual remains indicated medium Tzacualli, light Early Teotihuacan, light Middle Teotihuacan, light Mazapan, and light to medium Aztec components.

The site has a sparse distribution of lithic materials including obsidian blades. Ground stone tools, especially manos and metates, were also noted.

T.A. 257

Background and Classification: This site is known as Los Cuecillos Oeste II. It was a hamlet in Aztec times.

Natural Setting: Site T.A. 257 is located on the east slope of Cerro Buena Vista, between 2,510-2,580 m. Soils in the site area have a sandy to loamy texture and are tan to medium brown in color, with depths ranging from 0-25+ cm. There is moderate erosion in the site area, and tepetate is exposed in the southern and northern sections of the site. Moderate concentrations of rock and tezontle fragments are found in the area. Vegetation in the vicinity includes pirul, maguey, and various grasses. Other natural features include washes to the north and south of the site and an incipient barranca to the south.

Modern Land Use: Cultural features apparently include no structures and no jagüeys. The site area is used primarily for agricultural purposes including the cultivation of maize and maguey. Stone terraces and maguey bancals are also found. Grazing is also conducted in the vicinity.

Archaeological Remains: The total multicomponent site occupies 0.7 ha. Four mounds were identified. The site has one phase of the pre-Teotihuacan, two phases of the Teotihuacan, and two phases of the post-Teotihuacan represented for a total of five. Associated non-Aztec sites include TF-150 (Tzacualli), TT-223 (Late Toltec), and T.C. 81. The following mounds were sampled:

TC-81-1, 490 m^2, slightly eroded. Artifactual remains indicated medium Tzacualli, light Early Teotihuacan, light Middle Teotihuacan, light Mazapan, and light Aztec components.

TC-81-2, 385 m^2, heavily eroded. Artifactual remains indicated light Tzacualli, traces of Early Teotihuacan, traces of Middle Teotihuacan, light Mazapan, and light Aztec components.

TC-81-3, 160 m^2, heavily eroded. No samples were taken

TC-81-4, 85 m^2, slightly eroded. No samples were taken.

The site has a sparse distribution of lithic materials including obsidian blades. Ground stone tools, especially manos and metates, were also noted.

T.A. 123

Background and Classification: This site is known as Hacienda Salinas. It was a hamlet in Aztec times.

Natural Setting: Site T.A. 123 is located on the north slope of Cerro Buena Vista, between 2,450-2,460 m. Soils in the site area have a sandy to loamy texture and are tan to light brown in color, with depths ranging from 0-25+ cm. There is moderate erosion in the site area, and tepetate is exposed in the southern and

western sections of the site. Moderate concentrations of rock and tezontle fragments are found. Vegetation in the vicinity includes pirul, maguey, and various grasses. Other natural features include washes to the northwest and southeast.

Modern Land Use: Cultural features apparently include no structures and no jagüeys. The site area is used primarily for agricultural purposes including the cultivation of maguey. Grazing is also conducted in the vicinity.

Archaeological Remains: The total multicomponent site occupies 1.5 ha. At least one mound was identified. The site has one phase of the pre-Teotihuacan, two phases of the Teotihuacan, and two phases of the post-Teotihuacan represented for a total of five. Associated non- Aztec sites include TF-151 (Tzacualli), TT-224 (Late Toltec) and TC-82.

TC-82-1, Artifactual remains indicated medium Tzacualli, light Early Teotihuacan, light Middle Teotihuacan, light Mazapan, and medium Aztec components.

The site has a sparse distribution of lithic materials including obsidian blades. Ground stone tools were not recorded.

ZONE 19: CERRO GORDO: NORTH SLOPE (Figs. 119, 120; Plate 112)

Geographic Setting

Cerro Gordo is the and highest elevation in the Teotihuacan Valley, reaching 3050 meters at its peak. On the south side the flank drops down abruptly to join the narrow, gently sloping North Piedmont of the Middle Valley at about the 2300 meter contour. On the north side the steep slopes abut on a moderately sloping piedmont at about 2600 meters above sea level. Located along the upper edge of the piedmont is a chain of attached small volcanoes; moving from west to east they are Cerros Tlacuache Chico, Tlacuache Grande, Tezqueme, Ahuatepec and Xaltepec. All are steeply sloping with a thin soil cover and are used today primarily as pasture. Because of its size and height Cerro Gordo, acts as a rain trap and the runoff drainage down its slope is considerable. On the north slope the drainage collects in a network of deeply cut barrancas that all join near Temascalapa and ultimately drain into Lake Xaltocan-Zumpango in the northern part of the Basin of Mexico. The area, therefore, is not part of the drainage of the Valley of Teotihuacan. Below the chain of small hills the piedmont consists of gently to moderately sloping terrain. The survey strip that we completed on the north slope is in this area, lying between 2400 and 2600 m above sea level (what Sanders, Parsons, and Santley refer to as the Middle Piedmont Zone in the Basin of Mexico, generally, and well above the floor of the Teotihuacan Valley). It can be described as a series of long, gently sloping ridges separated by deep, wide barrancas. The area included in the intensive survey pertains to three villages: Maquixco Alto, Colhuacan and Teacalco. The first two villages are located at the midpoint of the piedmont, the third one at the lower edge. In Volume 1, Charlton (1970) presented a detailed analysis of contemporary agriculture and settlement pattern for this area. Within the piedmont, about midpoint downslope, are two isolated volcanic cones, Tiquimil and Teclalo.

Plate 112

Figure 119

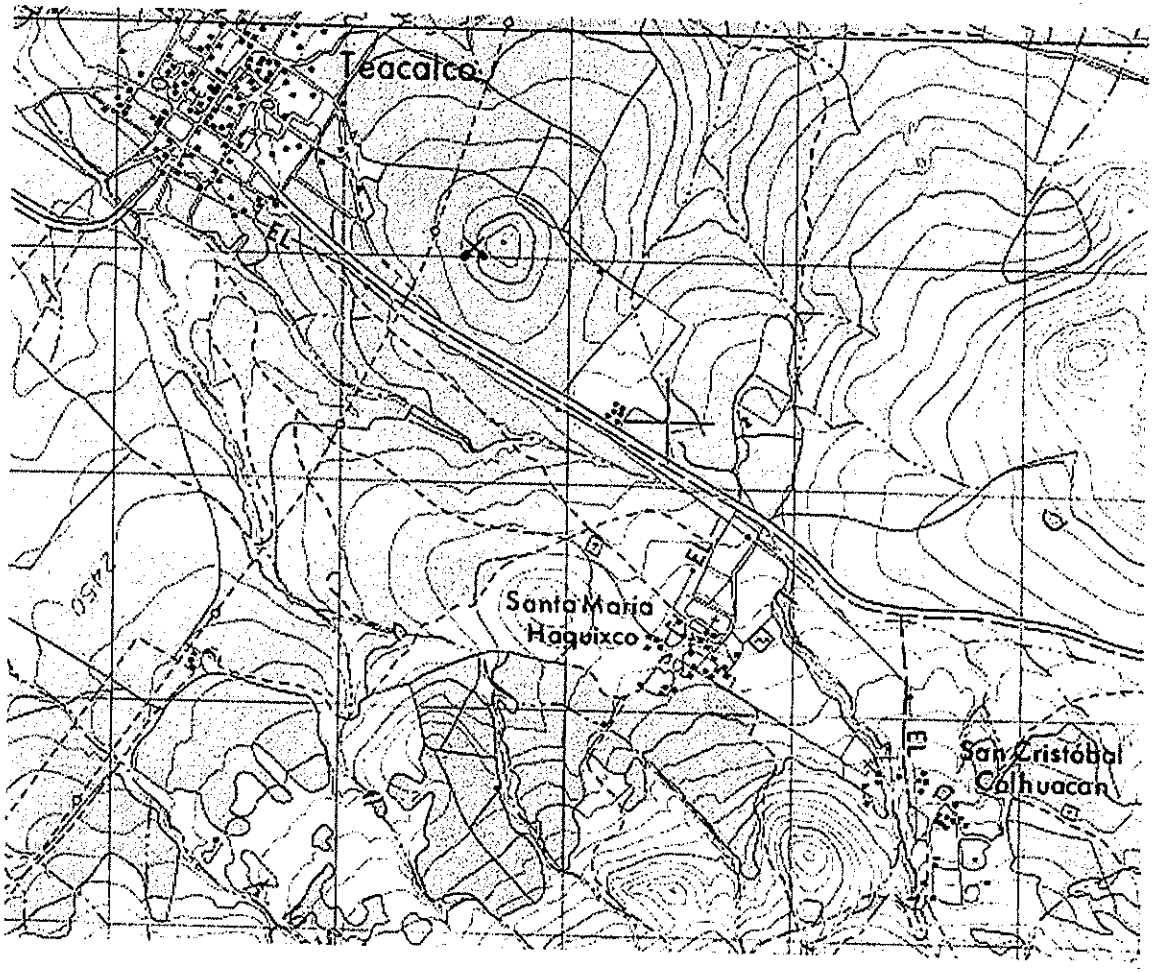


Figure 120

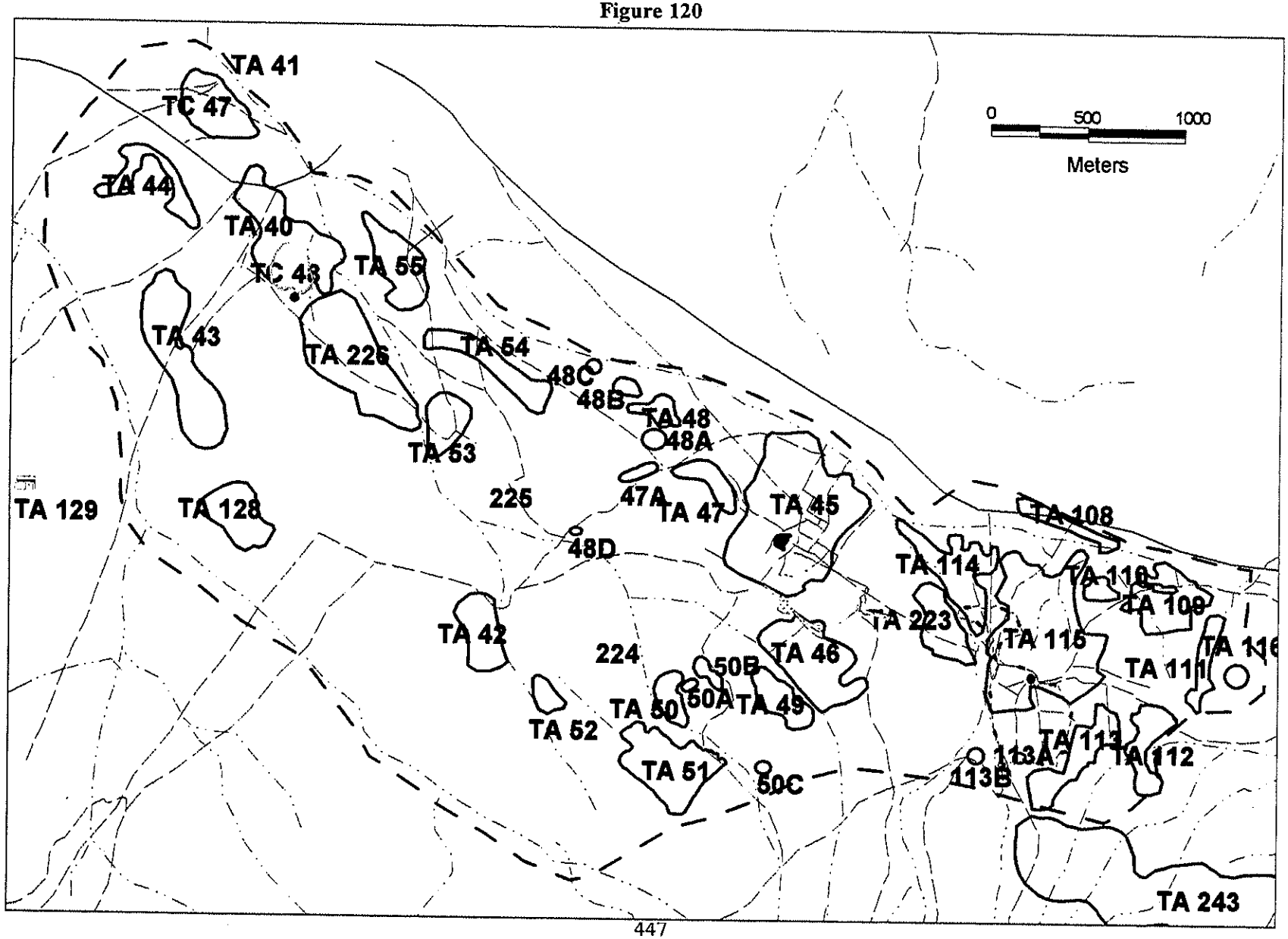
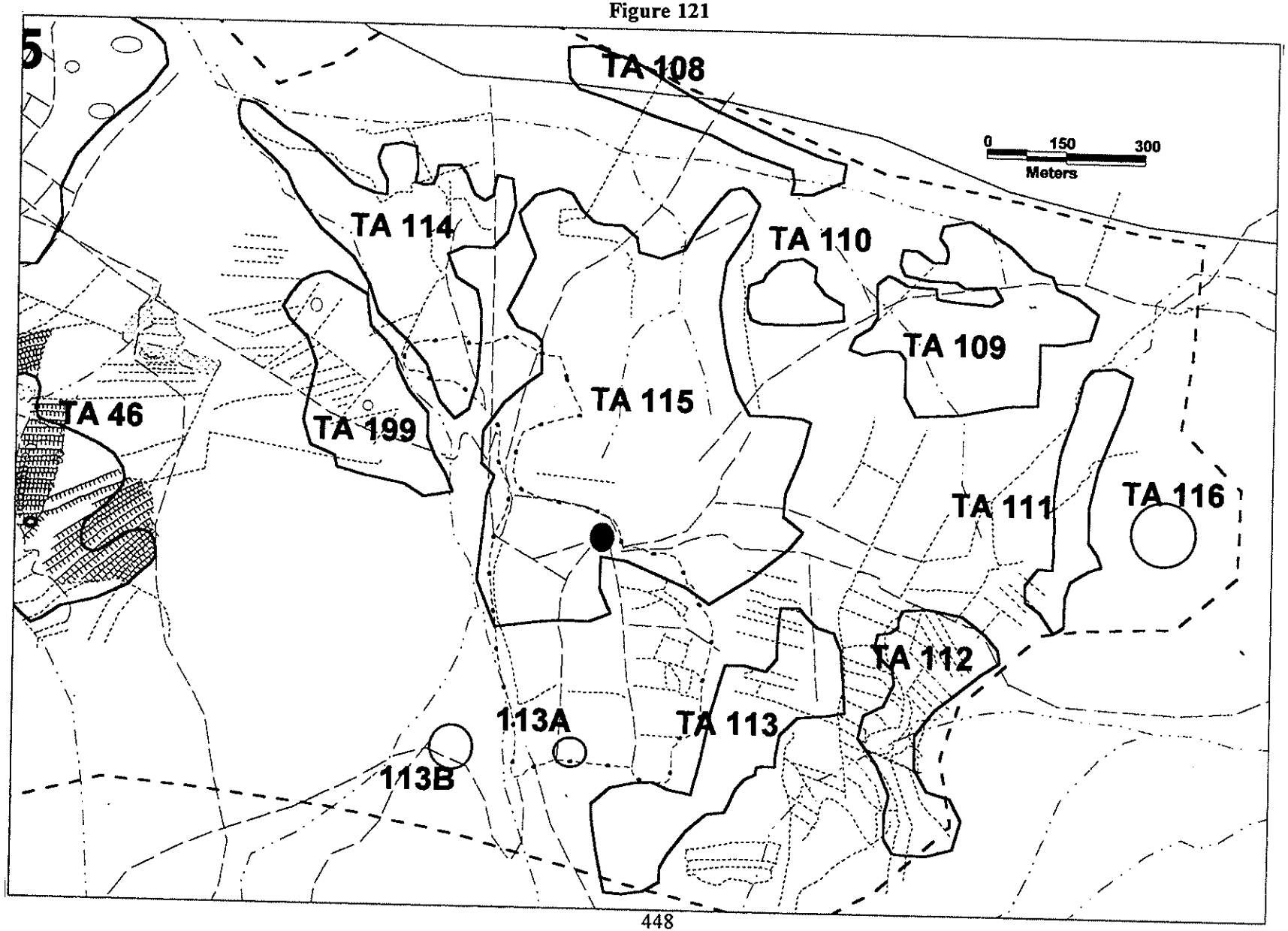

TA 41
TC 47
TA 44
TA 40
TC 43
TA 55
TA 43
TA 226
TA 54
48C
48B
TA 48
48A
TA 53
TA 129
TA 128
225
47A
TA 47
TA 45
48D
TA 108
TA 114
TA 116
TA 109
TA 223
TA 115
TA 111
TA 42
224
50B
TA 46
TA 50
50A
TA 49
TA 52
TA 51
50C
113A
113B
TA 112
TA 243
0
500
1000
Meters

Figure 121


5
TA 108
0
150
300
Meters
TA 114
TA 110
TA 109
TA 46
TA 199
TA 115
TA 111
TA 116
TA 112
113A
TA 113
113B

About 35% of the survey area consists of well-preserved, deep-soil terraces which utilize the floodwater from the slopes to obtain extra humidity, and are highly productive lands dedicated primarily to the production of basic grains like maize, wheat, and barley. An additional 35% consists of terrace systems, either new ones under construction or old ones in various phases of disintegration; these lands are used primarily for barley and bean cultivation since the soil depth, and hence the moisture content, is not adequate for maize. Approximately 20% consists of exposed tepetate and 10% of steep slopes of the nearby hills. The last two areas are in marginal use as pasture and for maguey planting.

Colhuacan Subzone (Fig. 121)

This is the part of the Cerro Gordo: North Slope Zone that includes the village of Colhuacan and its nearby agricultural lands. In the 1580 Relación of Tecciztlan San Cristobal Colhuacan is listed as a sujeto of Tepexpan. Probably all of the sites located in this subzone were part of the 1580 settlement.

T.A. 112

Classification: Hamlet.

Natural Setting: Gentle to medium slope. Soil is brown-black sand and loam, with moderate erosion. No permanent streams or springs; one barranca was located above the site, 3-4 m deep and 4 m wide. One wash went through part of the site. No special resources noted. Elevation 2600-2650 m.

Modern Land Use: Marginal land use--pasture, temporal cultivation of barley and maize, and scattered maguey and nopal. Erosion control through presas (check dams) and maguey terraces in some places. Municipio = Temascalapa; village = Colhuacan; land is privately owned

Archaeological Remains: No ceramic samples were taken but observations indicate light Aztec 2 and 3. Probably this is one of the oldest Aztec sites among those surveyed in the Colhuacan area. What was surveyed is probably the western edge of a large village site which extends into an unsurveyed area to the east. The combination of erosion--and later reclamation-of soil on the lower slope of Cerro Gordo has eliminated traces of connection with T.A. 111 and T.A. 113. Slight traces of Tzacualli were found on the site in one or two localities. This was probably a site occupied to conquest times and then, due to factors at the Conquest, abandoned. General condition: medium to heavy erosion in parts; Mound 17 is pitted. Mound 17: 1.5 to 2 m high, very heavy rock, very heavy ceramics. Located on western edge of very heavy eroded area with heavy ceramics; no walls showing. Besides this there are two possible mounds located on the hillslope at the southern edge of the site. No specialized features. Pottery is sparse to very heavy, localized and variable. Total site area is 6 ha.

T.A. 113

Classification: Hamlet.

Natural Setting: Steep slope. Soil is yellow brown sand, with severe erosion. No permanent streams or springs; no barrancas, but several washes went through part of the site. No special resources noted. Elevation of the site area is between 2600-2650 m.

Modern Land Use: Extremely marginal land use--pasture, temporal cultivation of barley and maize, and scattered maguey, nopal, and thorn bush. Erosion control through maguey and stone terraces in some places. One house ruin near Mound 26. Nearby are presas and a canal running from a *presa* to a terrace. Municipio = Temascalapa; village = Colhuacan; land is privately owned

Archaeological Remains: Site appears to be Aztec 3-4. Site is dispersed over a hill slope, was probably much larger since much of site destroyed due to heavy sheet erosion. Site was probably dependent upon T.A. 115, a large village site. No specialized features. Pottery varies from absent to very heavy, localized and variable. Mounds: centrally-located = 22, 23, 24, 25, 27, also probable Mounds 12, 13, 14 (these three mounds are separated by a zone of no occupation from the main body of T.A. 113; possibly they constituted a separate hamlet, but more likely were part of the larger site. They are perhaps located on Aztec terraces. Isolated mounds include 26, 29. These are quite far from the main body of T.A. 113; whether they were part of a continuous band of settlement or isolated houses is problematic, given the extent of sheet erosion. Total surface area 8.4 ha. Also present is Mazapan occupation (T.T. 74) and traces of Formative occupation including Cuanalan, Patlachique, and Tzacualli (T.F. 307, 308, 309).

Table 34 T.A. 113 Mound Observations

Mound No.	Height	Sherds	Rock	Comments
12	50 cm	Sample &; Tzacualli, MAz	Medium	Low small mound on terrace
13	50 cm	M-H Az, tr Tza	Medium	
14	50cm	M-H Az	Medium-Heavy	
22	1-2 m	V H Az 3-4; M Maz, tr Cl; M Tzac, L Patl	Light	An old soil remnant in middle of tepetate wash
23	1m	M-H Az3; L-M Maz; L Tzac; tr Patl	Medium	Earth remnant in tepetate wash
24	50 cm	M-H Az3; M-H Maz;	Light	Earth remnant in tepetate wash
25	0.5-1 m	M-H Az3; L Maz;	Light	Earth remnant in tepetate wash
26	50 cm	M Az3	Heavy	near modern ruin, heavily eroded area above new terraces
27	25-50 cm	M-H Az3; L Maz; Patl	Light	Soil remnant in eroded area
29	50 cm	M Az	Heavy	In badly eroded area
possible		L Az; L Maz; tr Cuan, Patl, Tzac		Probably a very large earth remnant

T.A. 116

Classification: Possible ceremonial site.

