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Intensive Archeological Survey

Proposed Advance Measures Flood Control Project

VOLUME 2

Hampton Township
Bay County, Michigan

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(Continued on reverse)

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

→ The survey included approximately a 10 mile stretch where dikes are proposed to be constructed, with varying construction easements of 15 feet to 60 feet. The dike alignment corridor is generally situated along Saginaw Bay in Hampton Township (T14NR6E). Portions of the dike alignment corridor traverse a sand ridge compound of Pipestone fine sand, probably a relict Huron Basin shoreline feature. In total, the survey segments encompassed approximately 12 acres, or approximately 11,500 linear feet, with a width varying from about 15 to 50 feet. About 6 acres (approximately 5,500 linear feet) were in cultivated fields; the remaining 6 acres (approximately 6,000 linear feet) were in unimproved land and residential lots. The fieldwork was conducted between August 31 and September 7, 1987. The area covered by the survey measured 40,627 square meters. Twenty person-days were expended completing the fieldwork.

→ The survey resulted in the location of no evidence of significant archeological material, and no sites were discovered which would meet the eligibility requirements for the National Register of Historic Places. It was therefore recommended that no additional archeological work be undertaken and that the project be given archeological clearance. ←

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

1

**INTENSIVE ARCHEOLOGICAL SURVEY
PROPOSED ADVANCE MEASURES FLOOD CONTROL PROJECT
HAMPTON TOWNSHIP, BAY COUNTY, MICHIGAN**

VOLUME 2

Conducted for:

**U.S. Army Corps of Engineers - Detroit District
Contract No. DACW 35-87-D-0043
Delivery Order No. 0004**

By:

**Gilbert/Commonwealth Inc.
209 East Washington Avenue
Jackson, Michigan 49201**

**Donald J. Weir - Principal Investigator
James Robertson - Project Archeologist**

R-2911

November, 1987

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INTRODUCTION

The following report presents the results of an intensive archeological survey of portions of the Advance Measures Flood Control Project proposed by the U.S. Army Corps of Engineers, Detroit District. The research was completed by Gilbert/Commonwealth as Delivery Order No. 0004 of Contract No. DACW35-87-D-0043. Donald J. Weir served as Principal Investigator. James Robertson directed the fieldwork, and was assisted by Beverly E. Bastian and Steve Sanderson. The plowing and disking activities were directed by J. Towler. The investigation was conducted between August 31 and September 7, 1987. The area covered by the survey measures approximately 40,627 square meters. Twenty person-days were expended completing the fieldwork.

The area under investigation is located in Hampton Township (T14N, R6W), Bay County, Michigan (Figures 1 and 2). The scope of work issued by the Corps of Engineers required that portions of the project area be surveyed to determine the existence of potentially significant archeological and historical sites. The investigation was conducted pursuant to the provisions of the National Historic Preservation Act of 1966 (P.L. 89665), as amended; the Archeological Resource Protection Act of 1979 (P.L. 96-95); and 36CFR800, 36CFR Part 6⁰.

During 1987, Caminos Associates (Prah 1987) conducted an intensive survey of the majority of the area to be affected by the Advance Measures Flood Control Project in Hampton Township. The work which is the subject of this report covers portions of this same area. Prah (1987:1) identified three major biotic communities within the project area: beach, dune ridges, and wet prairies or wetland. When considering the "land-water" relationship of the area, Prah concluded that the dune ridge and climax oak forest traversed by the project was the logical zone of prehistoric and early historic occupation. The area surveyed by Gilbert/Commonwealth crossed both wetlands and dune ridges. These areas were occupied by cover ranging from cultivated fields to wood lots of moderate density. In total, the corridor segments investigated encompassed 12 acres, or approximately 11,500 linear feet, with a width varying from about 15 to 50 feet. About 6 acres (approximately 55,000 linear feet) of the corridor segments surveyed were in



FIGURE 1
REGIONAL LOCATION
Advance Measures Flood Control Project
Hampton Township – Bay City, Michigan