Natural Setting: Hilltop. Located at 2630 m.

Modern Land Use: Pasture.

Archaeological Remains: Site is an Aztec hilltop ceremonial site with Aztec 3-4 - non-residential, probably used by surrounding sites. No structures are visible on the hilltop, however. On the site are traces of Teotihuacan (T.C. 115) and Tzacualli (T.F. 270).

T.A. 111

Classification: Hamlet.

Natural Setting: Gentle slope. Soil is brown-black sand, with moderate to extreme erosion. No permanent streams or springs; one barranca, 10-15 m deep and 20-30 m wide, with some presas (check dams). Elevation of site area 2560-2600 m.

Modern Land Use: Marginal land use--pasture (temporal cultivation), and scattered maguey and nopal. Erosion to tepetate in some places. No special resources noted. Municipio, Temascalapa; village, Colhuacan; land is privately owned

Archaeological Remains: Not all the site was surveyed. It obviously continues east around the base of a cinder cone and from its location and postulated location (assuming that a great part of the site had been destroyed by heavy erosion on the west) it probably was a line village around the base of the hill. Ceramics: the pre-Teotihuacan component probably washed from the hilltop where a large site is located. The Mazapan site (T.T. 75) is probably part of a larger site, now almost destroyed, but which shows up also at T.A. 109 and at Mound 20. At T.A. 111, the Aztec sherds from Mound 21 are late, 3-4 and Colonial. Aztec 2, however, was noted on survey. The site may have some relation to T.A. 112 where a heavy amount of Aztec 2 was noted--possibly a later site which persisted into colonial times. Area included in site shows moderate erosion with very badly eroded areas nearby--in which two mounds are located on definite earth remnants on non-eroded areas in the middle of a series of deep and recent barrancas. Mound #20: medium Toltec, light Aztec; a non-eroded area about 2 m above the level of wide barranca. Mound #21: very heavy Aztec 3-4. Light-medium Patlachique (T.F. 131) probably washed from this site; 2-3 m above severe wash area--black soil with tepetate base. No mound clusters were observed, and a great part of the site is obviously destroyed. No specialized features. Pottery is moderate to very heavy, localized and variable. Depth of archaeological deposits varied over the site, with large earth remnants at Tl's 20 & 21, resulting from erosion around them along with a large number of sherds. Total site area is 3.8 ha.

T.A. 108

Classification: hamlet or small dispersed village.

Natural Setting: On the lower south slope of Cerro Buenavista. Soil is yellow-brown and sandy, with moderate to heavy erosion. No permanent streams or springs; several shallow washes. Elevation of site area 2530-2550 m.

Modern Land Use: Vegetation is pasture and fields (temporal cultivation), with scattered maguey and nopal. No special resources noted. A jagüey was located on the slope above the survey area. Maguey terraces and terraces, and drainage ditches have been established to control erosion from Cerro Buenavista runoff. Municipio, Temascalapa; village, Colhuacan; privately owned

Archaeological Remains: Site is very badly eroded, but no pitting or excavation was noted. Highway construction probably caused partial destruction of site for use as road fill. Complete survey not possible, due to time constraints. Partial survey indicated an Aztec line village on the lower south slope of Cerro Buenavista. Occupation seems to be mainly Late Aztec. No specialized features. Pottery varies from sparse to very heavy, localized and variable. Five mounds located: height 25 to 50 cm, one mound has a diameter of 20-30 m x 20 m. Total site area is 3.5 ha. On the site are trace of Cuanalan (T.F. 295).

Table 35 T.A. 108 Mound Observations

Mound No.	Height (cm)	Sherds	Rock	Comments
1	50	H Az3	None	Pottery eroded out of a 50 cm deep soil deposit, the rest occurs on the surface, dimension 20-30x20 m
2	50	H Az3	None	Pottery eroded out of a 50 cm deep soil deposit, the rest occurs on the surface, dimension 20-30x20 m
3	0.5-1m	H Az3 - both on rock and in apronlike area in front	V H rock	Possible pyramid
4	25	H Az3 eroding from 25 cm depost of earth	H rock-situated above a quarry-like depression	
5	25	VH Az3;	H rock-at edge of tep wash area	

The only apparent clustering of the mounds located in a partial survey of the site suggests a line village on the contour of Cerro Buenavista.

T.A. 109

Classification: Hamlet

Natural Setting: Gentle slope. Soil is yellow-brown, sandy-loam, with moderate to heavy erosion. No permanent streams or springs; two barrancas, 3 m deep x 4-5 m wide and 8 m deep x 10 m wide (both appear to be recent and still expanding. The area is very badly eroded (one-fourth to one-third is bare tepetate). Elevation of site area 2550-2580 m.

Modern Land Use: Municipio, Temascalapa; village, Colhuacan; land is owned by church or is privately owned. Today used as pasture with scattered maguey and nopal and some temporal cultivation No special resources noted.

Archaeological Remains: Site is primarily Aztec 3 with traces of Aztec 2 and 4 over part of the site area, and enough Mazapan (T.T. 73, T.T. 76) and Tzacualli (T.F. 312) sherds to suggest one or two isolated houses of those periods although there are no mounds visible (see notes for Tl. 20 in T.A. 111--possibly also a part of a now destroyed Toltec site). Heaviest ceramic concentrations appear to be on high land

between the barrancas. Pottery is sparse to heavy, localized and variable. T.A. 109 has been badly eroded and the Aztec deposits probably indicate a number of widely-spaced houses--a hamlet--in probable association with T.A. 115, which appears to have been a large village. The site could have been much larger, if the barrancas were not in existence in the Postclassic. The site was possibly part of T.A. 110 and 111--so much erosion has occurred that it might have destroyed what was essentially a continuous zone of dispersed settlement below the present day agricultural terraces. The site is situated at the base of the north slope of Cerro Gordo, below an area of currently very productive agricultural terraces, well-constructed and well maintained. The site area is approximately 9.5 ha. The barranca edge yields the following stratigraphy.

1. surface
2. 1 m [deep] white soil
3. 50 cm [deep] black [soil] and Aztec sherds
4. hard tepetate

Interpreted as follows:
(1) a period of heavy erosion during which the white soil was deposited over the site
(2) later the barranca extended itself uphill, cutting through the deposit.
Probably, both actions were associated with the abandonment of certain areas and water control devices in the Early Colonial period.
The northern site boundary cannot be determined due to silting
Other components: Tzacualli, Teotihuacan, Mazapan.

T.A. 110

Classification: Hamlet.

Natural Setting: Gentle slope. Soil is light brown, sandy-loam, with moderate to heavy erosion. No permanent streams or springs; two barrancas, 6-8 m deep and as wide, partially filled behind presas. Site is located 2550-2590 m.

Modern Land Use: Marginal land use--pasture (temporal cultivation), and scattered maguey and nopal. Erosion to tepetate in some places. No special resources noted. Municipio, Temascalapa; village, Colhuacan; land is privately owned.

Archaeological Remains: No definite mounds (one possible). Probably in Mazapan (T.T. 76) and Aztec times the site consisted of several houses. Archaeological deposit is generally superficial surface, partially eroding from earth remnants 0.5 to 1.0 m deep (possibly mound remnants) on the tepetate. Also, ceramics erode from the edges of fields near barrancas, as well as being found on the surface. The Aztec period site seems to have been a continuation of Mazapan phase occupation, a small community (hamlet of 4 - 6 houses) isolated on the hill slope, a community of the same size and same location. Erosion may have destroyed evidence of contiguity with adjacent sites. T.A. 110 was probably deserted in the course of population reductions after the Conquest. No specialized features. Pottery varies from moderate to very heavy, localized and variable. Site area is 1.6 ha.

T.A. 115

Classification: Small dispersed village, partially nucleated.

Natural Setting: Gentle slope. Soil is brown sand and loam, with moderate to heavy erosion. No permanent streams or springs; three barrancas (one on western edge, two cutting through the center of the site), and several washes. No special resources noted. Site is located between 2470-2550 m.

Modern Land Use: Several modern structures--houses and stables--on south part of the site. There was one modern jagüey on the southern portion of the site. Marginal land use--temporal and floodwater irrigation cultivation of barley and maize, and scattered maguey and nopal. Erosion control through terraces, bancals, and presas in some places, some canals and drainage ditches. Several modern houses are located in the southwestern part of the site along the barranca edge. Municipio, Temascalapa; villages, Colhuacan and Santa Maria Maquixco; land is privately owned

Archaeological Remains: T.A. 115 probably grew out of the Mazapan (T.T. 77) site located in the very center of the site. Samples 16, 18, to 23, indicate a continuity from Aztec 2 to Aztec 4. Samples 12-17 show Aztec 2-4 occupation and probably represent a later expansion of the site to its fullest size. The apparently heavily nucleated center probably was the sociopolitical/religious center and had about 100-200 persons in residence. Population over the rest of the area was probably lighter--more like the population present in Colhuacan today. Subject or dependent settlements included T.A. 109, 110, 111, 112, 113, and 114. T.A. 116 was probably a hilltop ceremonial center for this cluster of settlements. Total site area is 34 ha.

Samples 20-24 revealed the possibility of a Formative hamlet in this area--largely destroyed and dispersed. Also noted in other samples were scattered sherds indicating possibly several hamlets of Formative date.

The site is primarily in the area of marginal land use today, especially heaviest occupation, with part of the site under modern house lots and terrace system. Condition of site: modern to heavy erosion, pitting in Mound 28 and Mound 11 (pyramid). Shaded area on map enclosed by a dotted line was probable central area of site, based on very heavy rock and ceramics--also there probably was a plaza near Mound 11, today appearing as an open and relatively flat field. This area also has the Mazapan occupation.

This site is now cut through by several deep and narrow, and apparently post-Conquest barrancas, and was probably a continuous habitation zone in Aztec times.

Table 36 T.A. 115 Mound Observations

Mound No.	Height	Sherds	Rock	Comments
7	50 cm	H	Heavy	Eroded area around mound
8	50 cm	VH	VHeavy	Located on an old terrace
9	1 m	H	Heavy	A small pyramid
10	50 cm	H	Heavy	
11	1-2m	M	Medium	Mounded area S of pyramid; stone wall with floors beneath it

28	1m	M	Medium	Floors of tezontle exposed at end of a house lot garden by barranca
15	1m	H	Heavy	Large residential mound or pyramid
16	1.5 cm	H	Heavy	A possible pyramid in tepetate wash area
Dotted areas in central area of residential and social center, indicate areas of very heavy ceramic, &/or rock, probably the remains of several ill-defined very badly eroded mounds				
18	50cm	tr Form, H Az	Light	Soil remnant
19	1 m	VH	VH- much rock scattered around it	Badly eroded-cut by path

Specialized features include one wall 1 m high, of finely finished masonry with traces of plaster. This was uncovered by a ditch behind Mound 11--a probable pyramid--possibly this area behind Mound 11 was very heavily occupied. Also present is a floor - 1 m above tepetate, 50 cm below the surface, 5 cm thick of tezontle, exposed by erosion in Mound 28, also part of probable urbanized zone. Pottery varies from not present to very heavy, localized and variable. Obsidian tools; present; ground stone tools present, figurines, spindle whorls, pottery discs present.

T.A. 114

Classification: Large hamlet or small dispersed village.

Natural Setting: Gentle slope. Soil is brown, with moderate to severe erosion. No permanent streams or springs; three barrancas (western one is 15-20 m deep, and as wide), and several washes. No special resources noted. Elevation of site area between 2450-2470 m.

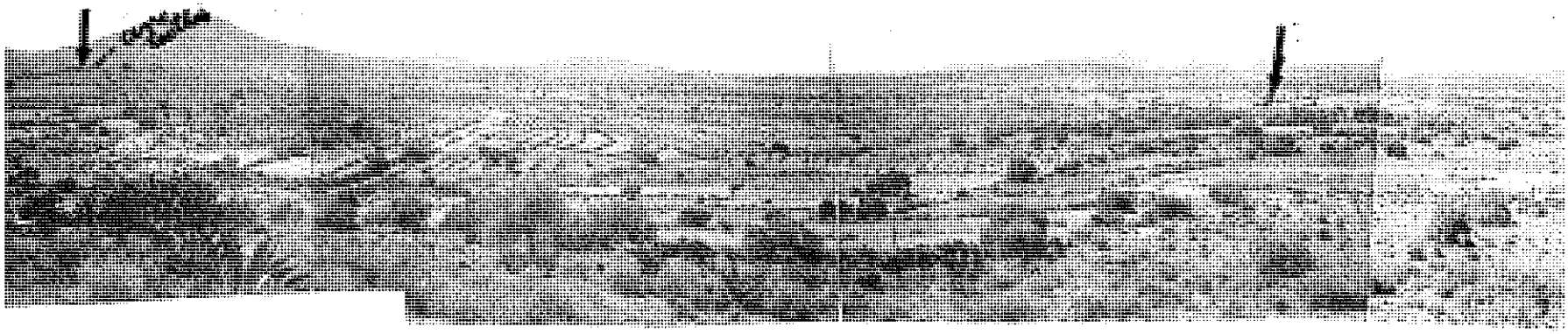
Modern Land Use: Marginal land use--temporal cultivation of barley and maize, and scattered maguey, nopal. Erosion control through maguey and earth terraces in some places, some dams and drainage ditches, and there are signs that the site area was once occupied by a well-tended terrace system which has eroded away. Several modern houses are located in the southwestern part of the site along the barranca edge. Municipio, Temascalapa; villages, Colhuacan and Santa Maria Maquixco; land is privately owned

Archaeological Remains: The site suggests--along with T.A. 110, and this is confirmed by historical documents, an Aztec site north of the current town of Colhuacan--but partially underlying it. Occupation as evidenced by sherds suggests an occupation similar to that of the modern town, heaviest along the barranca edge--with the use of the house lots for agricultural purposes. Occupation is heaviest--Aztec 3--with some Aztec 2--there are also traces of Patlachique, Early Tzacualli (T.F. 310, 311), and Mazapan. Probably a barrio of T.A. 115 - with its own temple--possibly also with some relation to the Aztec site on the other side of the barranca, T.A. 199. General condition: medium-heavy erosion; no excavation or pitting of remains. Due to agricultural activities and erosion, only one mound was identifiable: Mound 6: a possible pyramid; very heavy rock debris, 1 m high with medium Aztec pottery associated, and sparse remains in immediate area. Other than this, sherd deposits are scattered in soil or on tepetate with no observable stratification. No specialized features. Pottery varies from not present to very heavy, localized and variable. The total site area is 11 ha.

Plate 113

Cerro Teclalo

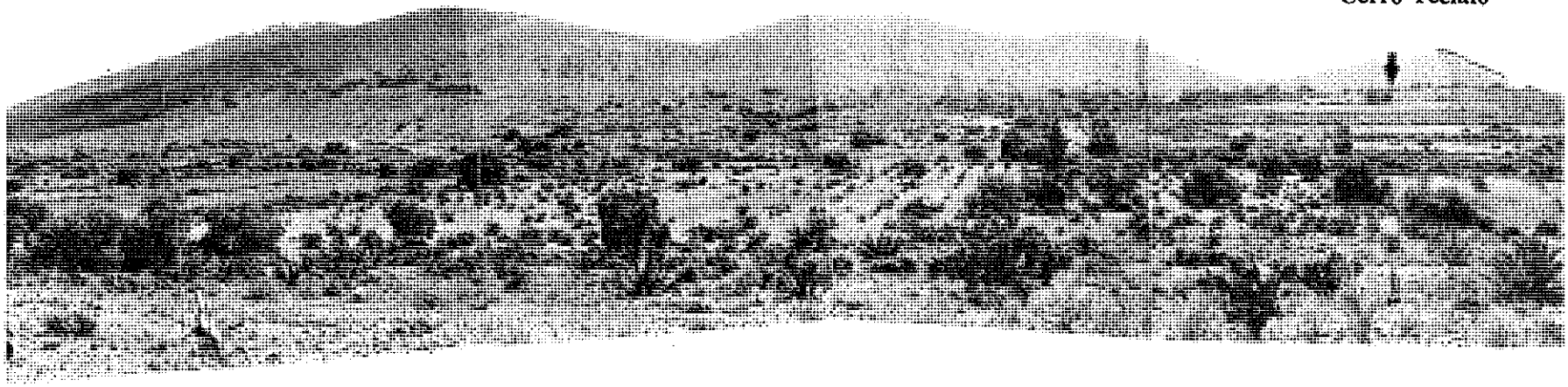
T.C. 49 (T.A. 225)



A

Cerro Gordo

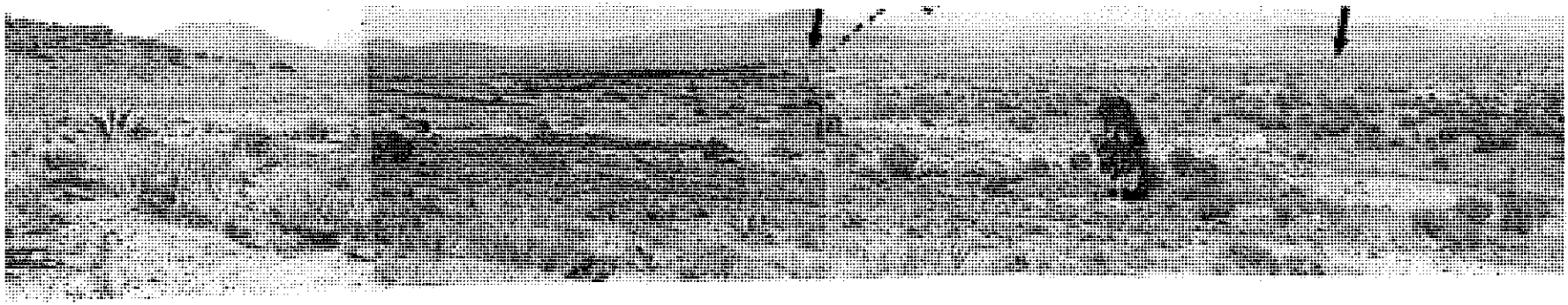
Cerro Teclalo



B

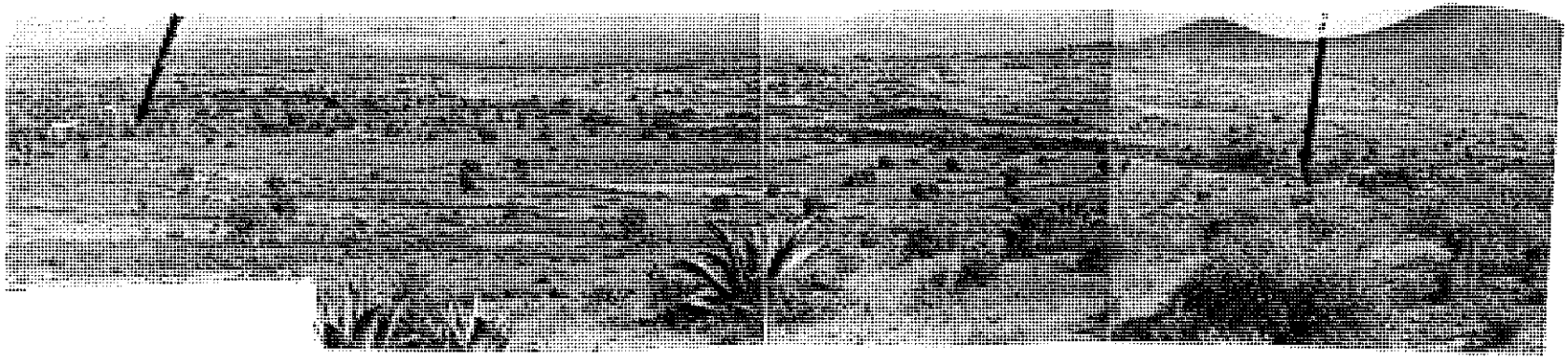
Plate 114

Cerro Aguatepec Cerro Teclalo Cerro Tiquimil



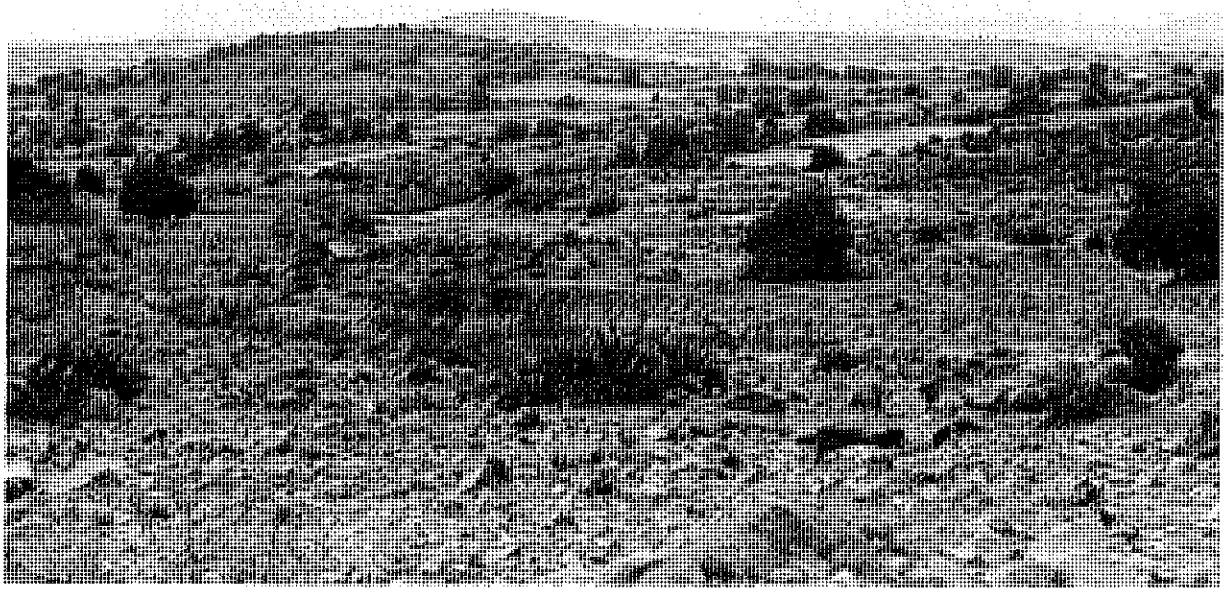
A

Maquixco Alto Colhuacan Cerro Buena Vista

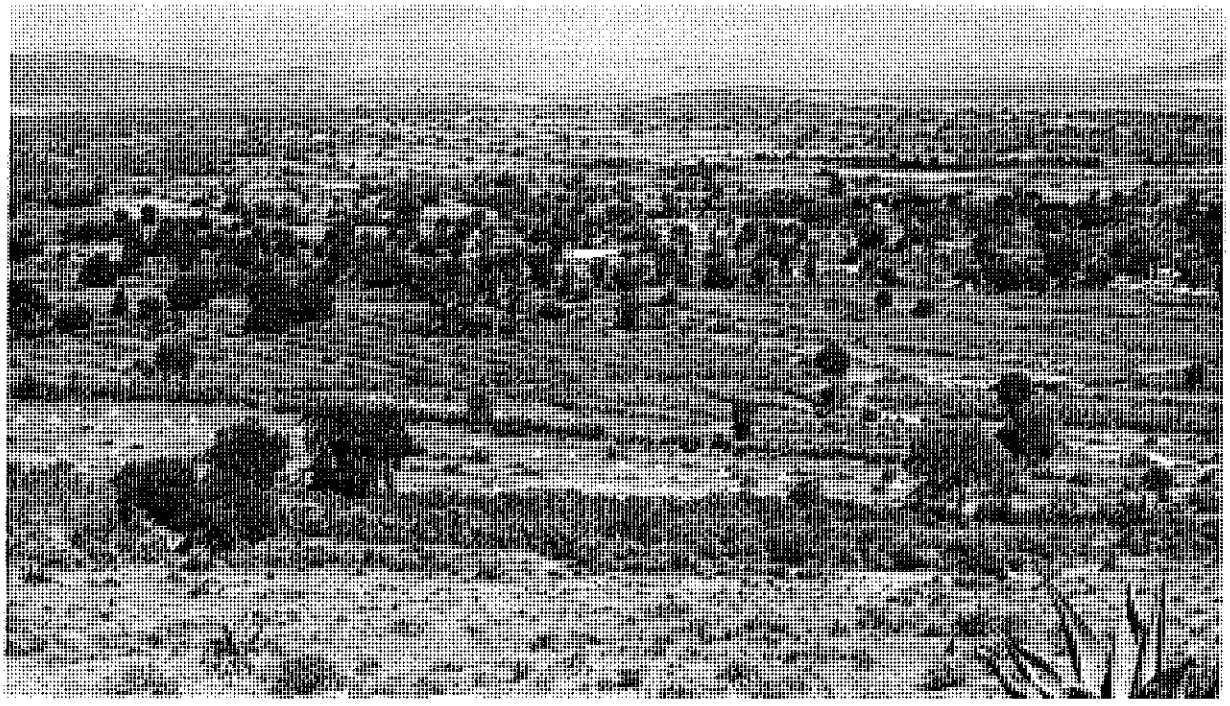


B

Plate 115



A



B

Maquixco Alto-Teacalco Subzones (Fig. 120)

This is a portion of the Cerro Gordo: North Slope Zone that includes Maquixco Alto and nearby agricultural land between it and the village of Teacalco. This portion of the North Slope Cerro Gordo survey consists of two major interfluves of medium to gently sloping terrain located between three barrancas, Barranca Tecorral to the east, Teclalo in the center, and Soledad to the west. All three gradually converge near the village of Teacalco at the lower north end. In both cases the interfluves are extremely wide at their upper ends, narrowing as the barrancas converge. Finally the Teclalo barranca has two tributaries, Ayllacal and San Jose, that further subdivide the east interfluve at its upper end. The southern edge of the zone is bordered by the noted small volcanic cones. All of these barrancas are wide, deeply entrenched features that we believe, on the basis of what we have tentatively identified as ancient irrigation canals, were used for floodwater irrigation in the past. This conclusion assumes that they were once narrower, shallower streams than today; a major question of the geomorphological and Prehispanic settlement history is the date of the erosional process. It undoubtedly began well before the Spanish Conquest, but probably became accelerated after it, as the product of population decline and abandonment of terraced fields on the surrounding hillsides. The natural hydrography, therefore, is abundant in this area and all sites would have had easy access to at least one, often two, of the noted barrancas.

Only one 20th century settlement is located on the two interfluves, Santa Maria Maquixco on the easternmost interfluve, a village of approximately 500 people in 1950. Most of the eastern interfluve consists of private lands owned by the residents of Maquixco Alto, excepting the northern end, where the lands belong to Teacalco. These are primarily small holdings and are in highly variable condition. Some have extensive areas of exposed tepetate; others consist of very well maintained terrace systems. In other areas old terrace systems are found, in various stages of maintenance, or newly created ones on reclaimed tepetate. More detailed information is found in the site descriptions of the situations at the specific location of the site.

T.A. 199, 46, 45, 47, 48, 50, 51, 53, 54, 55, 224, and 225 are located on the eastern interfluve; T.A. 42, 52, 128, 226, 40, 41, 43, and 44 on the western interfluve.

In 1580 there were two sujetos of Tepexpan located in this area, Maquixco and Teacalco. The sites found in the area presumably are all parts of these two communities.

T.A. 45 (Fig. 122; Plate 116)

Classification: Small or large dispersed village.

Natural Setting: On gently sloping terrain at the upper end of the east interfluve. Soil cover varies considerably within the area; generally erosion is slight within the village itself, and along the peripheries varies according to the degree of terrace maintenance. Site is located 2500-2540 m.

Modern Land Use: Most of the site is under the modern village of Maquixco Alto, a low-density compact village in which many house lots have nopal-maguey orchards. The village is built on a gently sloping area occupied by a terrace system, with house lots integrated into this system; the coincidence of Aztec and modern occupation would suggest that the main outlines of the terraces are ancient.

Figure 122

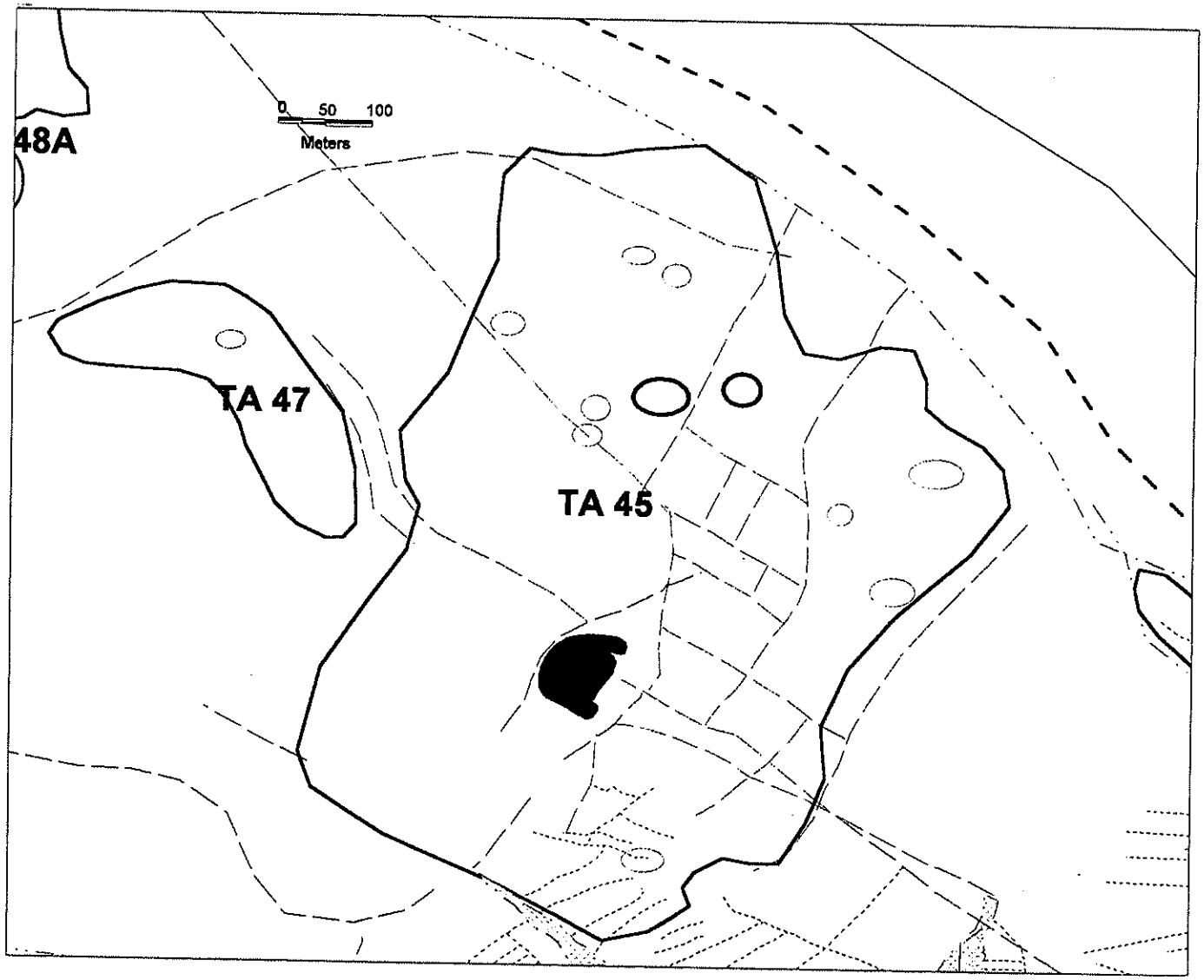
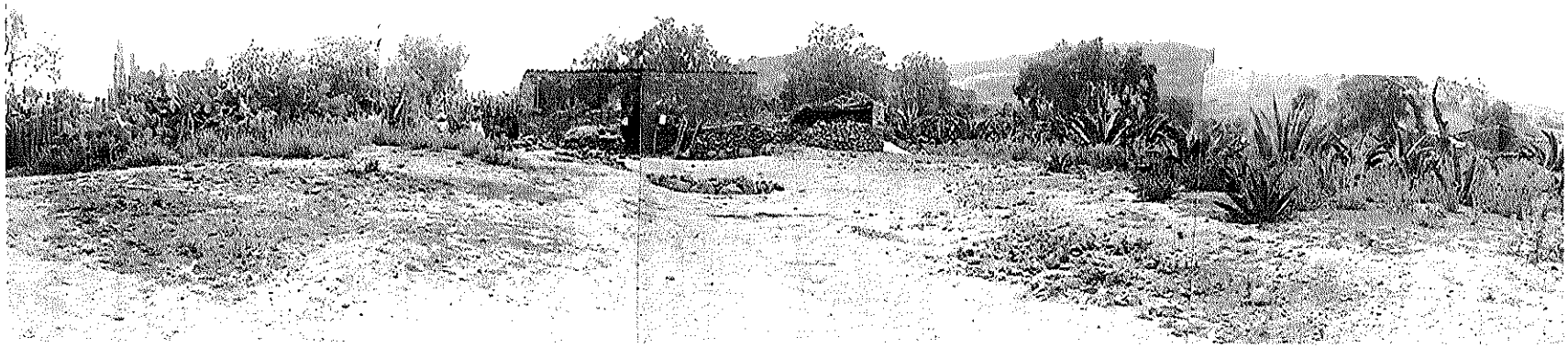


Plate 116



A

B

C

Soil cover is relatively deep, but there is one area of exposed tepetate. Northern edge of site consists of the best preserved set of terraces in this area with flat surfaces, deep soil, and high banks. The western edge of site is generally an area of gentle slope, with poorly-maintained terraces (except in the SW) with several large unterraced fields and soil depth is thin. The eastern edge of site is an area of deep soil and fairly well-maintained terraces.
municipio: Temascalapa; village: Maquixco Alto

Archaeological Remains: Extend over 38 ha. The site is nearly coterminous with the modern village, and very probably the Aztec village was similar in terms of relation to terraces, population size and density. It is the largest Aztec site in the Maquixco Alto survey area and has ceremonial architecture. Its relation to T.A. 46 is not clear; they may have formed a single community.

In the house lot area there were no mounds except one large one with an exposed wall of stones and adobes. At the edge of the modern village is an arc of scattered mounds; 8 residential and 2 ceremonial. A Toltec site encompasses the area of both the ceremonial mounds and three of the residential mounds, and thus the mounds may date to both periods. One ceremonial mound is a large low (<50 cm) sprawling structure 20 m in diameter. It could be either a low terrace platform or a multiroom structure. It is probably Mazapan in date because this is the dominant sherd assemblage. The other large mound is certainly a small pyramid--about 2 m high and 10-15 m in diameter - the dominant component is Aztec.

Sherd concentrations are very variable. Multiple occupations are present, and interpretation is further complicated by the presence of modern refuse collection and sweeping, and the presence of hard-packed modern patio floors in house lots. In most house lots Mazapan-Aztec pottery was light to medium. The heaviest Postclassic occupation was in a small area near the two ceremonial structures, especially the smaller one. Pottery was sparse to heavy, localized and variable, with a few obsidian and ground stone tools noted.

Within the Aztec site and dispersed over approximately 2/3 of the area is a consistent light Mazapan occupation. We have defined this as TT 35. In the NW sector, in 3-4 adjacent lots and fields, is a core area where Mazapan is heavier than Aztec on three structures, including the big low mound noted above as probably of this period. T.T. 35 is the largest and heaviest Mazapan occupation in the Teacalco/Maquixco Alto survey strip and was probably a local center.

T.C. 64 is a very small Teotihuacan period site, with medium to heavy pottery concentration (along with Aztec) in a single field. Also present are traces of Patlachique (T.F. 293), and Tzacualli (T.T. 250, 253).

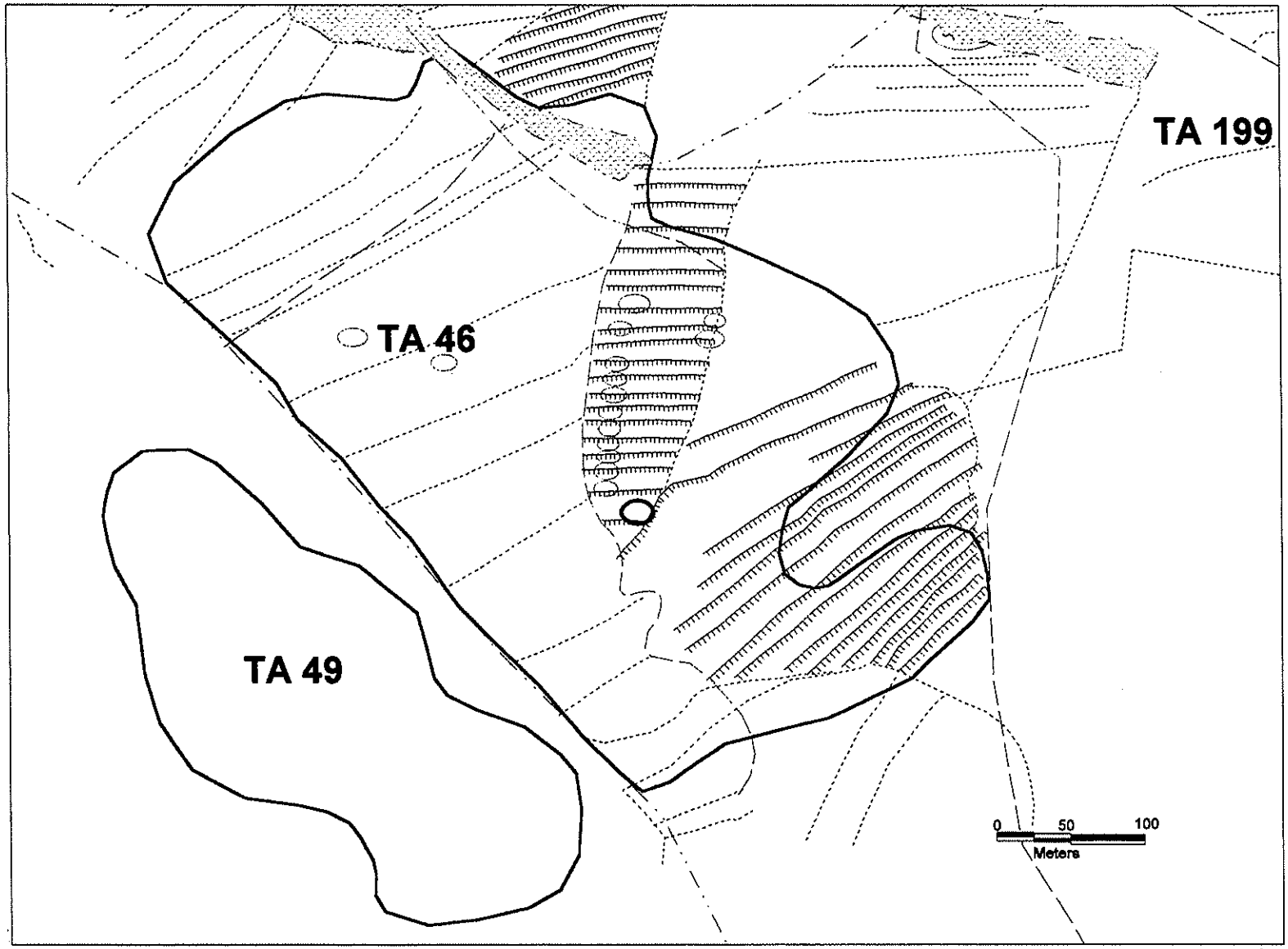
Ethnohistoric Information: The site was probably the center of the 1580 village of San Maquixco.

T.A. 46 (Fig. 123; Plate 117 B, C)

Classification: Small dispersed village.

Natural Setting and Modern Land Use: This site is located on gentle to medium sloping terrain north of Cerro Ahuatepec and south of the village of Santa Maria Maquixco. It is located on the east bank of the Barranca Teclalo, on the San Jose tributary of the Barranca Teclalo. The area varies considerably in soil preservation, but the situation may be summarized in terms of two zones. One of these zones is that adjacent to the barranca to the west, a very severely eroded area with only small remnants of old terracing, possibly

Figure 123



ancient, remaining and virtually no modern cultivation. The area to the east is occupied by very well maintained modern terrace systems, some of them of the narrowly spaced type, others of the wider type. Elevation is between 2550-2580 m.

Archaeological Remains: Sherds extend over an area of 15 ha, within which were located twenty residential mounds and one temple platform. Site is a big sprawling village that probably once had a minimum of 35 - 40 houses and a pyramid. Terrace remnants are common in tepetate area so that its general appearance must have been similar to that of Maquixco Alto and Colhuacan today. The big canal that runs through the site may have provided water for the Aztec period terraces but it is more probably of Teotihuacan age. It departs from the barranca near the point where a similar canal leaves it on the opposite side. This would seem to argue that both fed off water held back by a single dam. The second canal is not oriented to serve any modern or Aztec terraces and it even has check dams within its bed, similar to the system of soil recovery used in barrancas in recent times.

A major problem with respect to this site is its relationship to T.A. 45. The latter site is located inside present day Maquixco Alto. Between the two sites is an area of deep soil terraces and heavy Teotihuacan occupation. The latter tend to obscure the Aztec occupations and in a general survey it is difficult to sort out the Aztec occupation. Our impression is that it is nowhere heavier than light and frequently is scanty plus, indicating a break between the two sites of about 200 m. It is possible, however, that the two sites join and we have a single large village dispersed over a terrace system. The fact that both T.A. 45 and T.A. 46 have pyramids, however, would seem to suggest separate social communities. Within the borders of T.A. 46 and occupying about half the site area is a heavy non-Aztec occupation (Tzacualli, Teotihuacan, Mazapan (T.F. 127, T.C. 57, T.T. 36).

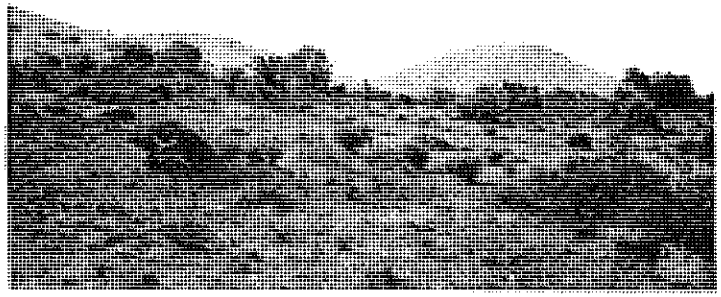
On the basis of the dense concentrations of sherds, there obviously were once several times as many residential structures as found preserved in 1963. The western half of the site is very severely eroded, with large areas of bare tepetate and extraordinarily abundant surface pottery - sherds frequently occur as heaps on the tepetate surface. In this area 4 - 5 definite mounds were found but rock and sherd concentration are so abundant that there must have been at least 15 - 20. Evaluation is further complicated by overlapping of the site with Tzacualli, Teotihuacan, and Mazapan occupations. In one narrow strip there is a series of narrowly spaced maguey terraces with thin soil that were partly built of stone taken from the mounds. On each terrace are traces of former mounds with heavy concentrations of rocks and sherds. Most of these are nearly destroyed and the set of 13 residential mounds located in the plan should be understood as an approximation of the original plan. Apparently, there were one or two strings of houses on a terrace system. Five other mounds are scattered through a thin soil terrace system.

Along with these remains there is a small pyramid that is either Aztec or Mazapan in date.