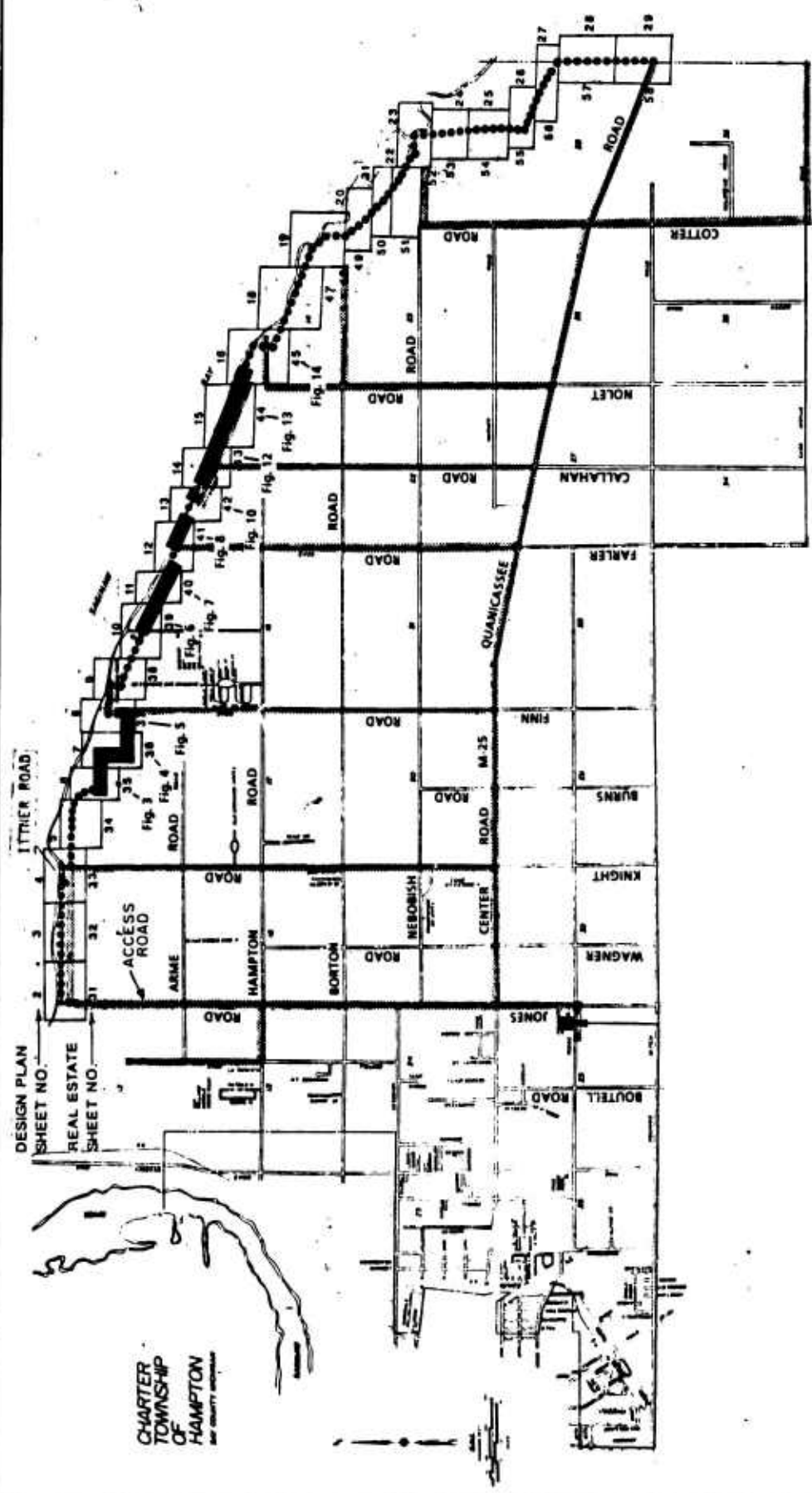
MICHIGAN



AREA TESTED

Note: Figure numbers of Corridor Segment Maps indicated below

FIGURE 2
AREAS OF ARCHEOLOGICAL TESTING
 Advance Measures Flood Control Project
 Hampton Township - Bay City, Michigan



cultivated fields currently in crops. The remaining 6 acres (approximately 6,000 linear feet) were unimproved land and residential lots.

The scope of work provided by the Corps of Engineers outlined the survey strategy to be used for each of the segments. This consisted of either plow, disk, and walk or shovel testing. Table 1 outlines these requirements by segments. The field methodology section of this report describes the work completed for each of the segments.

The work completed for this project resulted in the location of no archeological or historical material of significance and no sites meeting the eligibility requirements for listing on the National Register of Historic Places. Based on this finding, it is recommended that the project be allowed to proceed.

TABLE 1
CORRIDOR SEGMENTS

<u>Station(s) Description</u>	<u>Priority</u>	<u>Sheet Number(s)* Construc- tion</u>	<u>Real Estate</u>	<u>Survey Technique</u>	<u>Segment No.</u>
417+15 (P)- 378+28 (P)	5	6-8	35-37	Plow, disk & walk	1
1+58 (S)- 16+04 (S)	5	10-11	39-40	Plow, disk & walk	2
16+04 (S)- 22+34 (S)	5	11	40	Shovel test	3
22+34 (S)- 26+45 (S)	5	11-12	40-41	Plow, disk & walk	4
296+27 (P)- 289+60 (P)	4	12-13	41-42	Shovel test	5
279+14 (P)- 277+35 (P)	2	13	42	Shovel test	6
269+90 (P)- 265+80 (P)	1	14	43	Shovel test	7
263+17 (P)- 225+86 (P)	3	14-16	43-45	Shovel test	8

*Sheet Numbers refer to the Detroit District Corps of Engineers Construction/Real Estate Drawings, Hampton Township Advance Measures Flood Control Project, dated June 2, 1987, sheets 1-58 of 58.