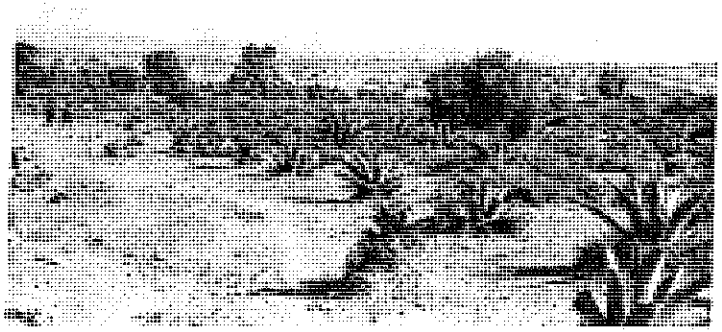
The Mazapan occupation is dispersed over a much smaller area, perhaps 1/4 the Aztec site, and in the northwest sector is found mixed with Tzacauli-Teotihuacan-Aztec on a tepetate surface, in other areas mixed with Aztec on a series of narrow maguey terraces. In this latter area are 13 residential mounds and a small pyramid, any of which could be of the Mazapan period but probably continued in use into the Aztec period. There is somewhat heavier Mazapan occupation near the pyramid.

All over the tepetate area are remnants of old terraces that apparently were related to house locations. As indicated previously, there is also clear evidence of an ancient canal--so deeply incised that it appears as small barranca. It is probable, however, that this is Teotihuacan in date, although it may have continued to function in the Aztec period.

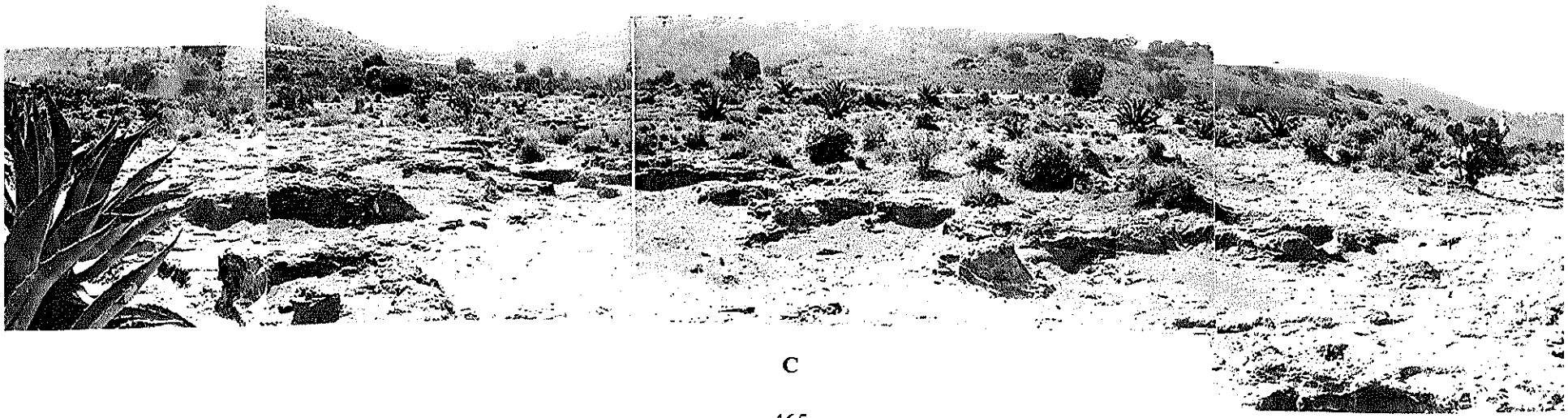
Plate 117



A



B



C

While 1 x 1 m counts of sherds were not done, we estimate that a count in the tepetate areas would reach 500 sherds/m2. Obsidian = scant to heavy; ground stone = scant to light.

T.A. 49 (Plates 117 A, 121 B)

Classification: Small dispersed village

Natural Setting; Municipio: Temascalapa; Village: Maquixco Alto. Site is scattered along medium sloping terrain between the steep slopes of Cerro Tezqueme and the Barranca San Jose, a tributary of the Teclalo Barranca. Area is almost denuded of soil--just patches here and there, usually 30 - 50 cm deep. Many of the Aztec structures have certainly been obliterated. Site is located 2550-2580 m.

Modern Land Use: Maquixco Alto village area

Archaeological Remains: Extend over 5.2 ha, about 11 mounds. The site is a narrow band of settlement 80 m wide dispersed along the west bank of the barranca for 300 m. Over this area are gullies, exposed tepetate and generally medium - heavy sherds. In at least 11 localities there are especially heavy sherd and rock accumulations that probably mark house former sites -- no walls are preserved. Over about half the site there is an equally heavy Tzacualli occupation - T.F. 72, and T.C. 72, with a trace of Mazapan. Tzacualli, however, occurs in light concentrations over the balance of the site.

Running along the NW edge of the site is what appears to be a small barranca. It departs from the big barranca--is generally 3 - 5 m deep and disappears ultimately in the tepetate waste just north of the site. The drainage pattern is reversed from a natural one and it undoubtedly is an old canal. Today it is unused, it has several presas in it and it clearly is unrelated to modern terracing.

One problem is the relationship of T.A. 49 to T.A. 50. Both are located at opposite ends of a band of slightly to moderately sloping terrain between two main barrancas just north of Cerro Tezqueme. Between them is an area about 300 m wide [area] of extremely eroded terrain--gullies and sheet erosion. In this area are scattered remnants of a Tzacualli site with scattered Aztec. There may have been continuous settlement in the area and T.A. 50 and T.A. 49 were parts of a single, large site. T.A. 49 probably did not have more than 15 - 20 houses.

No other specialized features (structural, hydrographic, exploitive etc) were found; Pottery is moderate to heavy, localized and variable. Obsidian is sparse to moderate, w/ blades and cores. Ground stone is sparse - light, with manos and metates..

T.A. 42

Classification: Problematical, either two hamlets or a small dispersed village.

Natural Setting and Modern Land Use: This site is located well up the barranca system just below the beginning of the steep slopes of Cerro Gordo. The site occupies a portion of a narrow interfluve (300 meters wide) between two deep barrancas. The terrain is gently sloping and much of the surface is severely eroded. There are small areas of preserved soil that appear as house mounds. In some areas this preserved soil is 1.5 meters in depth, indicating a very respectable original soil cover for the overall area. Where such soils occur they are occupied by natural scrub, including huizache, huixcolote, pirul and grass. Remains of recent and ancient terracing are abundant throughout the interfluve area. Site is located 2450-2470 m.

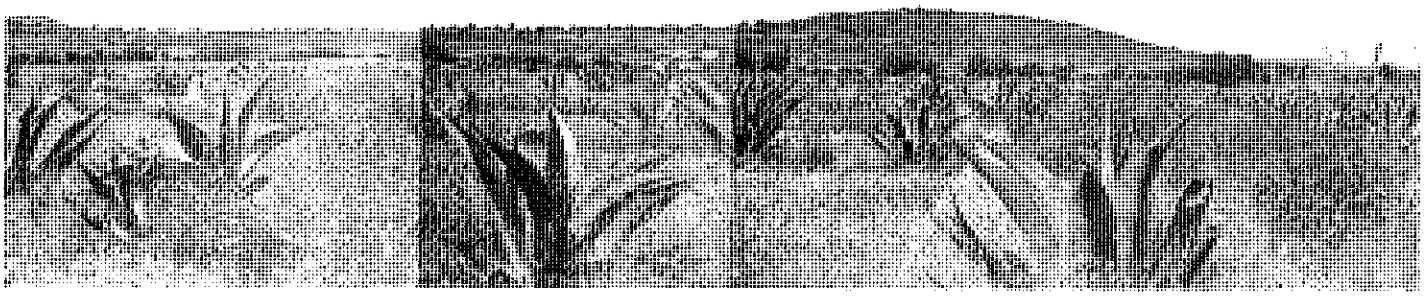
Archaeological Remains: The site was surveyed by the Formative Survey Team and in the process reported information on the Aztec occupation. The multicomponent site extends for a distance of 600 meters along the interfluve and varies in width from 80 to 240 meters. At opposite ends of this strip are two small areas 120 meters in diameter with very heavy sherd concentrations where all the Formative period occupation is concentrated. Within each is a series of small mound-like remnants of the type noted previously. When we first surveyed the sites we interpreted them as the remains of prehistoric houses. Excavation of one of them revealed only a homogeneous black clay soil but with very heavy concentrations of sherds. The intervening areas between these mounds and between the two areas of dense settlement have only light occupation debris. Along with potsherds, obsidian scrapers, points and blades and ceramic figurine fragments were found. Aztec occupation is abundant over the site area.

The total area of the Formative site is approximately 4 hectares, but the two areas of dense concentration occupy a total area of only 1.5 hectares. The Aztec site extends over an area of 7 ha.

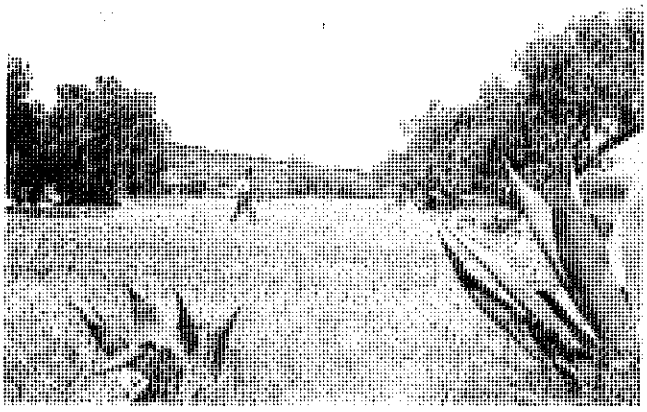
Chronology: Surface samples were collected from both areas of dense settlement and small test pits excavated in each to determine the nature of these mounds. As we noted they turned out not to be structures. In the site report the upper densely settled area is referred to as Tecorral and the lower as La Chiva. Chronologically the samples from the two portions of the site were distinctive. Aztec is heavily represented in both. Aside from Aztec the major component at Tecorral seems to be Patlachique, which makes up half of the identified Formative rims in the sample and 3/4 of the total sample. The balance of the sherds were about equally divided between Altica-Chiconauhtla and Cuanalan. At least one definite Altica rim was found in the sample, a flanged-lipped, incised cream bowl. Teotihuacan sherds also occur scattered through the excavated sample but were undetected in the surface sample.

The La Chiva sample was predominantly Aztec with a strong secondary occurrence of Late Tzacualli (Apetlac) and Teotihuacan and a scattering of Altica-Chiconauhtla and Patlachique. We have coded the Formative occupations as follows: T.F. 1, Chiconauhtla; T.F. 70, Patlachique; T.F. 71, Tzacualli; T.F. 224, Cuanalan; and T.F. 225, Altica. The last much be considered as a trace, the others as probable occupations. The Chiconauhtla component is well-enough represented to be considered a true occupation, a surprising occurrence considering the total isolation of this site from all other Chiconauhtla settlements at this time.

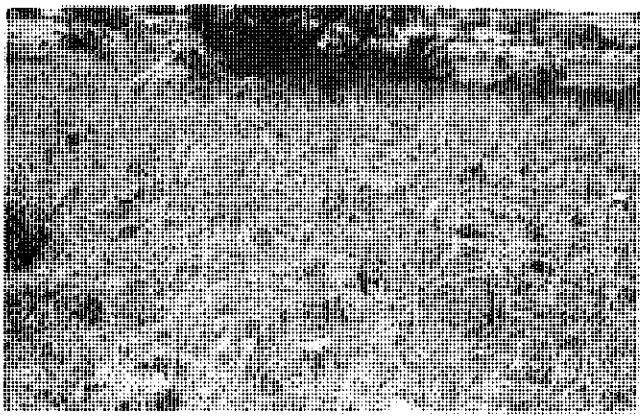
Plate 118



A



B



C

D

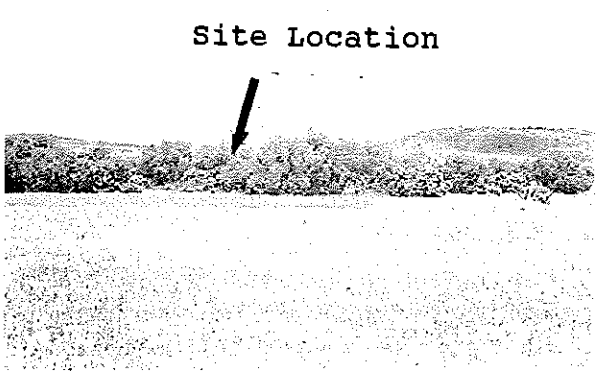
E

Plate 119

A

B

C



D

E

T.A. 44 (T.C. 40) (Fig. 130)

Classification: Small dispersed village

Background: The Teotihuacan period occupation at this site was surveyed by Marino in 1963. The artifact collections from the Teotihuacan period survey and consisted of 22 samples. Marino also, however, noted the distribution of the Aztec occupation on the map of the Teotihuacan period site.

Natural Setting: Site T.A. 44 is located between 2,400-2,430 m. Soils in the site area have a loamy to sandy texture and are medium to dark brown in color, with depths ranging up to 110 cm. There is slight erosion in the north edge of the site where tepetate is exposed. Moderate to heavy concentrations of rock and tezontle fragments are found in the area. Vegetation in the vicinity includes pirul, maguey, huizache, nopal, and various grasses. Other natural features include a wash along the north and northeastern edge of the site; an incipient wash is located at the western margin. Site is located 2410-2430 m.

Modern Land Use: Cultural features include the Cemetery or Panteon of Teacalco at the northeast corner of the site. The site area is used primarily for agricultural purposes including the cultivation of maize and barley. The entire area is composed of a series of wide stone terraces and maguey bancals. Several drainage ditches along the western boundary of the site were noted.

Archaeological Remains: The total multicomponent site occupies 16.5 ha, while the Teotihuacan component occupies 9.5 ha. Twenty-two mounds or areas of sherds and rock concentration were identified and sampled, of which nine are definite Teotihuacan period ceremonial or civic mounds. There is a strong suggestion in the spatial arrangement of the mounds that the site had an orderly grid plan in Teotihuacan times. The Aztec in contrast, appears as an arc of dispersed occupation, running northeast - southwest through the core of the Teotihuacan period town but extending to the north and south outside of the Teotihuacan site area (see Figure); nine small residential mounds in the site were identified by Marino as Aztec. The site has two phases of pre-Teotihuacan, three phases of Teotihuacan, and two phases of post-Teotihuacan represented for a total of seven. Associated non-Aztec occupations include T.F. 16 (Tzacualli), T.T. 31 (Mazapan). Also present are traces of Cuanalan (284) and T.C. 40. Aztec occurs as a narrow band across the site covering at least 6 ha.

The site has an abundant distribution of lithic materials including obsidian blades, cores, and scrapers. Ground stone tools, especially metates, mortars, and pestles, were also noted. Two stone rings and a fragment of a Huehueteotl stone statue were also found.

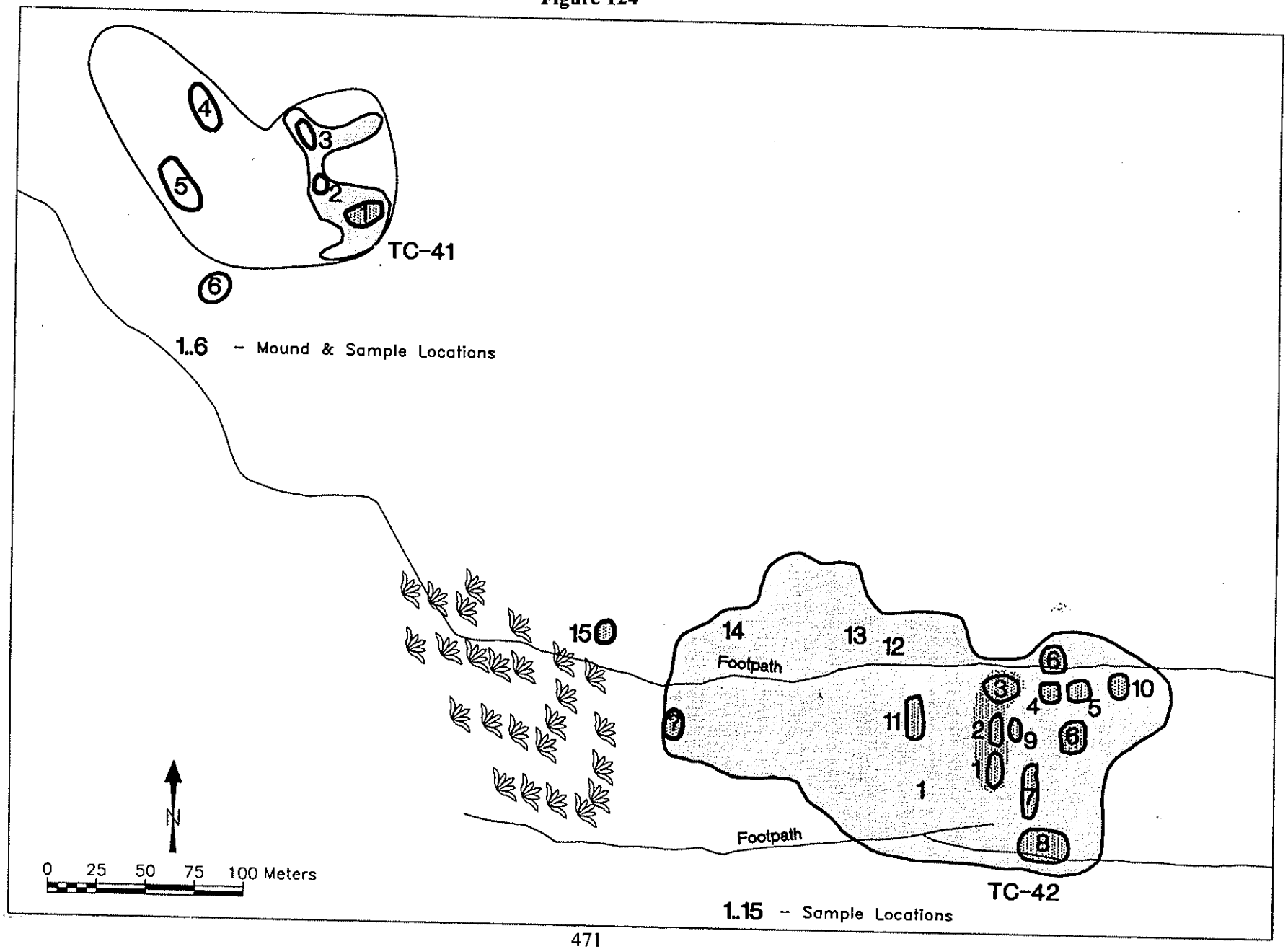
T.A. 128 (T.C. 42) (Fig. 225; Plates 118, 119 D, E)

Classification: Hamlet

Background: This site, also known as San Cayetano de San Juan Teacalco, was surveyed by Marino in 1963 as part of the Teotihuacan period site survey. The artifact collections from the Teotihuacan Period survey consisted of 15 samples. Aztec occupation occurs in eleven of these samples, dispersed over most of the surface area of the site.

Natural Setting: Site T.A. 128 is located between 2,420-2,450 m. Soils in the site area have a sandy to loamy texture and are medium to dark brown in color with some dark gray soils also noted. Soil depths range to 35 cm. There is slight erosion along the western side of the site where tepetate is exposed.

Figure 124


4
3
5
2
TC-41
6
1..6 – Mound & Sample Locations
15
14
13
12
Footpath
6
3
4
5
10
7
11
2
9
6
1
10
7
Footpath
8
TC-42
1..15 – Sample Locations
N
0 25 50 75 100 Meters

Moderate concentrations of rock and tezontle fragments are found in the area. Vegetation in the vicinity includes pirul, nopal, huizache, and various grasses.

Modern Land Use: Cultural features include no structures. There is a large abandoned jagüey some 18.0 m from the southeastern corner of the site which probably dates to Early Republican (i.e. 1810-1910) times. The site area is used primarily for agricultural purposes including the cultivation of maize, barley, and wheat on maguey terraces. Some grazing is also conducted in the vicinity.

Archaeological Remains: The multicomponent site occupies 3.7 ha. Fifteen mounds or ares of concentration of rock and sherds were identified, all of which have Teotihuacan occupation. Seven have Aztec occupation as well. Five of these mounds probably had civic or ceremonial functions and are almost certainly Teotihuacan structures. The others did not appear as well defined mounds but as localized areas that resemble the remains of residential structures. The site has two phases of pre-Teotihuacan, three phases of Teotihuacan, and two phases of post-Teotihuacan represented for a total of seven. Other associated non-Aztec sites include T.F. 42 (Tzacualli), T.T. 33 (Late Toltec). The total area of Aztec occupation covers 8.0 ha.

The site has an abundant distribution of lithic materials including obsidian blades and scrapers; in addition, there are sparse obsidian cores and projectile points. Ground stone tools, especially manos, metates, mortars, and pestles, were also noted.

T.A. 224 (T.C. 46) (Fig. 124)

Classification: Either a small dispersed village or two hamlets.