PROJECT BACKGROUND

A detailed discussion of the project area, including its geology and soils, is presented in Caminos Associates' report on the prior investigations in the area (Prahl 1987:3-12). Most important for an understanding of the cultural history of the area is the discussion of the glacial history of the Saginaw Bay area. The highest elevation encountered during the survey was at 585 ft above mean sea level (amsl) and was assumed to be remnant beach ridges. The Algoma beach line at 595 ft amsl is located south of the project area along highway M-25 (Lovis 1986; Prahl 1987). The soils of the area reflect its glacial history, and are highly sandy in nature. Both windborne and water-laid sands are present in the coastal dune line in the project area. South of this a wetland prairie exists (Prahl 1987:9).

The prehistoric and historical background provided in Caminos Associates' report (Prahl 1987:12-24) details some 12,000 years of human occupation for the region. However, it is only after 3,000 B.P. that the project area became available for human use. It is expected that cultural remains, should they be located in the project area, would date at least this time. Prahl (1987:12) notes that the Jahrman Ranch site (20BY1) located east of the project area above the 585 ft amsl elevation, points to the possibility of Late Archaic deposits in the project vicinity. Michigan State University's recent work in Bay City has done much to clarify the nature of the Archaic occupation in the region (Lovis 1986). Caminos Associates also notes that several sites in the region contain Late Woodland components, such as the Fletcher site and the Trombley site (Prahl 1987:18 and Figure 9).

As is detailed in the Historical Consideration section of the prior report for the project, the area under consideration has been modified less than the rest of Hampton Township (Prahl 1987:23). The areas along the shore have been developed for recreational activities within the last 60 years. This includes the construction of both year-around houses, cottages and the remains of such commercial activities as marinas. The farming enterprises that exist were the result of widespread draining by 1874 (Prahl 1987:20). However, at the time of this survey (fall 1987) several of the agricultural parcels showed evidence of spring

plowing but were not planted and were left to weeds. If this reflects the general downturn of agriculture as a business in the area or a reflection of the unusually high water that was present in the area in the fall of 1986 is not known.

FIELD METHODOLOGY

Survey techniques were prescribed by the scope of work issued by the U.S. Army Corps of Engineers, Detroit District. Where indicated and possible, the entire width and length of corridor segments were plowed, disked, and walked. Using the real estate sheet maps provided by the Corps of Engineers, corridor segments were located and flagged accordingly. Plowing and disking was confined to a depth of no greater than 1 foot below the existing ground surface. The exposed surface was walked immediately after plowing and disking and again after the surfaces were allowed to weather 1-3 days. A minimum of three transects spaced no less than 5 meters apart were walked parallel to all dike alignments surveyed in this fashion.

All remaining areas were to be shovel tested in the following manner. Shovel test units measuring 30 x 30 cm were to be excavated to a depth of not less than 30 cm whenever possible. The contents of each test unit were to be screened through 1/4-inch hardware cloth and the soils mapped. A 12 x 15 meter sampling grid was to be employed with test units spaced 12 meters apart parallel to each other within the width of the corridor segment, and successive units spaced at 15 meter intervals. Where the corridor was less than 12 meters wide, a single transect of shovel tests spaced 15 meters apart was to be placed on the centerline of the corridor.

These shovel testing techniques were employed by the Gilbert/Commonwealth field crew on August 31-September 2, 1987, with one modification. The contents of active beach soils, disturbed soils, and fill episodes in shovel test units were not screened but only examined to verify the nature of the deposit; artifacts from these contexts would be of too recent origin to justify the time required to process them through hardware cloth. Shovel test units were mapped directly on the real estate sheet maps. Each shovel test was assigned a number corresponding to the sheet number and its position on the map.

Based upon the survey results of August 31-September 2 and consultation with Mr. Keith Ryder, U.S. Army Corps of Engineers Archeologist, Chicago District, who served as a consultant to the Detroit District, several modifications were made in the survey techniques described above. These modifications are discussed separately in the next section as they pertain to each corridor segment investigated during the period September 3-September 7.

FIELD INVESTIGATIONS AND SURVEY RESULTS

CORRIDOR SEGMENT 1 (Figures 3, 4 and 5)

The stationing description for this corridor segment is 417+15(P) - 378+28(P) and is shown on real estate sheets 35-37. The total length of the corridor segment as measured at the centerline is 3850 linear feet. This corridor segment is located south of the 585-foot amsl beach ridge that parallels the Saginaw Bay shoreline in the project area. Soils are limited to Essexville loamy sands (Weesies 1984). All portions have been cultivated in the past but are fallow at present. Vegetation consists of willows, small shrubs, and dense weeds. The thickness of this vegetation required the use of a brush hog to prepare the corridor segment for plowing. Both activities were accomplished on September 2, 1987, with disking on the morning of September 3. For additional descriptive purposes this corridor segment is divided into subsegments A and B.

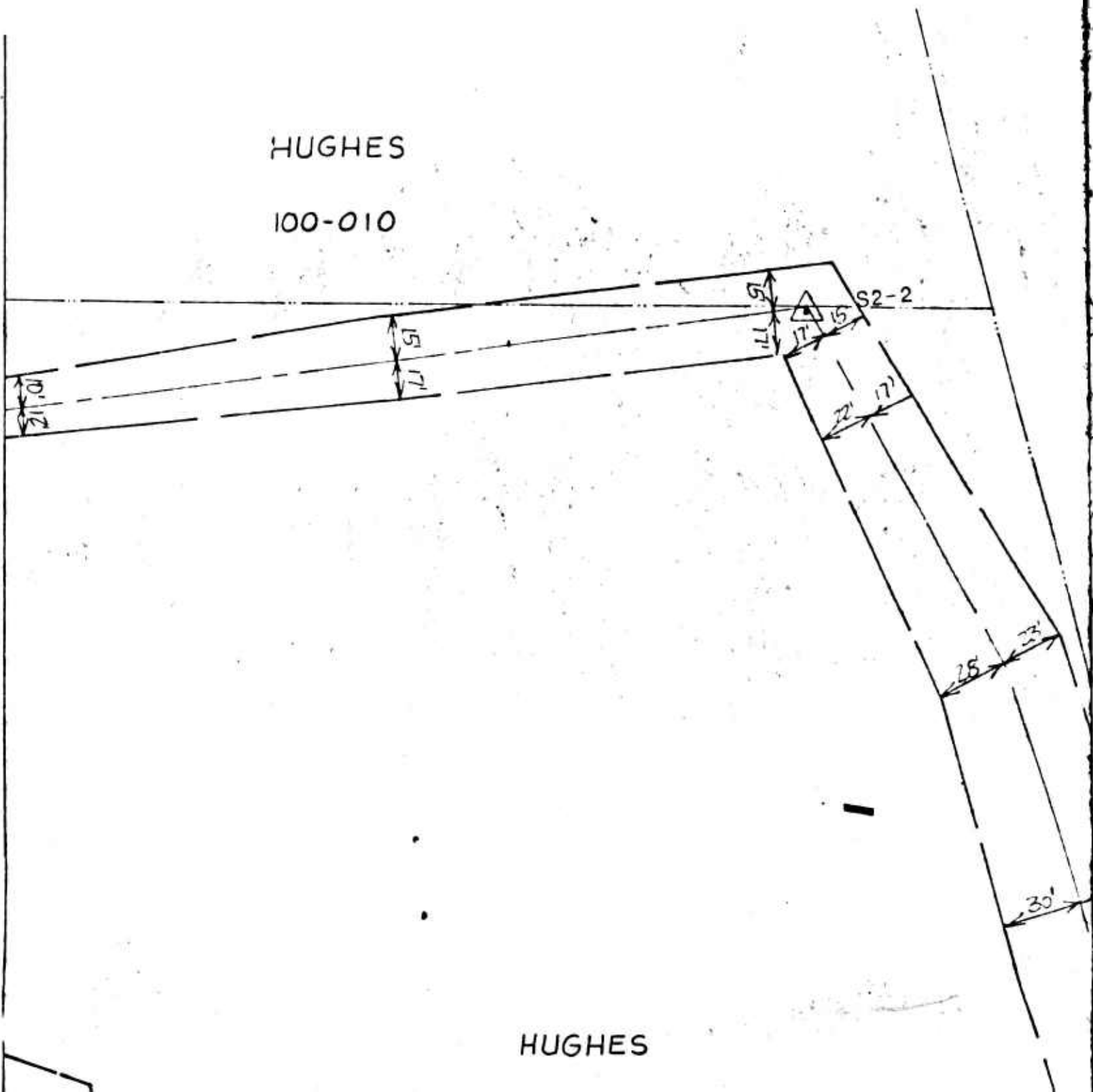
Subsegment A is the "L-shaped" area bordering the north and east edges of the Badour property (Parcel No. 400-045) on real estate maps 35 and 36. The corridor subsegment is 45 feet wide along its entire 2550-foot length. A 45-foot-wide path was plowed here, exclusive of the ditch at the southern terminus of the corridor subsegment and a deep drainage pathway that the plow and disk could not negotiate. This latter area is just west of the corner of the "L." Four transects spaced 3 meters apart were walked immediately after disking. The second walkover was conducted on the afternoon of September 4, 1987. Three transects spaced 4 meters apart were walked at this time. No cultural remains were recovered during either walkover. The only noteworthy observation pertaining to this area is the presence of disturbed soils along the east half of the north-south section. These soils are apparently dredgings from the ditch immediately adjacent to the field.