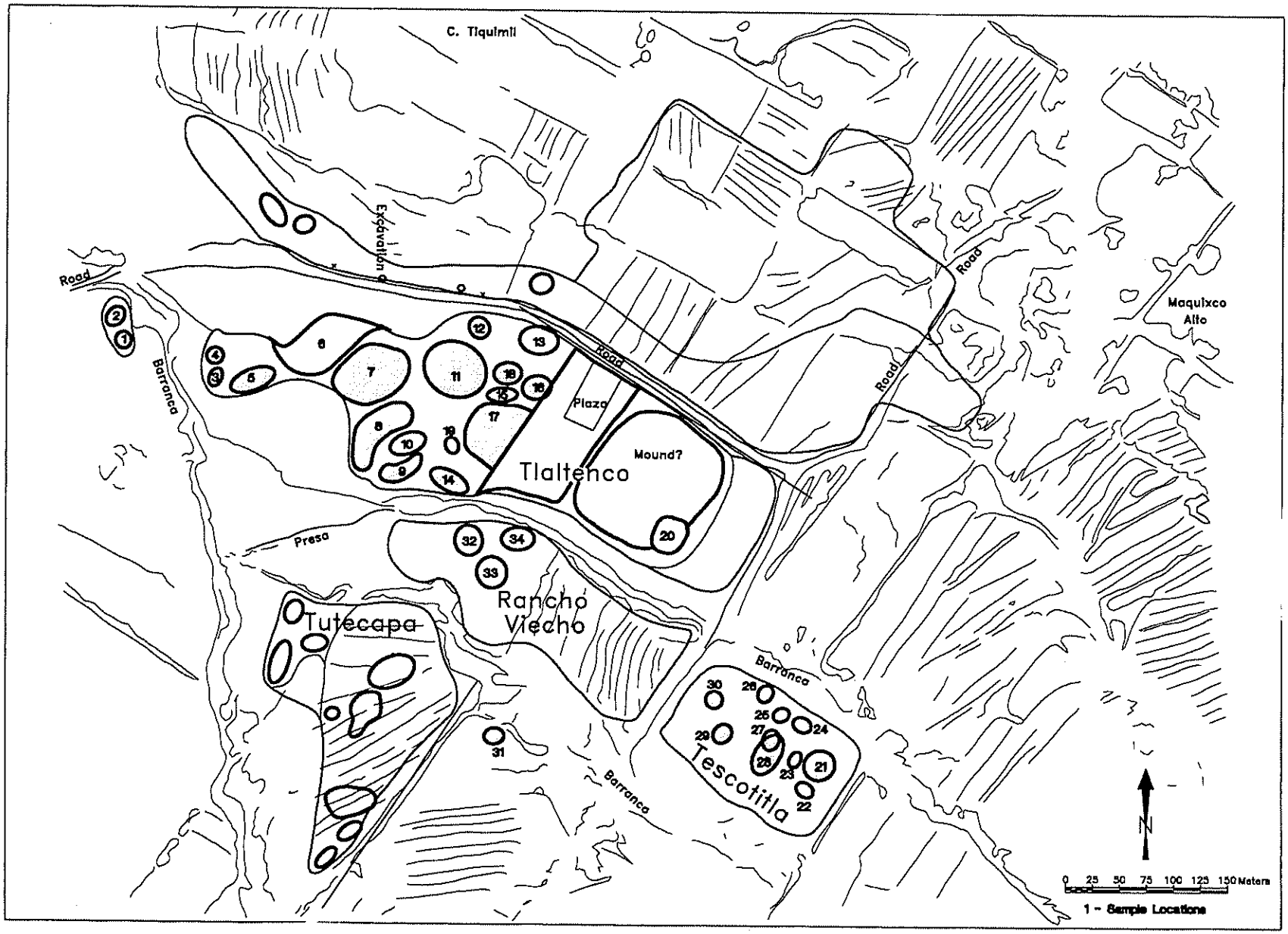
Background: This site designated, T.C. 46 by the Teotihuacan Period survey Team, and also known as Tlaltenco de Santa Maria Maquixco el Alto, was surveyed by Marino in 1963 as part of the Teotihuacan period survey. The site was not resurveyed by the Aztec team. Small excavations were conducted at this site in 1963 (see Vol 3, Chapter 3). The artifact collections from the Teotihuacan period survey were processed by Kolb in 1963 and 1964 and consisted of 35 samples. The dominant occupation is clearly Teotihuacan but there are substantial Aztec, Tzacualli, and Mazapan occupation. The Aztec occupation is designated T.A. 224.

Natural Setting: Site T.A. 224 is located between 2,500-2,530 m. Soils in the site area have a sandy to loamy texture and are light brown in color, with depths ranging up to 40 cm. There is moderate erosion in most of the site area, and tepetate is exposed along the northeastern side of the site. Moderate concentrations of tezontle are found over much of the area. Vegetation in the vicinity includes pirul, nopal, maguey, and various grasses. Incipient washes are found in the site area, one of which may be the remains of a prehispanic canal. It runs approximately southeast-northwest, splitting the site into two unequal areas, and ultimately joins the Barranca Teclalo.

Modern Land Use: Cultural features apparently include no structures or jagüeys. The site area is used primarily for agricultural purposes including the cultivation of maize and maguey. Some stone terraces and maguey bancals are found in the area. Grazing is also conducted in the vicinity. The main road from Maquixco Alto to the Hacienda San Cayetano runs through the site near its northern edge.

Archaeological Remains: The total multicomponent site occupies 22.5 ha. Thirty-five mounds or areas of rock and artifact concentrations were identified, all of which have Teotihuacan occupation. On eighteen of

Figure 125


C. Tiquimil
Excavation
Road
Barranca
Road
Road
Maquixco Alto
Plaza
Mound?
Tlaltenco
Presa
Rancho Viejo
Tutecapa
Barranca
Barranca
Tescotitla
N
0 25 50 75 100 125 150 Meters
1 - Sample Locations

these the Aztec occupation was recorded as light to medium in density. The site is so large that various portions have local toponynns such as Tescaltitla, Rancho Viecho, Tutecapa and Tlaltenco (the last name we have used for the entire site) (see Fig. 125). The Aztec occupation is concentrated in two areas, Tlaltenco and Tescaltitla. Erosion over much of the site is severe. The small size of some of the mounds suggest that they date to the Aztec period. Possibly these are cases of Aztec residences placed above Teotihuacan structures. Approximately nine of the mounds (Mounds 5-8, 11, 35-37) are larger than the vast majority of recorded Aztec mounds, ranging from 500-1,500 m^2 in size and almost certainly are the remains of Teotihuacan residential structures. One of these mounds is so large that in all probability it represents the remains of several Teotihuacan house compounds. It is indicated on the map as a mound with a question mark. The site has three phases of the pre-Teotihuacan, three phases of the Teotihuacan, and three phases of the post-Teotihuacan represented for a total of nine. Other associated components include TF-144 (Tzacualli) and a Mazapan component (T.T. 225). The total area occupied by the Aztec occupation is problematic because of the multicomponent nature of the site.

The site has a light concentration of lithic materials including obsidian blades and scrapers. Ground stone tools, especially manos, metates, mortars, and pestles, were also noted.

T.A. 225

Classification: Hamlet or small dispersed village

Background: This site, also known as Tenango de Santa Maria Maquixco el Alto, was surveyed by Marino in 1963 in the general survey and was not resurveyed by any of our survey teams. Small excavations were conducted at this site in 1963 (see Volume 3, Chapter 2). The artifact collections from the Marino's survey were processed by Kolb in 1964 and 1965 and consisted of 28 samples. Aztec occupation was reported in eighteen of the twenty-eight samples taken during the general survey and generally was recorded as light to medium.

Natural Setting: Site T.A. 225 is located between 2,450-2,470 m. Soils in the site area have a sandy to loamy texture and are tan to medium brown in color with depths ranging from 0-35 cm. There is moderate erosion in most of the site area, and tepetate is exposed along the northern edge of the site. Moderate concentrations of rock and tezontle fragments are found in the area. Vegetation in the vicinity includes pirul, nopal, maguey, huizache, and various grasses. Other natural features include several incipient washes and barrancas to the east and west of the site.

Modern Land Use: Cultural features include no known structures or jagüeys. The site area is used primarily for agricultural purposes including the cultivation of maguey and maize. Stone terraces and maguey bancals are also found in the vicinity.

Archaeological Remains: The total multicomponent site occupies 9.2 ha. Twenty-seven areas of rock and artifact concentrations were identified, probably the remains of residential mounds, all of which have Teotihuacan occupation. Two additional structures are definite mounds, measuring two to three meters high and probably the remains of temple-platforms. For more information on this site see Volume 3, Chapter 2. The site has two phases of the Formative, three phases of the Teotihuacan, and two phases of the post-Teotihuacan represented for a total of seven. Associated non-Aztec components include TF-144 (Tzacualli), and TT-37 (Late Toltec), and T.C. 49. It is unfortunate that no mound sizes or erosional data were recorded during this general survey. Data, however, are available as to the phase represented by the occupations of the 28 samples. On the basis of the samples, the Aztec occupation occurs in a wide arc, occupying the

Figure 126

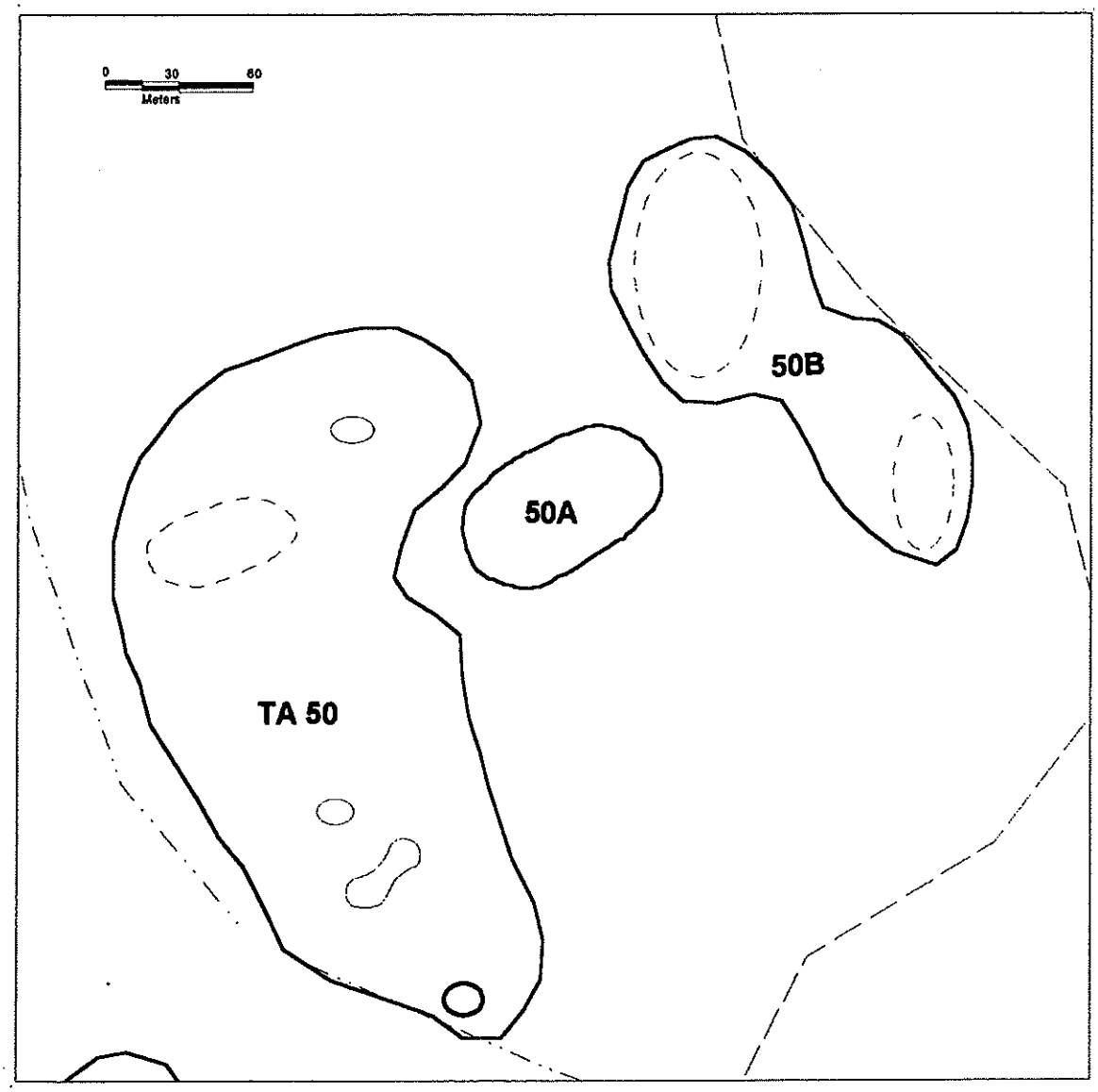
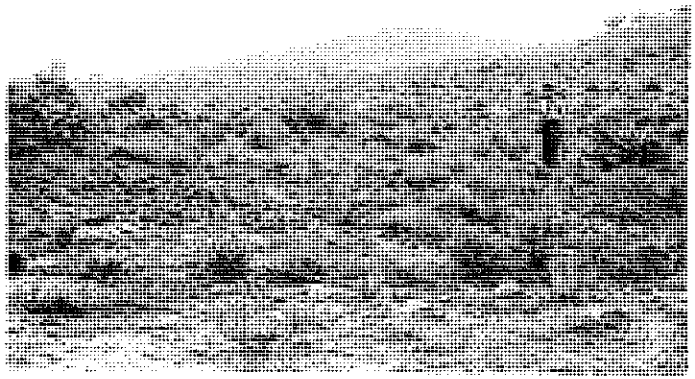
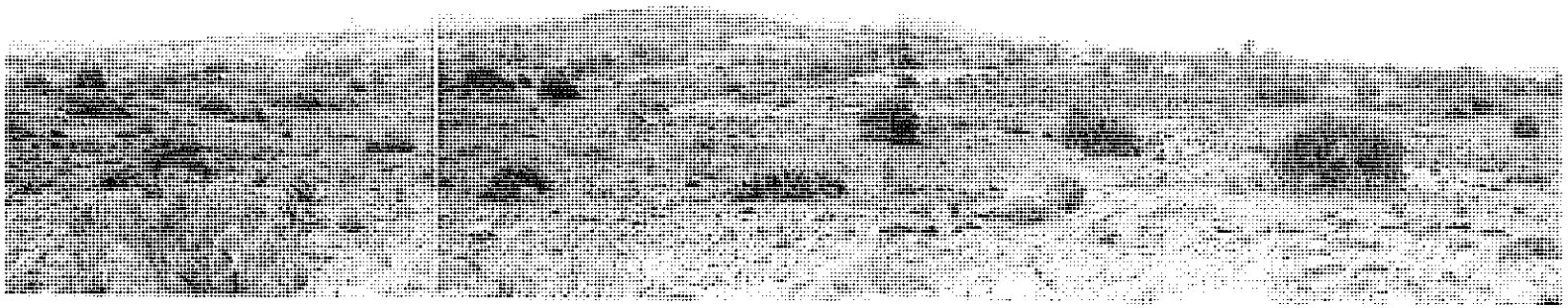


Plate 120



A

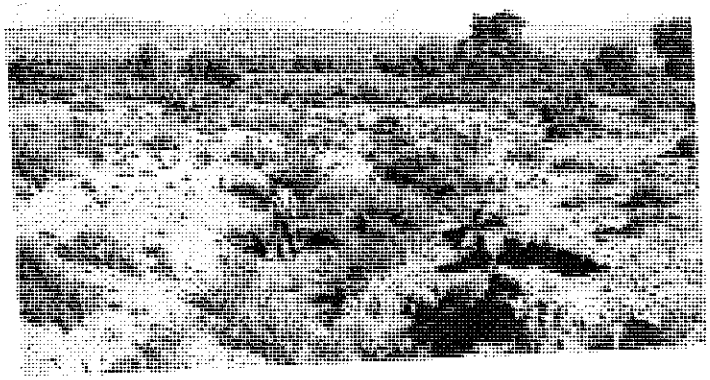
B



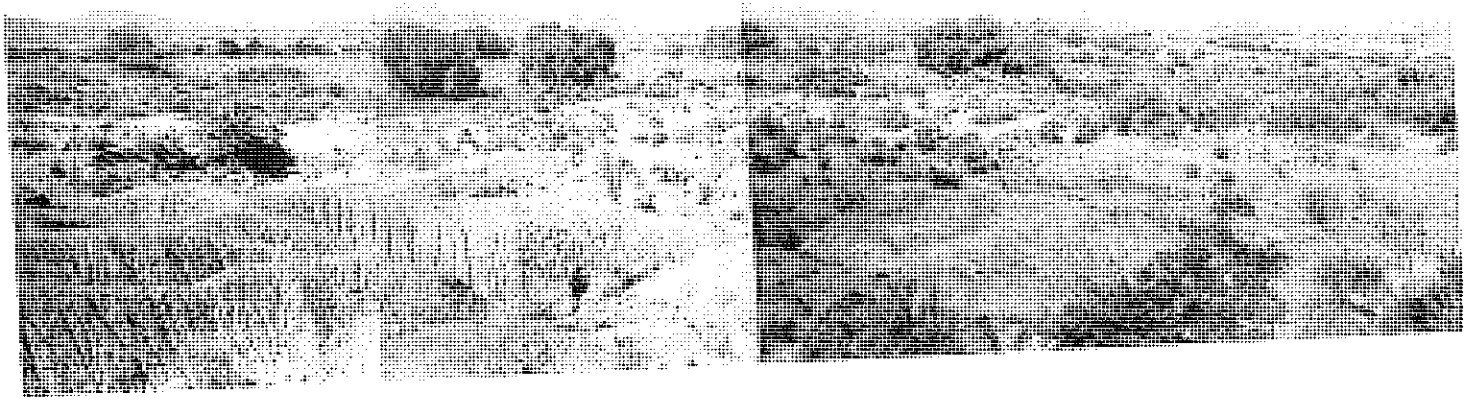
C

Plate 121

A



B



C

southern and eastern half of the site, perhaps a settlement of 4-5 hectares of well spaced residential structures.

The site has a moderate and discontinuous distribution of lithic materials including obsidian blades, cores, and scrapers. Ground stone tools, especially manos, metates, mortars, and pestles, were also noted.

T.A. 50 (Fig. 126; Plate 120)

Classification: One or more hamlets

Natural Setting: Municipio: Temascalapa; Village: Maquixco Alto. Soil depth never exceeds 20 - 30 cm except in the areas around mounds. Site is located 2550-2580 m.

Modern Land Use: Site is on gentle to moderate sloping terrain between two big barrancas, Ayllacal and Teclalo, and just north of Cerro Tezqueme on the northwest edge of the hill. Today it is a badly preserved terrace system with much exposed tepetate and generally thin soil. Many of the mounds have undoubtedly been destroyed by erosion and recent terrace construction.

Archaeological Remains: Extend over 4.7 ha, medium - heavy sherds, ca. 6-7 mounds and I pyramid.

In the northern sector of the site is a large oval area of very heavy concentration of rock. One's impression is that there was a cluster of house mounds and terraces in that area. Occupation is heavy--predominantly Aztec with secondary Tzacualli and possibly Miccaotli. Occupation otherwise in the area varies from light to medium, rising to heavy in areas of bare tepetate with 3 small localized areas of heavy rock and sherd concentrations that are probably house remains. At the upper edge of the site is a small pyramid perhaps a meter high. No specialized features (structural, hydrographic, exploitative etc); Pottery is sparse to heavy, localized and variable. Obsidian is sparse to moderate, with blades and cores. Ground stone is sparse, with manos and metates.

Only a small proportion (10-25%) of residential structures has survived. The site area is roughly that of T.A. 49, which has 11 definable house sites and density of pottery is comparable. It is possible that it once joined the latter site, representing formerly a fairly large village dispersed over a terrace system between two barrancas. Possibly T.A. 46-49-50-51 appeared as a single band of settlement with houses dispersed over and located at the upper part of a big terrace system with separation of the units only by natural features such as barrancas. Other components include traces of Patlachique (T.F. 288), Tzacualli (144, 248, 249), Teotihuacan (T.C. 71), and a trace of Mazapan.

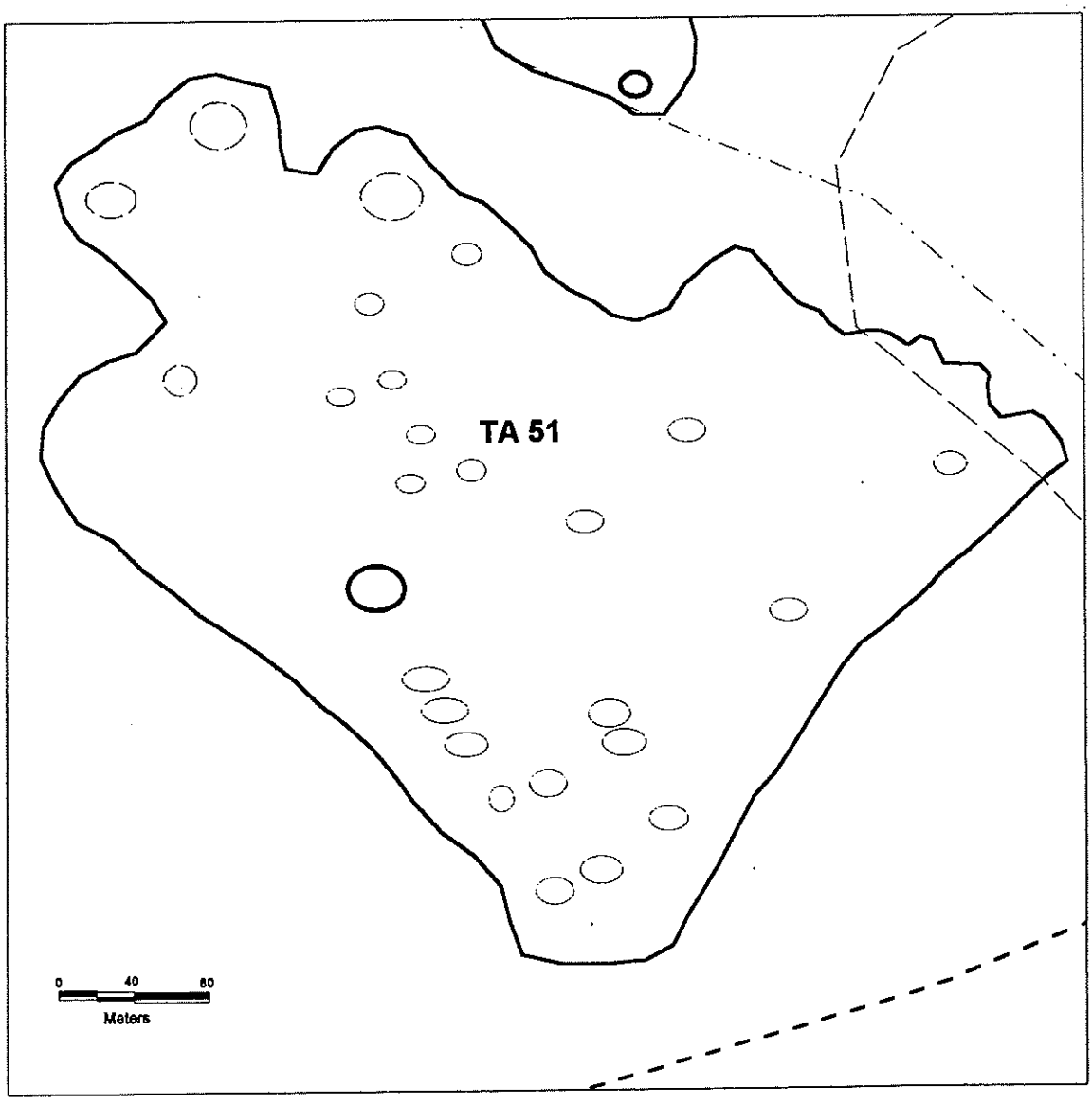
T.A. 51 (Fig. 127, Plate 121)

Classification: Small dispersed village.

Natural Setting and Modern Land Use: Except around mounds, the soil nowhere exceeds 20 - 30 cm, and is generally eroded to bare tepetate. The land today is used as marginal pasture and belongs to the village of Maquixco Alto. Site is located 2550-2580 m.

Archaeological Remains: Extends over 14 ha, 20 mounds and 1 pyramid. Site is on gentle to moderate sloping terrain between two barrancas. The entire area is severely eroded, much of it tepetate wash, with extensive sheet and gully erosion. Site appears as a heavy concentration of sherds on surface tepetate or in

Figure 127



the form of rock debris of disintegrating houses.

There are approximately 20 well-defined residential mounds. These appear as heavy concentrations of rock, earth, and sherds, frequently on tepetate areas. They vary in size from 5 - 15 m in diameter, most of them at least partly eroded. No preserved walls were noted. Aside from these there is an extensive continuously concentrated area of rock and moderate to heavy sherds measuring 40 x 80 m which probably represents the remains of a disintegrated mound cluster. There are two smaller areas of rock and pottery concentration as well. All of these mounds are less than 50 cm high. One mound may be the remains of a temple platform. It is about 20 m in diameter and varies from 50 to 100 cm high. All over the area are traces of almost obliterated terraces. In some areas the tepetate surface occurs in the form of terraces, possibly indicating the former existence of terrace systems. We suggest that the gullies are remnants of canals that once fed the system. No other specialized features were noted (structural, hydrographic, exploitation etc); Pottery is sparse to heavy, localized and variable. Obsidian is moderate to heavy in sherd areas, with blades and cores. Ground stone is sparse to light in sherd areas.

Major methodological problems with respect to the site may be summarized as follows:

1) The dating of terracing and its relationship to the Aztec settlement
2) Possibility that gullies are canal remnants
3) How much of the site has been destroyed by the extreme erosion?
4) How old is the barranca between it and T.A. 50 and what, therefore was the social relationship between the two sites?
5) Below the area of heavy occupation is a set of medium to deep soil terraces still in use today. The heavy occupation is limited to the tepetate and thin soil areas above, but is sparse on the lower terraces. Did the site really end where it appears or does it extend under the deeper soil in the lower section?

Our general feeling about this matter is that the site is a separate unit since T.A. 50 and 51 each had what appears as a temple platform. We doubt that it extended further down since a number of terraces below do have gullied areas and pottery is sparse there as well. We suggest that the site area was once located in a well-maintained terrace system with canals, that houses were located on terraces and that each householder had a cultivated lot near the house and terraces below the site area. We would guess also that there were at least 50% more houses at one time than the present remains would indicate--perhaps a total of 30 - 35 houses.

T.A. 52 (Plate 122 A)

Classification: Site is very small--possibly a hamlet cluster of 5 - 6 houses, certainly no more than this

Natural Setting and Modern Land Use: The site is located in a tepetate wash along a barranca. Most of the area is bare tepetate, with soil cover 5 - 10 cm on edge of site. Municipio: Temascalapa; Village: Maquixco Alto. Site is located 2480-2500 m.

Archaeological Remains: Extend over 2.2 ha.

No definite mounds. Site appears as an area 60 x 200 m along barranca edge of tepetate wash with light to moderate Aztec - Mazapan sherds scattered over the surface, in the same general distribution. Toward the northeast - south edge a little soil occurs. there is also a trace of Tzacualli concentrations. No specialized features (structural, hydrographic, exploit, etc); Pottery is scanty to medium, localized and variable. Obsidian is light, with blades and cores. Ground stone is sparse.

Other occupations: TT38 (Mazapan).

T.A. 47 (Fig. 122)

Classification: Hamlet

Natural Setting: Area is almost denuded of soil

Modern Land Use: Municipio: Temascalapa; Village: Maquixco Alto. Today this is an area of marginal pasture.

Archaeological Remains: Sherds extend over 4.7 ha, 1 mound.

Site occurs as a 80 m wide ribbon of settlement on lower flank of Cerro Tiquimil for a distance of 320 m N-S. The site doesn't extend far up the steep slope of the hill; most of is a medium sloping area, almost denuded of soil with abundant rock debris and sherds, but only one definite mound (residential) preserved. Terrace remnants-- presumably related to the Aztec occupation--are common.

Other occupations: a Teotihuacan period occupation (T.C. 45, 64), traces of Patlachique (T.F. 286), and Tzacaulli (244). No specialized features (structural, hydrographic, exploitative etc); Pottery is sparse to heavy, localized and variable. Obsidian is sparse to moderate, with blades and cores. Ground stone is sparse.

T.A. 48 (T.C. 60-61-62) (Fig. 122)

Classification: Hamlet

Natural Setting and Modern Land Use: The site lies northwest of the village of Maquixco Alto in very marginal agricultural land. Municipio: Temascalapa; Village: Maquixco Alto. Site is located 2450-2470 m.

Archaeological Remains: scanty - medium sherds extend over 3.5 ha, no mounds.

Rectangular area, roughly 200 x 100 m on medium to gently sloping area, almost bare of soil. Site is mostly exposed tepetate with sherds scattered over the surface in varying levels of density (localized sparse to moderate). One small section has perhaps 20 cm of soil, another new terrace is in construction but with very little soil accumulation so far.

Site is a small hamlet, almost obliterated by erosion, on gently sloping terrain. Within the area of the site are 3 small localized continuous areas of Teotihuacan-Tzacualli occupation, the largest not over 0.5 ha. in size, the smallest an area of 30 m in diameter. No structural remains were found, just heavy concentrations of pottery (designated T.C. 60, 61, 62). There is also a scattering of Mazapan (T.T. 35A), traces of Patlachique (T.F. 288), and Tacaulli (T.F. 246, 251, 252, 202). No specialized features (structural, hydrographic, exploit. etc); Obsidian is sparse to moderate, with blades and cores. Ground stone is sparse. The Aztec period remains at T.C. 60-61-62 probably represent the badly eroded remnants of a hamlet size community.

T.A. 53

Classification: Hamlet.

Natural Setting: General sheet erosion occurs over much of the site. It is an area of thin soil to exposed tepetate, gentle to medium slope near barranca; scrubby vegetation, and the rest is cultivated thin soil terraces. Some of these are part of a recent reclamation project. Site is located 2420-2430 m.

Modern Land Use: Municipio: Temascalapa; Village: This area is part of the lands of San Juan Teacalco. Where cultivated, it was planted in barley.

Archaeological Remains: extend over 5.6 ha, Light - medium Aztec, Toltec

The site is probably a small barranca-side hamlet of half a dozen houses. It is located in an area of gentle to medium slope with thin soil (10-20 cm deep) terraces, mostly in disuse and disintegrated; when planted are in barley. There was an apparent string of small settlements including T.A. 53 between two big barrancas, without definite mounds. Occupation occurs as small scattered areas of light to medium sherds. There is one area of continuous light to medium occupation with moderate rock. Occupation is about half Aztec, half Mazapan plus light Tzacualli. The distribution of the Mazapan site (T.T. 37) is comparable to the Aztec in distribution and density. The Tzacualli occupation is concentrated in one small area where the lowest density of the site occurs.

Artifacts noted include as scanty to medium, localized and variable scatter of sherds; obsidian blades and cores (light to sparse); scanty ground stone.

T.A. 54 (Plate 122 B, C)

Classification: Probably a small dispersed village.

Natural Setting. North of the large Teotihuacan period site, Tenango (TC-49) site is a triangular shape interfluve, with the wide end upslope and to the south, formed by the convergence of two major barrancas, El Tecorral to the east and Teclalo to the west. Most of the area pertains to the town of San Juan Teacalco and is referred to locally as Touculco. Within this triangular area, at its upper end, are four separate loci of occupation, in all cases mixed with Tzacualli and Teotihuacan occupations. We have designated these as a single site, T.A. 54. The sites range in elevation from 2,430 to 2,470 m.

Modern Land Use. The entire triangular area is presently covered with maguey bancals. Today it is a patchwork quilt of well preserved bancals, badly disintegrated ones and new ones being constructed. Barley is extensively cultivated along with maize in the deeper soil areas. No modern structures are present.

Archaeological Remains. The total area occupied by the site is approximately 7.9 ha and no definite mounds or structures were preserved. Associated non-Aztec sites are T.C. 67-T.C. 69, and T.T. 35A (Late Toltec). The following samples were taken from the four clusters of occupation by the Teotihuacan Period Survey Team:

> T.C. 66-1, Artifactual remains indicated traces of Tzacualli, light Early Teotihuacan, light Middle Teotihuacan, traces of Mazapan, and medium Aztec components.

Plate 122

A

B

C

T.C. 67-1, Artifactual remains indicated light Early Teotihuacan, medium Middle Teotihuacan, and light Aztec components.

TC-68-1, Artifactual remains indicated traces of Early Teotihuacan, light Middle Teotihuacan, and light to medium Aztec components.

TC-69-1, Artifactual remains indicated light Early Teotihuacan, light to medium Middle Teotihuacan, and light Aztec components.

T.A. 55 (T.C. 67)

Classification: Small dispersed village.

Natural Setting and Modern Land Use: This site is below T.A. 54 at the lower end of the triangular shaped, gently sloping piedmont between two major barrancas, the Tecorral and Teclalo. Present day soil cover is highly variable but generally is between 5-10 cm, reaching in some areas 50-60. There are a few areas, however, of severe sheet erosion, mostly near the Teclalo Barranca. In general this is an area of well defined maguey bancals in variable state of preservation, planted in barley or maize. The land belongs to San Juan Teacalco. Site is located 2420-2430 m.

Archaeological Remains: We defined approximately two dozen field survey units in this area, which consists of approximately 10 ha of terraced fields as site T.C. 67. We found Aztec occupation on approximately 2/3 of these units or an area of about 8.7 ha. Within the site area the occupation varies in density from light to medium, reaching heavy on or near the mounds. At the site we located eight residential mounds and a small temple-platform. Tzacualli also occurs (T.F. 130).

T.A. 43 (Fig. 128)

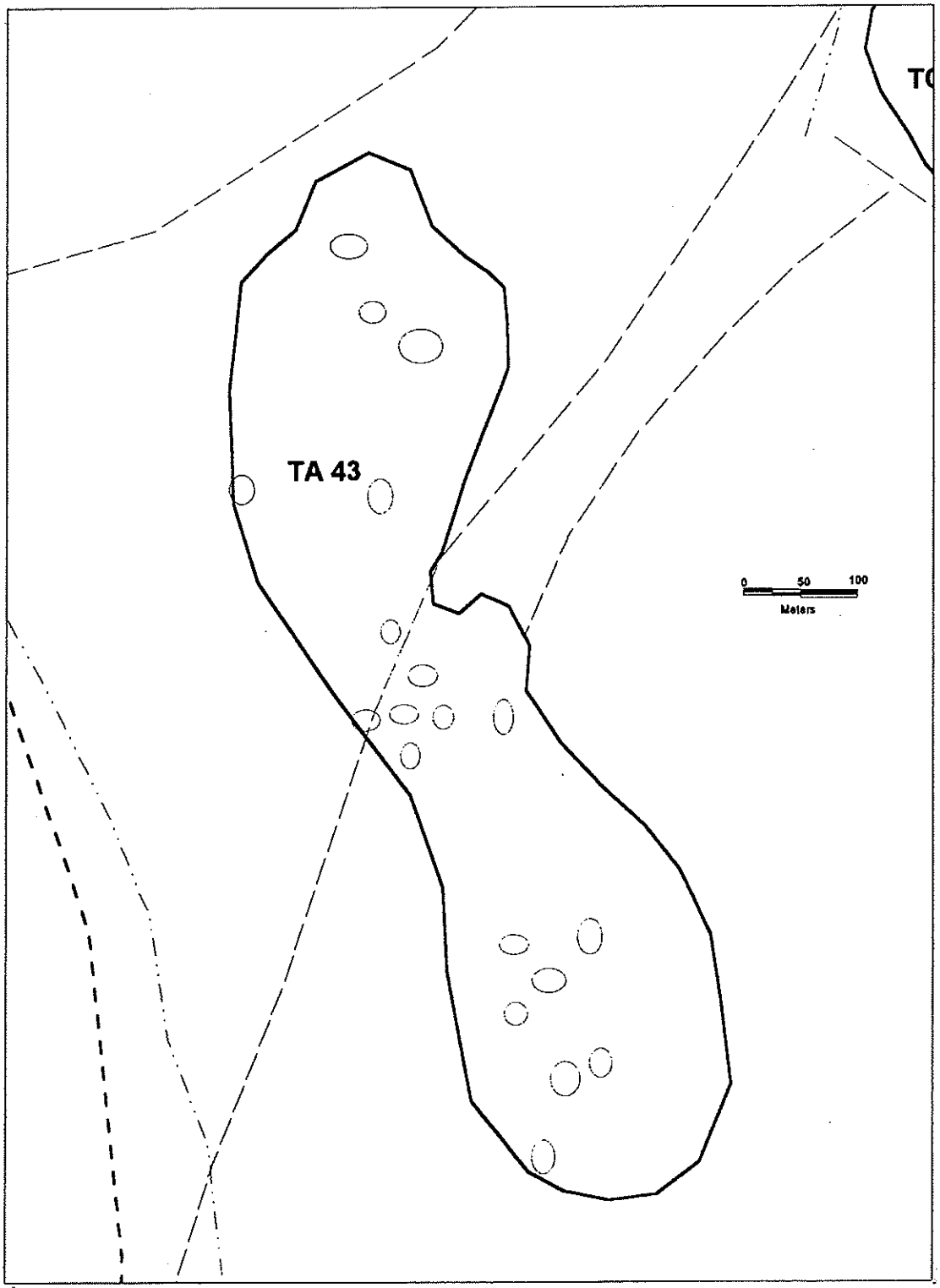
Classification: Small dispersed village or set of closely spaced hamlets

Natural Setting: Ridge top site, restricted to the higher part of the ridge. Soil depth is 20-60 cm, medium brown loam soil. Erosion is relatively slight, except along sloping area along the edge of the site. No permanent streams or springs. Site runs parallel to a deep and wide barranca for a distance of 160-280 m; there are few wash areas. The area is under plow cultivation, with pirul trees in fields and along terraces. Below to the west is a narrow string of thin to medium soil slopes, in places badly eroded, below them a slope of deep alluvium along the barranca; to the east is a gradual downward slope towards the SE to the large fields near the Hacienda Cayetano. Site is located 2420-2430 m.

Modern Land Use: Good agricultural land, for this area, temporal cultivation primarily planted in barley, with some maize. Crops are in good condition. Terraces of earth-maguey-and-stone are common. One large well-maintained terrace delimits the medium soil area parallel to the barranca, running for nearly 800 m. On the barranca downslope near the hacienda there is a huge check dam. No jagüeys.
Municipio: Temascalapa; village: Teacalco

Archaeological Remains: extend over 18 ha, 24 mounds.

Figure 128



The site runs for a distance of nearly 1 km along the top of the ridge, varying in width from 80 to 100 m. Pottery varies from sparse to moderate over the site and was localized and variable. Among obsidian tools, scrapers were found and blades were common. Manos and metates were fairly common; figurines were fairly common and a few spindle whorls were noted.

The site was clearly a line village of the dispersed type; no more than 24 mounds may be defined in the present condition of the site, of which 5 have much heavier occupation from earlier periods. These are not located in Fig. 128. We suspect that there may have been as many as twice the number of mounds before modern terrace construction. All are small structures--undoubtedly the remains of houses--grouped in three definite clusters, possibly representing different hamlet size sites.

The north group consists of 4 definite mounds and an area of scattered rock debris that might have been a fifth. There is, however, considerable rock terrace construction in the area. Occupation is generally medium density on terraces and mounds, light-medium in fields. There is a consistent light Toltec (mostly Mazapan) component with the Aztec, and a little Tzacualli on one mound.

A second cluster has 7 mounds, very closely concentrated, near the center of the site. In one field there is much scattered rock debris indicating that other mounds were once there and in another field is a large area of rock debris with medium-heavy occupation so that a small cluster of 2-3 mounds was probably located there. Occupation generally varies from light-medium. Toltec is sparse in this area except in a small area where there is also a Tzacualli concentration.

The third cluster with 6 mounds at the southern end of the site, includes a group of 4 mounds located on top of a terrace. This terrace was a notable feature and clearly has no connection to modern agricultural terraces. There was a significant Aztec occupation on three Toltec mounds and two Teotihuacan ones. The Teotihuacan occupation (T.C. 41) is a large mound--probably a multifamily dwelling of considerable size-and an isolated similar but smaller residence. The Toltec occupation involves reuse of the two Teotihuacan mounds plus at least 3 new structures. The field in which the 3 Toltec mounds are located has much rock debris and there were probably other mounds. There is also a Tzacualli occupation in the area of the large Teotihuacan mound. Sorting out the Aztec period occupation from that of earlier periods presents a major problem, especially in the northern cluster, where Teotihuacan, Toltec, and Tzacualli occupation complicate the picture. We suspect that the Aztec used older mounds here as house platforms. Another problem is the probable destruction of the site for stone terrace construction. Including older mound remains, there are probably remains of some 24 house structures today but there may have been as many as 40-50 before destruction. The site seems to have actually comprised three distinct house clusters, although stragglers with good occupation occur between them. The major point here is first whether the site represents remains of one or several social communities, and second, what might be the relationship to T.A. 44. There seems to be a 240 m break between them, whereas the distances between the three mound clusters of T.A. 43 are less than half that. No Aztec period ceremonial structures occur on the site. Traces of Cuanalan were found on the site (T.F. 283), along with Tzacualli (T.F. 41), and some Mazapan

T.A. 226

Classification: hamlet

Natural Setting: Ridge top, barranca side. Soil depth is mostly less than 20 cm, with much surface tepetate; brown sandy loam soil. Erosion is considerable; at least half the site has less than 10 cm of soil. No permanent streams or springs. One very deep and wide barranca limits the eastern edge of the site, with sheet

erosion near the barranca. Vegetation in the tepetate area is typical thorny scrub, with nopal; the rest of site is in agricultural use.

Modern Land Use: Temporal cultivation of barley, with some maguey terraces. No jagüeys. Municipio: Temascalapa; Village: Teacalco

Archaeological Remains: Extend over 5 ha, 9 mounds.

Site is a small hamlet of at least 9, and perhaps as many as 12-15 houses and is a typical barranca-side line village. No ceremonial structures present. We suspect is was a dependent site of T.A. 41. The mounds do not occur in clusters or plaza formations, are relatively evenly spaced and in very bad condition due to sheet erosion on the slope. Total linear distance is approximately 240 m. Occupation in and around the mounds is medium to heavy; in fields generally it varies from light to medium. Probably several mounds have been destroyed along the barranca edge. House structures rest on the thin soil cover or on tepetate. Pottery was moderate to heavy, localized and variable. Among obsidian tools, blades were common. A few manos and metates were found.

T.A. 223

Classification: A small dispersed hamlet with houses scattered along the barranca edge.

Natural Setting: Soil in terrace system is generally light-medium depth, all a new deposit related to the terrace system, which may have covered some mounds.

Modern Land Use: Agriculture, with a terrace system in excellent condition. Municipio: Temascalapa; Village: Maquixco Alto, on the side of a barranca that separates that village from Colhuacan.

Archaeological Remains: Extend over 8 ha, 1 mound.

The site appears as a consistent light-medium scatter of sherds through the terrace area--mostly Aztec, with Mazapan materials over about half the area, in the deep soil section. Mazapan occupation consists of a li[illegible] even sherd scatter. The site is dispersed over an area 400 m NS by 50-200 m EW along a barranca and through a well-preserved terrace system. The terrace system is not directly linked to Aztec occupation. Erosion of the area is light but the rebuilding of terraces has obliterated all residential mounds except one.

There may possibly have been a pyramid at the north end of the site. It appears as a high stone terrace bank, possibly remodeled when the terraces were constructed. It is located in the center of the Mazapan occupation, and might have been a Toltec period construction. Pottery was sparse to moderate, localized and variable, with a few obsidian tools noted.

T.A. 40 (Fig. 129)

Classification: Small dispersed village.

Natural Setting: Mostly on a level or gently sloping area on a triangular ridge between two barrancas near the apex of the triangle with a low depressed area to the west. Soil depth varies from 0 to 50 cm deep; light to medium brown loam. Erosion is severe in the northern and barranca edges of site, with much eroded tepetate. No permanent streams or springs. One large deep barranca limits the eastern edge of the site. A shallow broad wash runs though the northern section of the site. Vegetation includes pirul trees, scattered

nopal; most of site is in agricultural use, with trees along the terraces and around the jagüey. Site is located at 2420-2430 m.