Subsegment B is an east-west running corridor subsegment on Consumers Power Company property, as shown on real estate sheets 36 and 37. The majority of this 1300-foot-long corridor subsegment is 43 feet wide. It does, however, widen to 52 feet about 175 feet from its eastern terminus at Finn Road

MATCH SHEET 34

HUGHES

100-010



S2-2



WILD

200-005

CHANDLER SEGMENTS

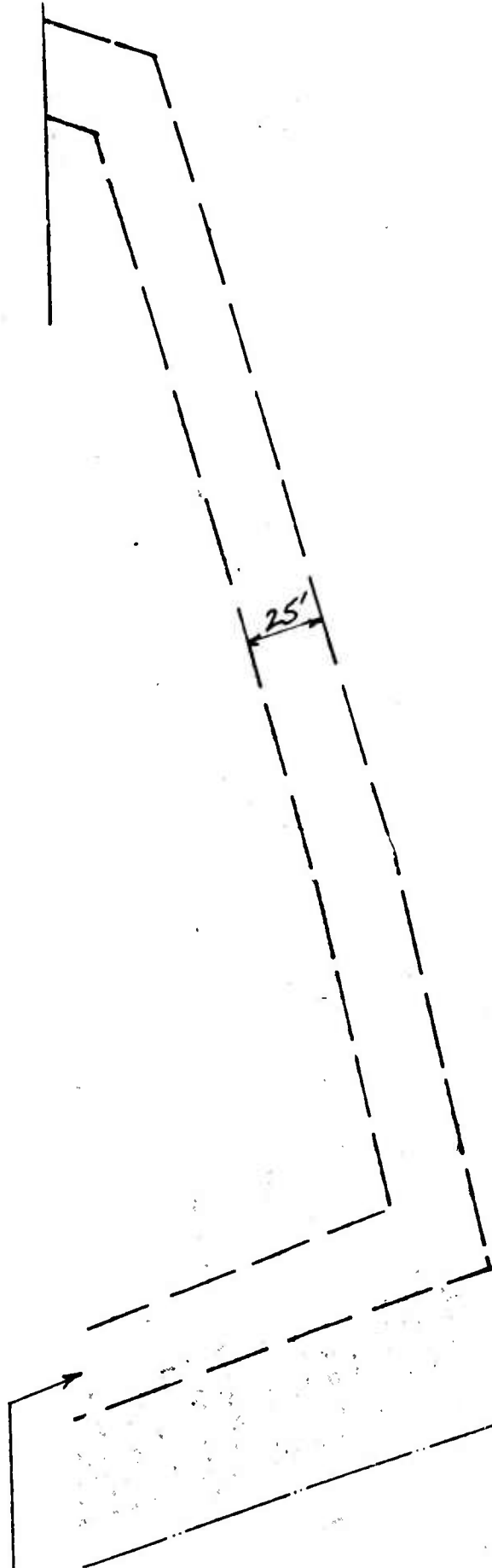