Modern Land Use: Temporal cultivation with some probable floodwater control; Municipio: Temascalapa; Village: Teacalco

Archaeological Remains: extend over 18 ha, 21 mounds.
The site consists of isolated well-spaced low small mounds of rock and earth. Five in Field 2 are probably stratified because both Teotihuacan and Aztec pottery occur. Soil cover is a layer of brown earth varying from a few cm to 50-60 cm on tepetate.

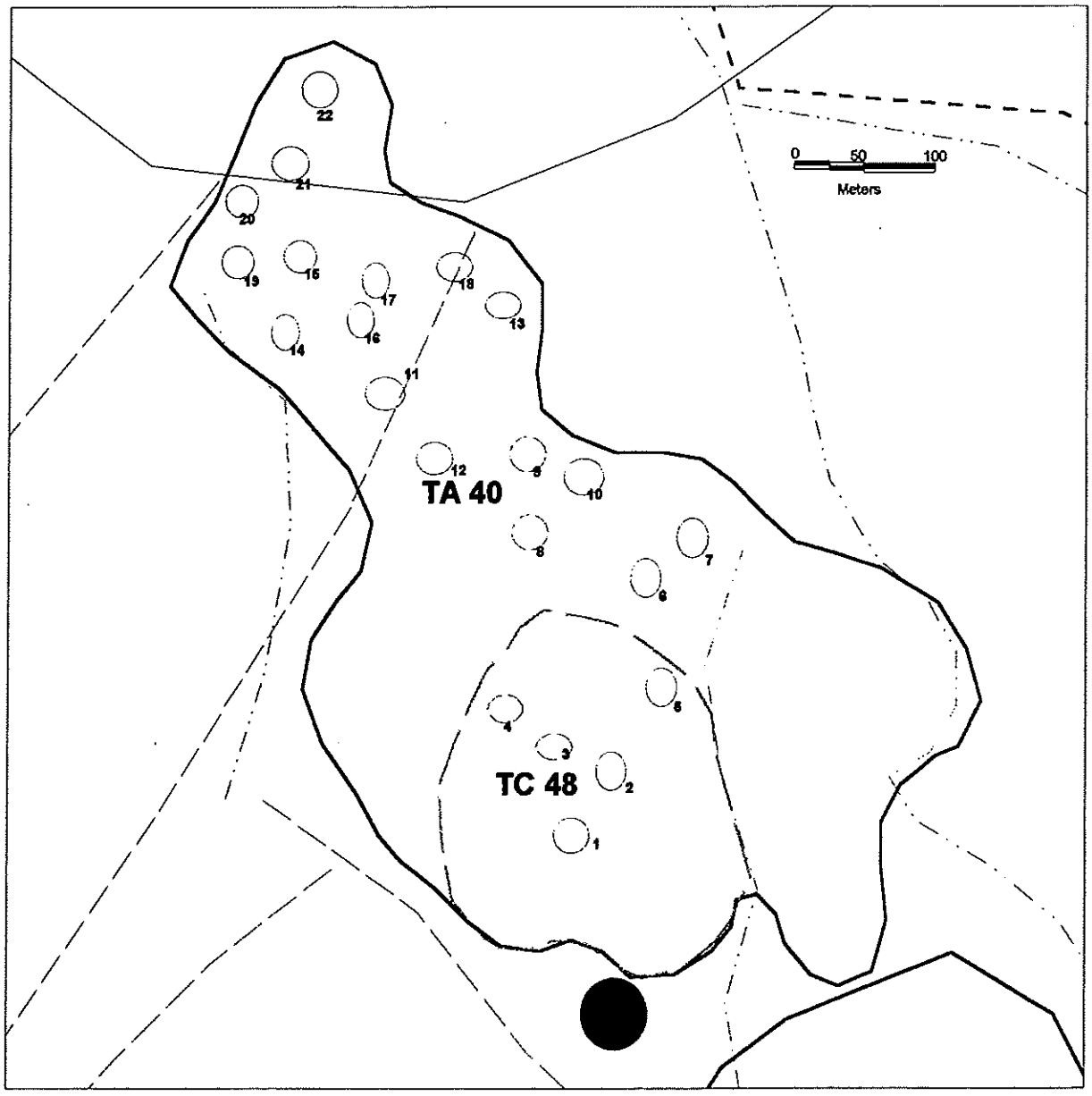
The site runs along the top of a ridge along a barranca for about 600 m and varies in width from 80 to 240 m. Total surface area probably ca. 6 - 8 ha. Fields 1-2 have good soil cover, with various stages of erosion. Fields 1 and 2 are coterminous with a small Teotihuacan site and are located near a modern jagüey. In these fields there is much rock debris from mounds; at least 5 definite mounds are visible today. This part of the site covers 2-3 ha. Occupation is uniformly medium in fields as a whole, heavy in areas around the mounds. Aztec tends to be well-represented all over the field but is outrepresented by Teotihuacan in mound localities. Fields 3-4-11-12 have a thin soil cover and there are at least 7 scattered mounds in this area. Occupation is generally medium to light and is entirely Aztec. Field 15 is badly eroded but Aztec occupation varies from light to heavy so at least seven more mounds were probably located here. Field 13 has a cluster of approximately 8 mounds but is so severely eroded that there may have been more. Occupation varies from light to very abundant on these mounds. Apparently there were at least 2 more mounds in this group across the highway in Field 14. There may have been several more because this unit has no soil cover left at all. The definition of the site to the north and south is fairly clear because there are a number of fields with very scanty occupation and no mounds for at least 120 m up the barranca for a distance of nearly 400-500 m to the southeast. To the east it reaches a point near the barranca edge. To the north there is an area of 160 m of scant occupation separating it from T.A. 41. In plan there is internal patterning--possibly 2 clusters of mounds at opposite ends of the site but no definite plaza area between. There are at least 21 mounds preserved but there may have been around 30 before erosion destroyed parts of the site. All are small mounds, undoubtedly domestic in function and appear as ovals measuring on the average 15 x 10 m. One of the mounds--Mound 15--had low stone wall foundations noticeable on survey. Mound 15 was completely excavated, revealing a complex of 5 rooms (see Chapter 7).

Although it is conceivable that T.A. 40 is simply part of a larger site or community that includes T.A. 41 and T.A. 226, the presence of scantily occupied areas or lack of mounds between them would seem to make it more consistent to treat them as isolated units. T.A. 40 lacks ceremonial architecture, and consisted of 21-30 house structures. Excavation of Mound 15 reveals that these mounds are multiroom structures, with no more than 5 rooms; the degree of mutual access of rooms plus the several kitchens argue for an extended family residence. Most of the mounds are probably of this character. Even if all were nuclear family residences, the population would suggest a village rather than a hamlet. Pottery was sparse to heavy, localized and variable. Obsidian tools included points, scrapers, and (far more common) blades. Manos and metates were fairly abundant; there were a few mortars and pestles, figures, and spindle whorls. Other components at T.A. 40 include traces of Cuanalan (T.F. 281), and Patlachique (T.F. 282); along with a Tzacualli (T.F. 49), Teotihuacan (T.C. 48), and Mazapan (T.T. 33B).

T.A. 217

Classification and Ethnohistoric Background: This is the 20th century village of San Juan Teacalco. This community was a sujeto of Tepexpan in the Colonial Period. It was not surveyed by the Teotihuacan Valley

Figure 129


0 50 100
Meters
TA 40
TC 48
22
21
20
19
15
17
18
13
14
16
11
12
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10
8
7
6
5
4
3
2
1

Figure 130

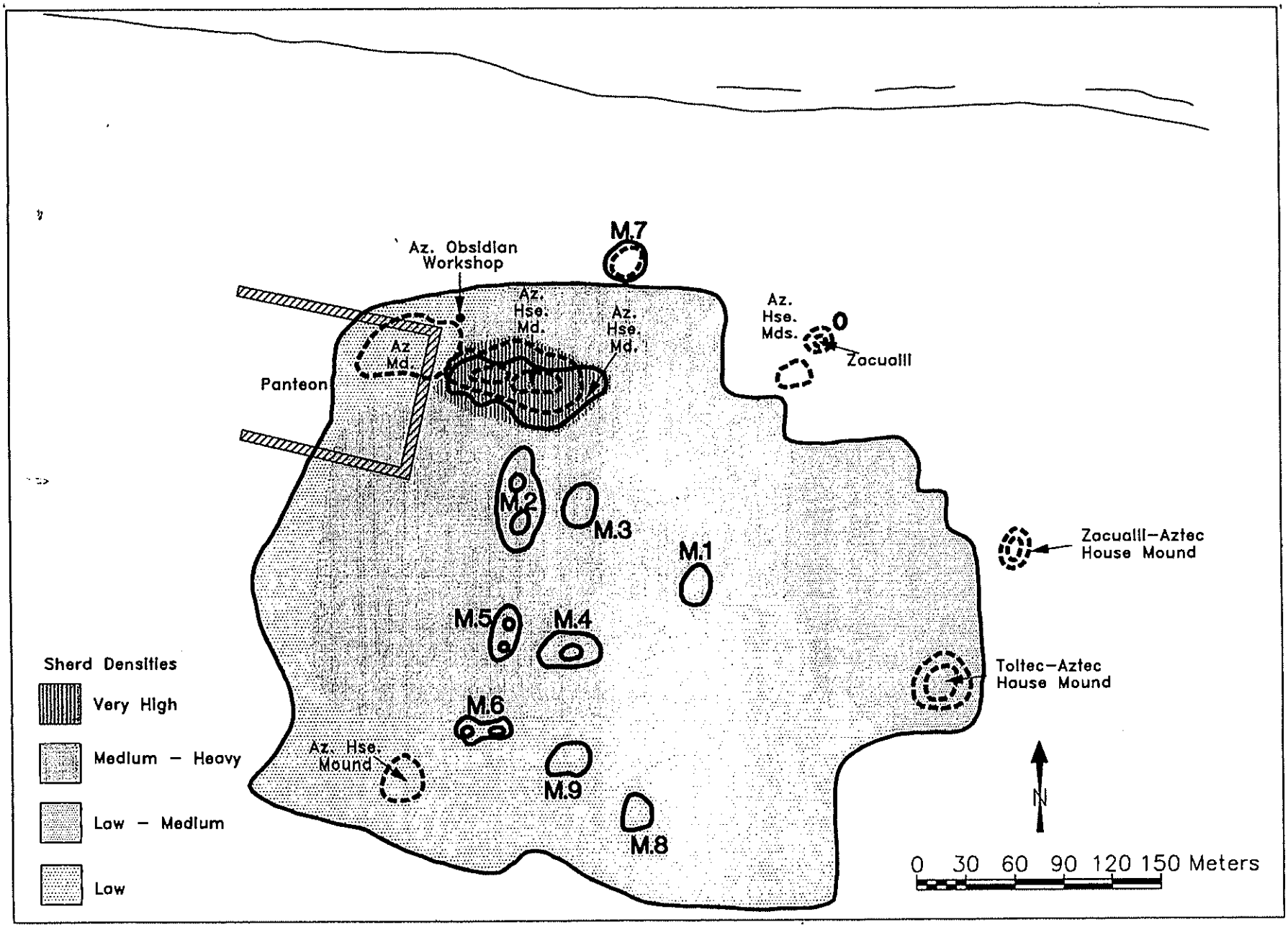
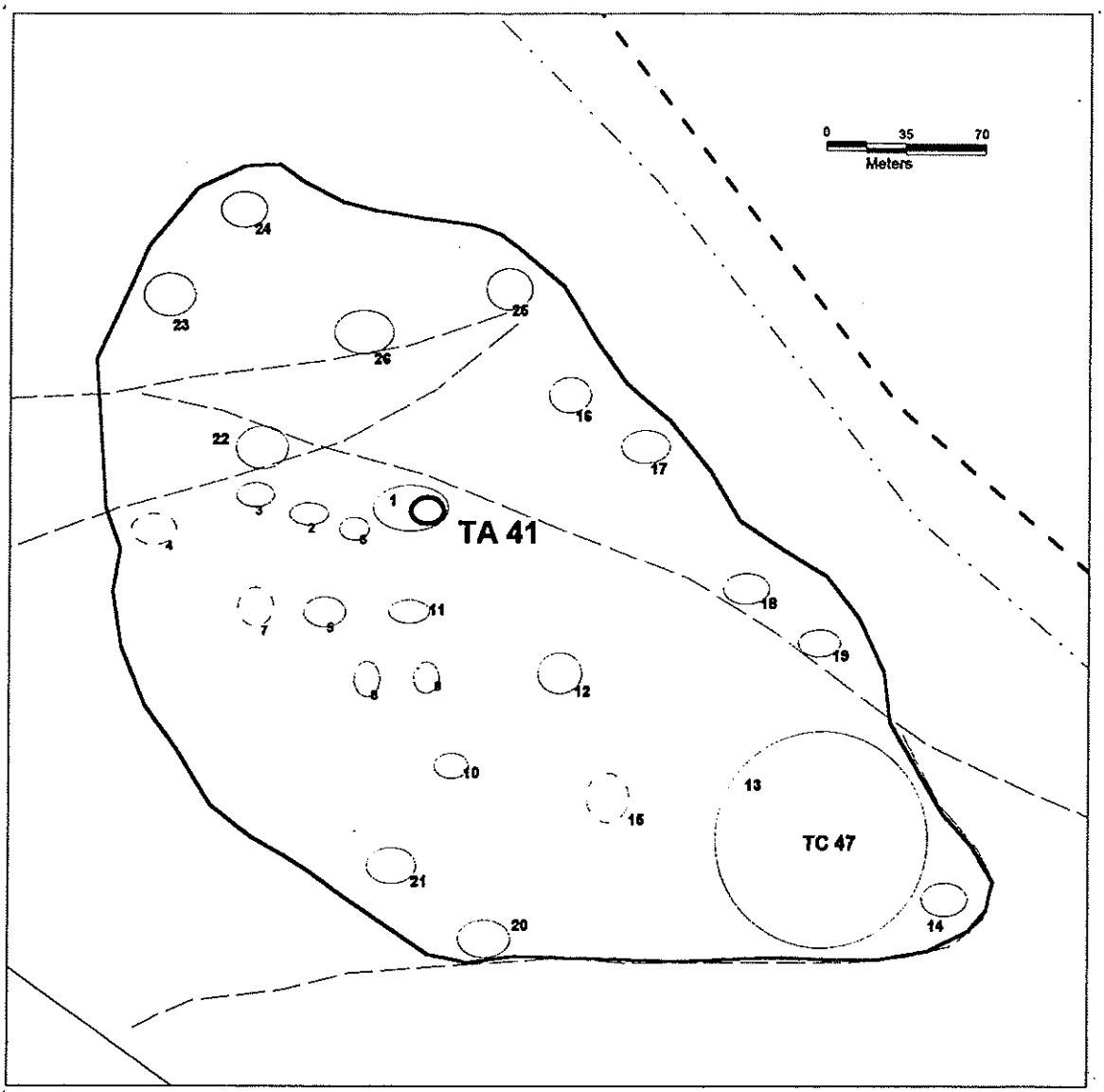

M.7
Az. Obsidian Workshop
Az. Hse. Md.
Az. Hse. Md.
Az. Hse. Mds.
Az. Md.
Panteon
Zacualil
M.2
M.3
M.1
Zacualil–Aztec House Mound
M.5
M.4
Toltec–Aztec House Mound
M.6
Az. Hse. Mound
M.9
M.8
N
0 30 60 90 120 150 Meters
Sherd Densities
Very High
Medium – Heavy
Low – Medium
Low

Figure 131


0
35
70
Meters
TA 41
TC 47
1
2
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5
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26

Project, so we have no information on the possibility of Aztec remains under the modern settlement. It may possibility be a post-Conquest creation at the time of the Congregación policy. If this was indeed the case, the 1580 and Prehispanic center of Teacalco may be site T.A. 41, described below

T.A. 41 (Fig. 131)

Classification: Small compact high density village.

Background. This site is known as San Juan Teacalco, Piramide.

Natural Setting. Site T.A. 41 is located between 2,400-2,420 m. Soils in the site area have a sandy to loamy texture and are tan to medium brown in color with depths ranging from 0-60 cm. There is heavy erosion on the periphery of the site, especially to the west, and tepetate is exposed in several areas. Moderate concentrations of rock and tezontle fragments are found in the area. Vegetation in the vicinity includes pirul, nopal, and various grasses. Other natural features include two barrancas to the east and west of the site.

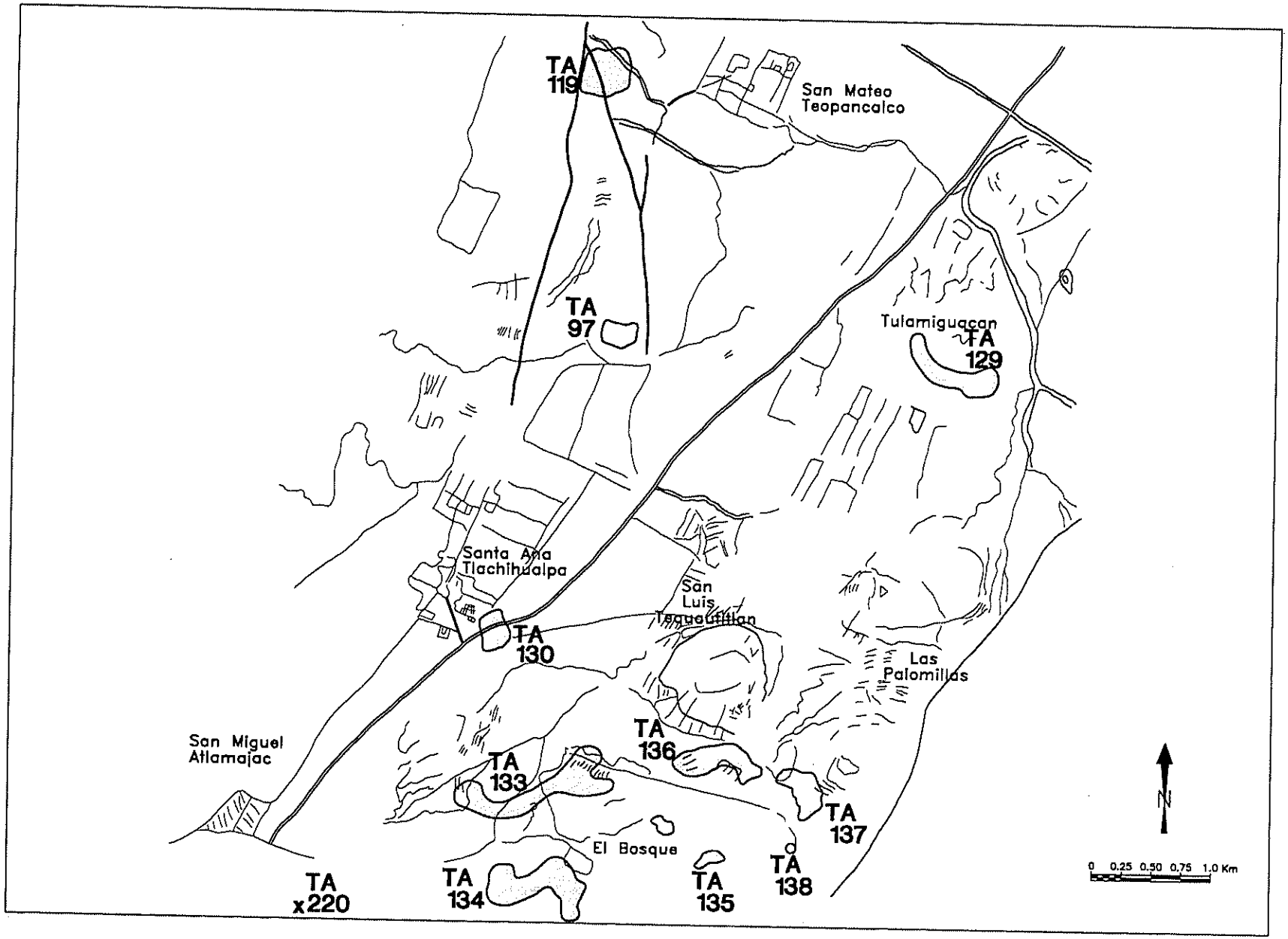
Moderate Land Use: Cultural features apparently include no structures and no jagüeys. The site area is used primarily for agricultural purposes, including the cultivation of maize and maguey. Stone terraces and maguey bancals are found in the vicinity. Over much of the central area of the site, where soil depth varied from 20-50 cm, approximately 60% was covered with a dense stand of barley making surface observations difficult; our map of mound locations, therefore, is probably somewhat inaccurate and mound numbers underrepresented.

Archaeological Remains. The total multicomponent site occupies 9.0 ha. Within the Aztec site is a small area with a Teotihuacan component, occupying 1.0 ha. Twenty-six mounds were identified, all of which are probably Aztec in date. One of these is a temple-platform. The abundance of rock debris in the eroded northern area of the site argues for the former presence of several mounds in this area. It is doubtful, however, that the site originally had more than 35-40 mounds. All but two are low elevations 20-50 cm in height and ranging from 5-15 m in diameter. Unlike most Aztec sites, sherd densities are uniformly medium to heavy and rock debris is common. It appears more like a Teotihuacan than an Aztec period site in terms of the density of the remains. The site has one phase of the pre-Teotihuacan, three phases of the Teotihuacan, and two phases of the post-Teotihuacan represented for a total of six. Associated non-Aztec sites include TF-15 (Tzacualli), and TC-47.

This site has discontinuous and moderate distribution of lithic materials including obsidian blades and scrapers. Ground stone tools, especially manos and metates, were also noted.

One group of mounds, 2-7, seem to be loosely arranged around an open plaza-like area but again considering the difficulty of observation for this site, this is problematical. Mound 12 is approximately twice the size of the average residential mound and may be a special function structure, possibly an elite residence. Mound 13 is a large mound with heavy rock debris and sherd concentrations and measures 80 x 80 m. The predominant occupation here, however, is Teotihuacan and the mound probably dates from that phase. Mound 1 is a small temple platform. It measures 15 m^2 and is placed on the summit of the southeast cuadrant of a large low platform that measures 50 x 30 m. Depending on where one stands, the summit for the temple platform is 2-4 m above the surround field. No traces of walls, floors or plaster were noted in the survey, but again we must note the difficult of making surface observations on this site.

Figure 132


TA
119
San Mateo
Teopancalco
TA
97
Tulamiguacan
TA
129
Santa Ana
Tlachihualpa
San
Luis
Tequautlan
TA
130
Las
Palomillas
San Miguel
Atlamajac
TA
136
TA
133
TA
137
El Bosque
TA
x220
TA
134
TA
135
TA
138
N
0 0.25 0.50 0.75 1.0 Km

ZONE 7: NORTH TRIBUTARY VALLEYS: THE NORTHERN SUBZONE (Fig. 132)

The Northern Tributary Valleys drain partly into the Xaltocan-Zumpango drainage, partly into the Teotihuacan Valley. That area which drains northward is discussed here as Zone 20. The area that drains to the south is included in the previous description of Zone 7. For marketing and administrative purposes, it was, in Aztec as well as in Colonial times, dependent on the Teotihuacan Valley towns of Tepexpan and Teotihuacan (Gibson 1964:48-49). The northern half, which is described here, was dependent on Tepexpan. Topographically it is an area of numerous small hills interspersed with zones of gently to moderately sloping terrain.

Soils are thin and there are no permanent water sources. Maize and frijol are cultivated over approximately 25% of the area. Some barley is also grown in this zone. The largest part of the area is devoted entirely to maguey, with some nopal, and grazing. By the time Sanders revisited the area in 1995 a substantial percentage of the landscape had been converted to nopal cultivation, in response to the growing demand for tuna in Mexico City market, a process which has had enormous repercussions on land use generally in the Teotihuacan Valley.

This zone is one of the poorest of any within the Teotihuacan Valley Project survey area, suitable today only for the cultivation of nopal or maguey. A comparable area is the northern and eastern piedmont of the Upper Valley. Located here is the nineteenth-century hacienda of San Miguel Tenopala, the rancherias of Cerro Las Palmas, Cerro Temeyuca, and Cerro Tonalan as well as the villages of Santa Ana and San Luis.

In the northern half of the North Tributary Valleys we identified a number of Aztec period sites on general survey. For most of these we only have data generated by the Teotihuacan Period Survey Team, none was resurveyed by an Aztec Team. Following this introduction is a description of the three surveyed sites that have both Teotihuacan and Aztec occupation on them and is a modified version of the descriptions published in Volume 3, of T.C. 20, 21, and 22. Two other sites were not located in any of our surveys but are locations reported in the 1580 Relación. The Aztec sites recorded in this area are as follows:

During the Early Colonial period this area was tributary to Tepexpan, with the exception of San Luis Tecuauhtitlan (the former San Luis Xiuquemecan) which was tributary to Teotihuacan. The three sujetos of Tepexpan were Santa Anna Tlachihualcan, San Mateo Teopancalca, and San Pedro Tulamihacan.

T.A. 129

Classification: Not surveyed by any of our surveyed teams and the location based on the 1580 Relación in reference to the community of San Pedro Tulamihuacan.

T.A. 131

Classification: This site was not surveyed by any of the survey teams, but based on the 1580 Relación this is the location of San Luis Xiuhquemecan; today this community is called San Luis Tecautitlan. This was a subject community of Acolman in 1580.

Figure 133

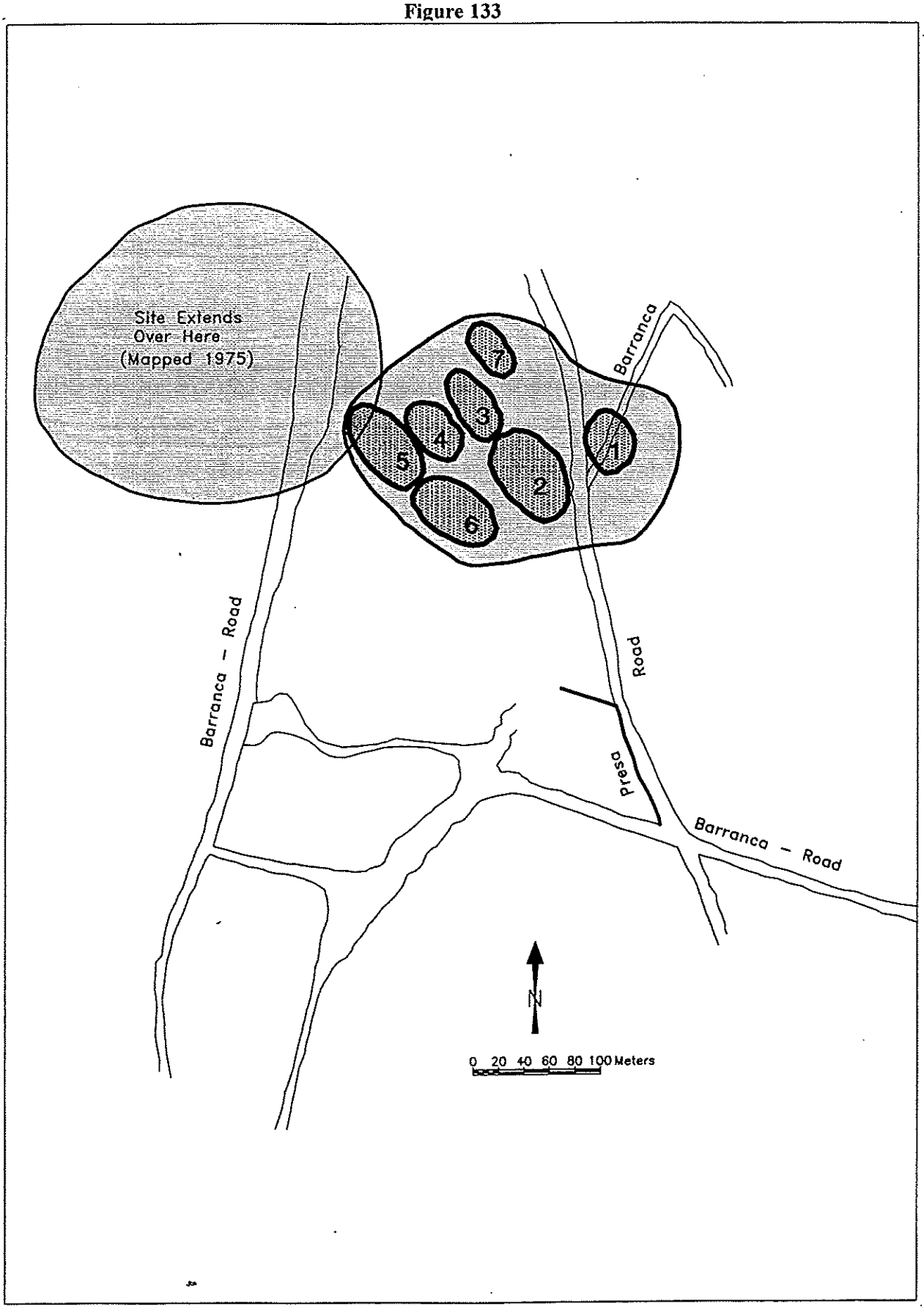
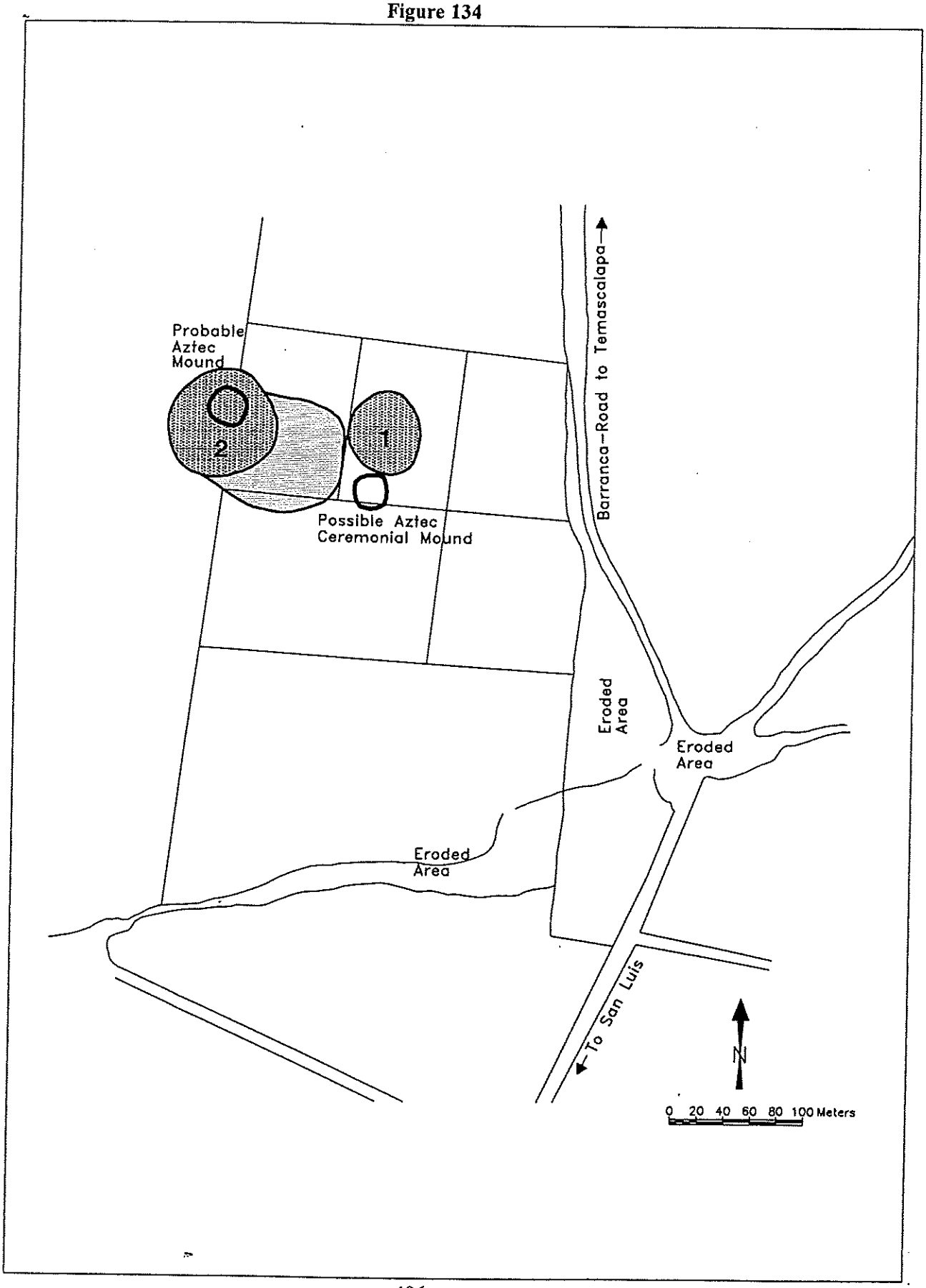

Site Extends
Over Here
(Mapped 1975)
7
3
4
5
2
1
6
Barranca
Road
Barranca – Road
Presa
Barranca – Road
N
0 20 40 60 80 100 Meters

Figure 134


Probable
Aztec
Mound
2
1
Possible Aztec
Ceremonial Mound
Barranca-Road to Temascalapa
Eroded
Area
Eroded
Area
Eroded
Area
To San Luis
N
0 20 40 60 80 100 Meters

T.A. 119 (T.C. 20) (Fig. 134)

Classification: This is the location of the 20th century and 1580 village of San Mateo Teopancalco, a subject community of Tepexpan at that time. To the west of the village of Teopancalco is a Teotihuacan period site T.C. 20, which also has an Aztec component. In this volume we are using the designation T.A. 119 for that site and the village together. The village itself was not surveyed by any of the survey teams. Classification is uncertain due to the lack of survey within the village area. This site was resurveyed by Sanders in 1975, as part of the Temascalapa Regional Survey and renumbered Tm-c 24.

Natural Setting: Site T.A. 119 is located in the North Tributary Valleys region, between 2,320-2,340 m. Soils in the site area have a sandy to loamy texture and are light brown in color, with depths ranging up to 30 cm. There is slight erosion in the site area, and tepetate is exposed in the northern area of the site. Moderate concentrations of rock and tezontle fragments are found in the area. Vegetation in the vicinity includes pirul, maguey, and various grasses. Other natural features include several washes and two barrancas.

Modern Land Use: Cultural features include no structures and no jagüeys. The site area is used primarily for agricultural purposes including the cultivation of maize, barley, and rye. In addition, there are maguey bancals; some grazing is conducted in the area. Two canalized barrancas border the site.

Archaeological Remains: The total multicomponent site occupies 10.5 ha. The 1975 survey almost doubled the site area. At least seven mounds were identified, all of which have Teotihuacan occupation. The site has three phases of pre-Teotihuacan, three phases of Teotihuacan, and three phases of post-Teotihuacan represented for a total of 9. Associated non-Aztec sites include T.F. 197 (Tzacualli phase), T.C. 20, T.T. 115. (Mazapan phase) All seven mounds were sampled and of these samples, two have significant Aztec occupation on them.

The site has a discontinuous and sparse distribution of lithic materials, including obsidian blades, cores, projectile points, scrapers, flakes and cobbles. Ground stone tools included manos and metates.

T.A. 97 (T.C. 21) (Fig. 135)

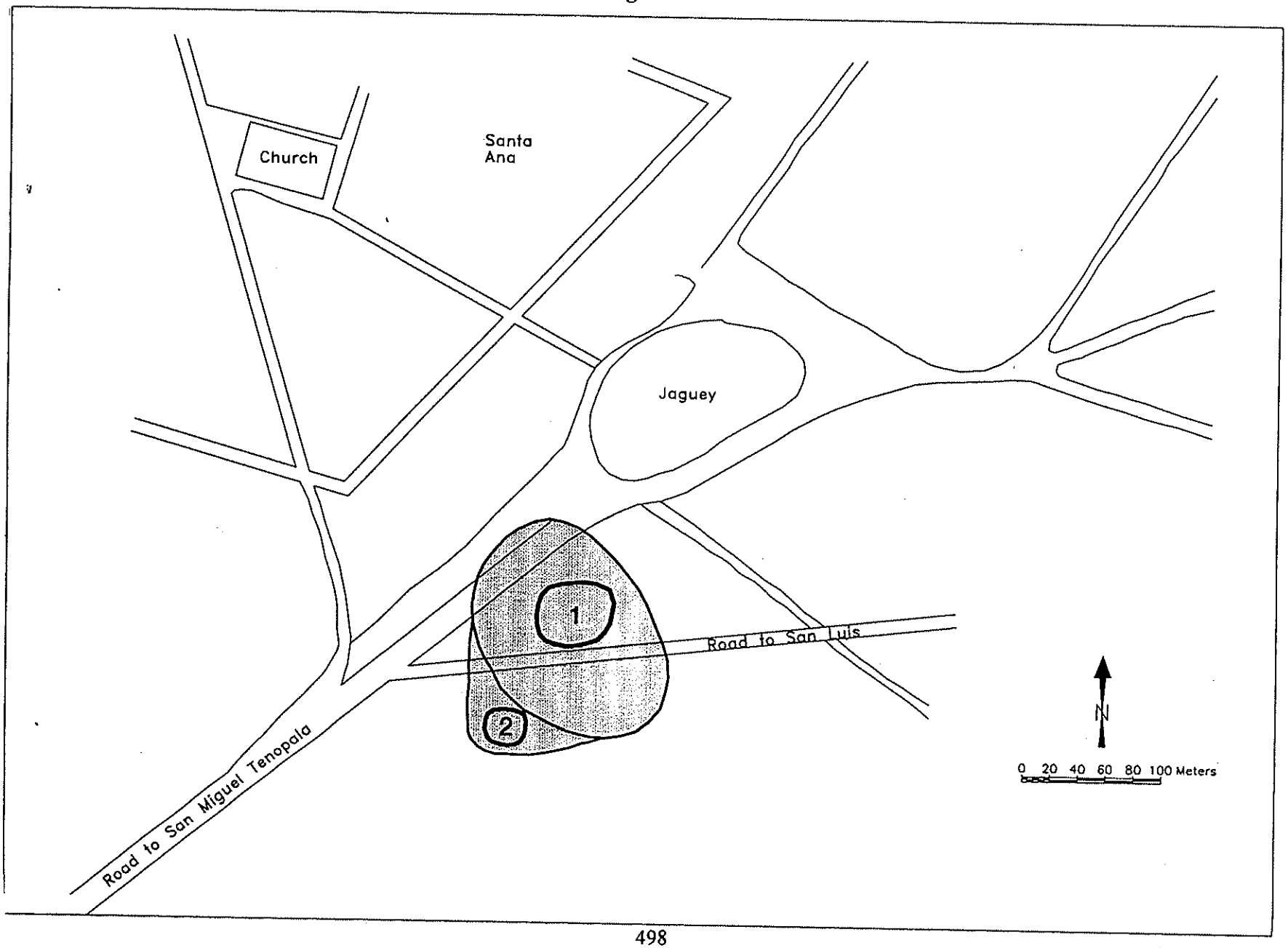
Background and Classification: Probably a hamlet. This site, also known as Cerro Santa Paula de Temascalapa, was surveyed by the Teotihuacan Period Team and was not surveyed by the Aztec Team.

Natural Setting: Site T.A. 97 is located in the North Tributary Valleys ecological zone, between 2,350-2,370 m. Soils in the area have a sandy to loamy texture and are tan to light brown in color, with depths ranging from 0 to 35 cm. There is moderate erosion in the site area, and tepetate is exposed in the northern and western sections of the site. Moderate concentrations of rock and tezontle fragments are found in the area. Vegetation in the vicinity includes pirul, nopal, maguey, and various grasses, although none of these are abundant. Other natural features include an incipient barranca and several washes.

Modern Land Use: Cultural features include no structures and no jagüeys. The site area is used primarily for agricultural purposes including the cultivation of maize. Some bancals are found in the area.

Archaeological Remains: The total multicomponent site occupies 4.0 ha. Four mounds or areas of heavy rock and artifact concentration were identified. Two are large areas with Teotihuacan period occupation. The other two are definite mounds and probably Aztec in date, including a temple platform. The site has no phases of the pre-Teotihuacan, three phases of the Teotihuacan, and four phases of the post-Teotihuacan

Figure 135


Church
Santa
Ana
Jaguey
1
2
Road to San Luis
Road to San Miguel Tenopala
N
0 20 40 60 80 100 Meters

represented for a total of seven. Associated non-Aztec sites include T.T. 29 (Early Toltec phase, and T.C. 21. A trace of Mazapan was also recorded. The following mounds were sampled:

T.C. 21-1, 1,335 m^2, slightly eroded and damaged. This mound was not sampled.

T.C. 21-2, 2,870 m^2, heavily eroded and damaged. Artifactual remains indicated heavy Early Teotihuacan, heavy Middle Teotihuacan, traces of Late Teotihuacan, traces of Oxtotipac, medium Xometla, traces of Mazapan, and heavy Aztec components.

This site has a moderate and discontinuous distribution of lithic materials including obsidian blades, cores, and scrapers. Ground stone tools, especially manos and metates, were also noted.

T.A. 130 (T.C. 22) (Fig. 136)

Background and Classification: A part of a 16th and 20th century village of Santa Ana Tlachahualco. It was surveyed by the Teotihuacan Period Survey Team. It was not resurveyed by an Aztec period survey team. The classification, therefore, is uncertain since most of the village area was unsurveyed.

Natural Setting: Site T.A. 130 is located in the North Tributary Valleys, between 2,410-2,420 m. Soils in the site area have a sandy to loamy texture and are tan to light brown in color, with depths ranging from 0-60 cm. There is some erosion in the northern section of the site and slight erosion in the western section of the site. Moderate concentrations of rock and tezontle fragments are found in the site area. Vegetation in the vicinity includes pirul, scattered nopal, maguey, and various grasses. Other natural features include a wash on the eastern side of the site.

Modern Land Use: Cultural features include no structures and one jagüey. The site area is used primarily for agricultural purposes including the cultivation of maize, nopal, and maguey. Grazing is also conducted in the area.

Archaeological Remains: The total multicomponent site occupies 1.5 ha. The site appears as a continuous concentration of medium densities of artifacts and rock rubble. Within it are two definite mounds, probably Aztec in date. The site has one phase of the pre-Teotihuacan, three phases of the Teotihuacan, and two phases of the post-Teotihuacan represented for a total of six. Associated non-Aztec sites include T.F. 198 (Tzacualli), and T.C. 22. The following samples were collected from the two areas of Teotihuacan occupation and from the two definite mounds:

T.C. 22-1, The artifactual remains indicated light Tzacualli, medium Early Teotihuacan, medium Middle Teotihuacan, light Late Teotihuacan, traces of Mazapan, and medium to heavy Aztec components.

T.C. 22-2, The artifactual remains indicated light Tzacualli, medium Early Teotihuacan, medium Middle Teotihuacan, light Late Teotihuacan, traces of Mazapan, and medium to heavy Aztec components.

The site has a sparse distribution of lithic materials including obsidian blades, projectile points, and scrapers. No ground stone tools were observed.

Lake
Xaltocan
Tecamac
Tecalco
Chiconautla
Lake
Texcoco
Teotihuacan
Archaeological
Zone
Tlalnepantla
Tenayuca
Tlatelolco
Tenochtitlan
0
2
4
Kilometers
Figure 2
Teotihuacan Valley and Tenochtitlan
Region Aztec Period Occupation
KEY
Intensively Surveyed Late Aztec
Period Site
General Survey Site or
Surveyed by Non-Aztec Survey Teams
Ethnohistoric Site (No Survey Data)