WATCHE SHEET 36

1994

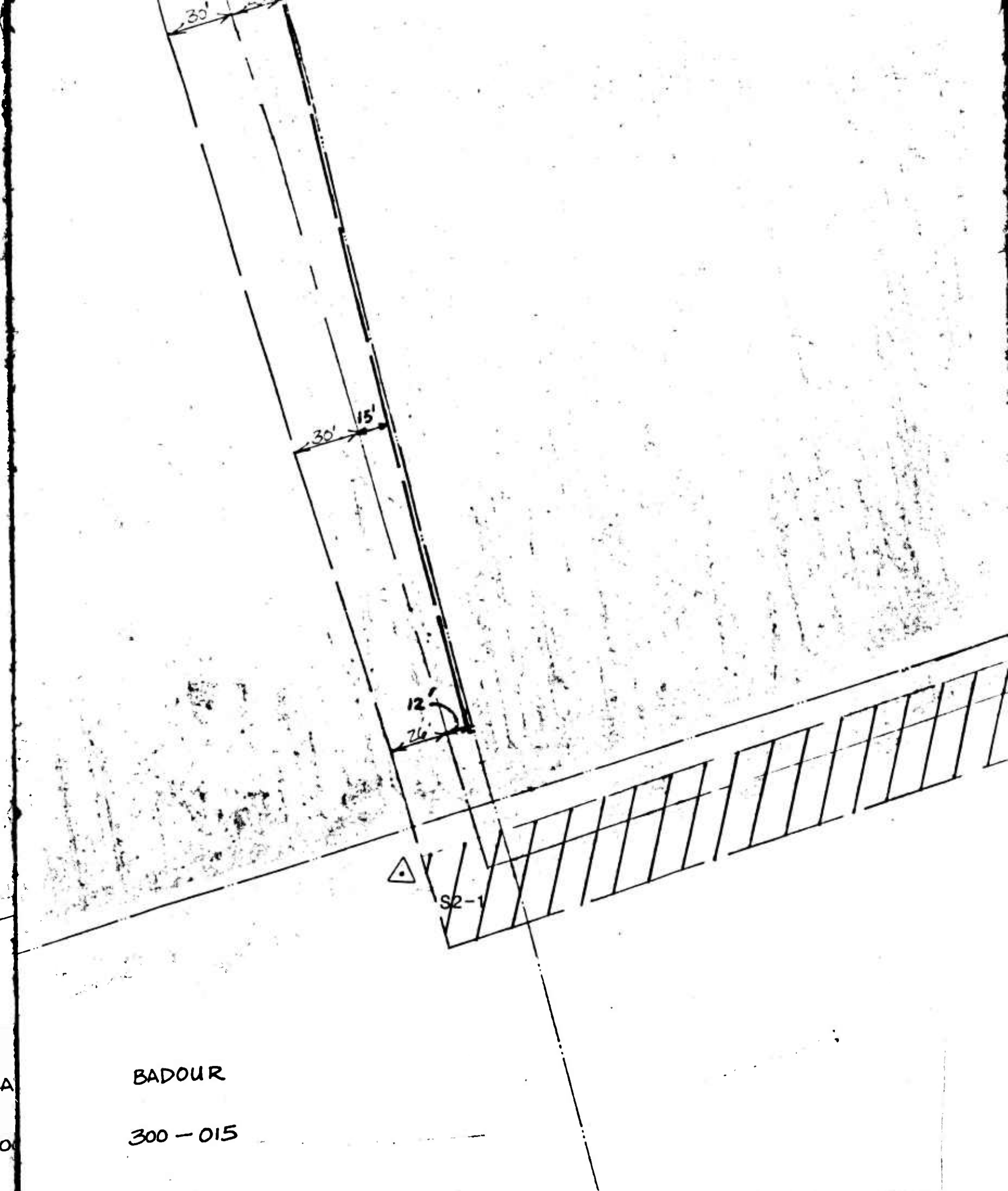
HUGHES

100-015



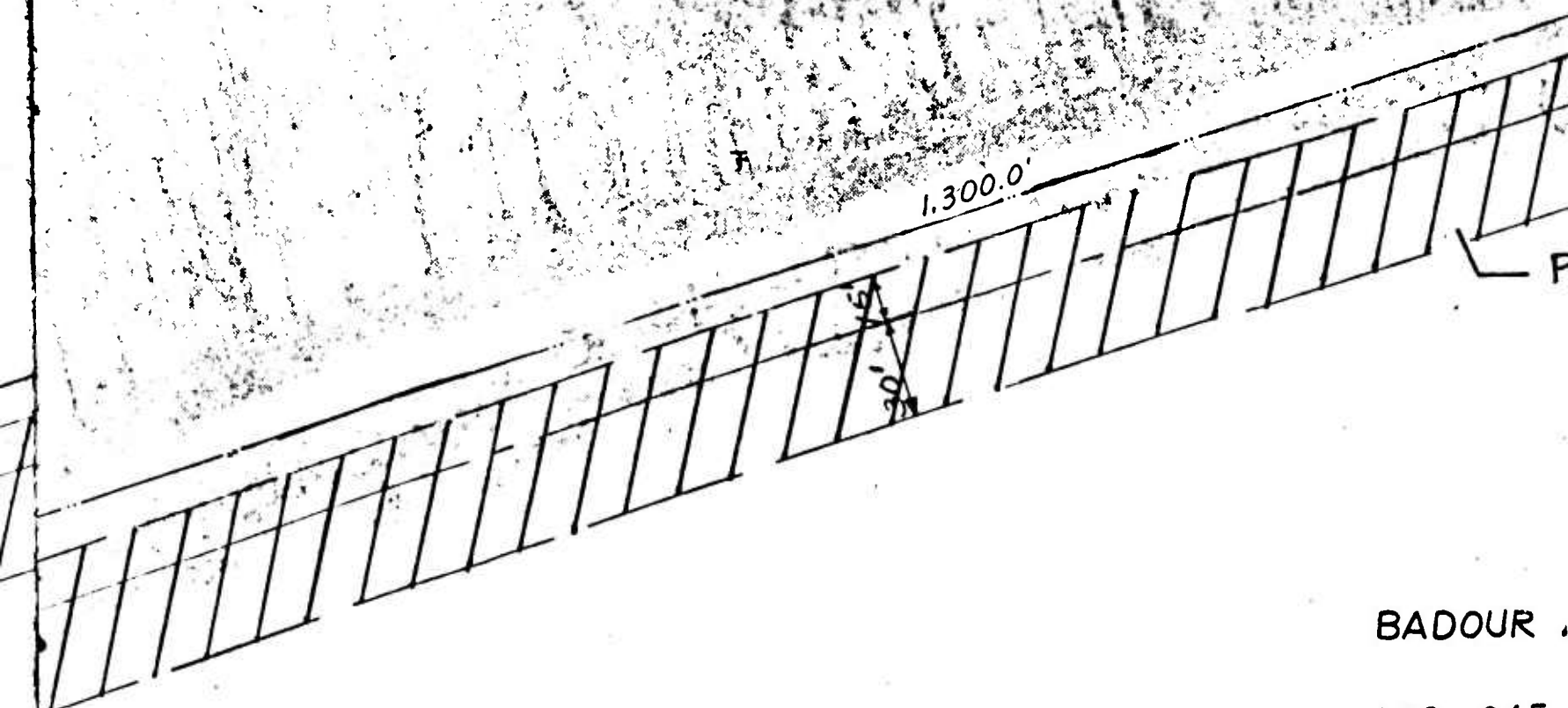
BA

300



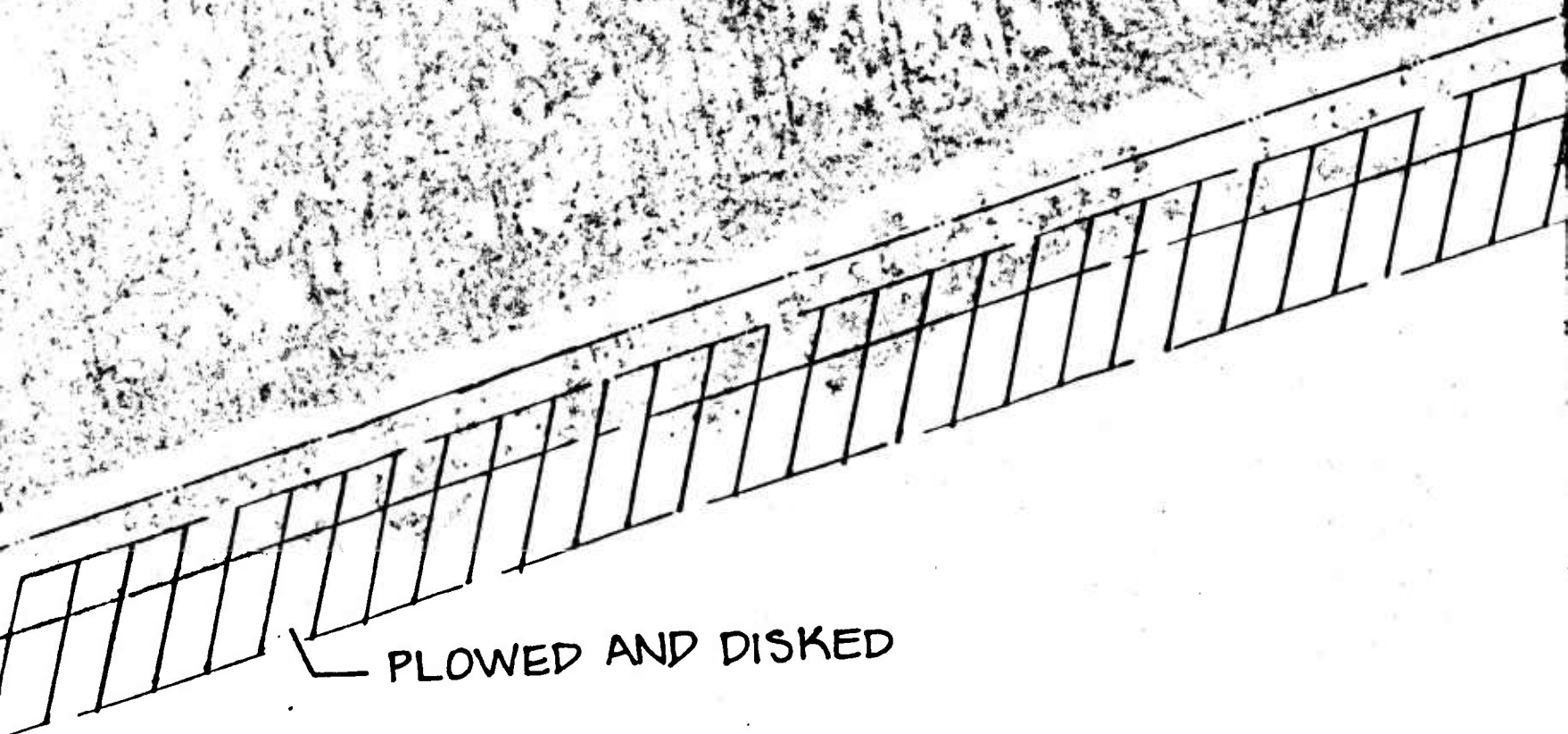
BADOUR

300 - 015



BADOUR

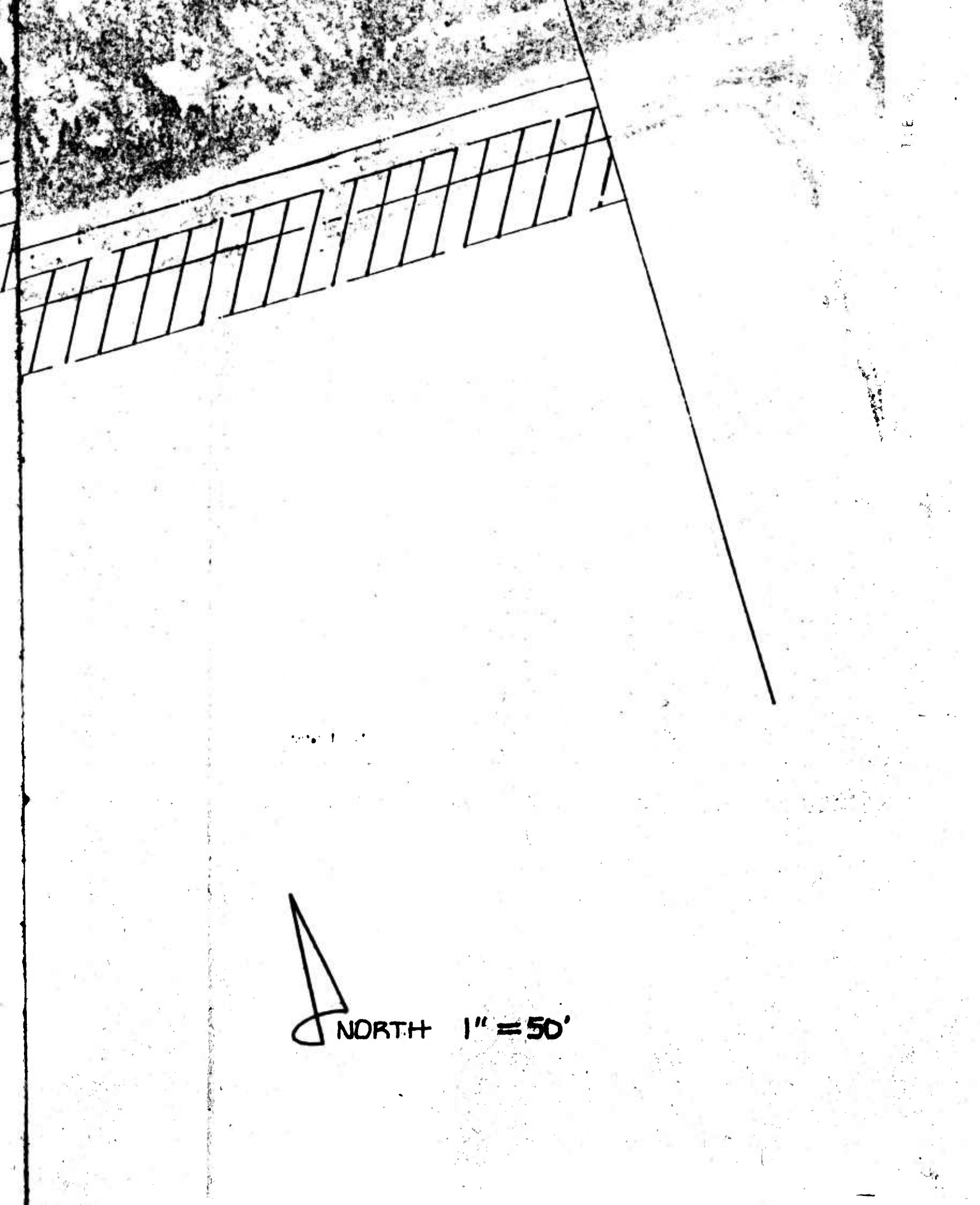
400 - 045



PLOWED AND DISKED

BADOUR .

400 - 045



NORTH 1" = 50'

200-00

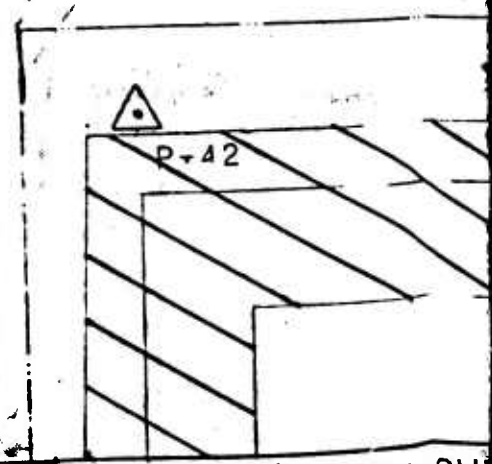
TIE 7

MATCH SHEET 37

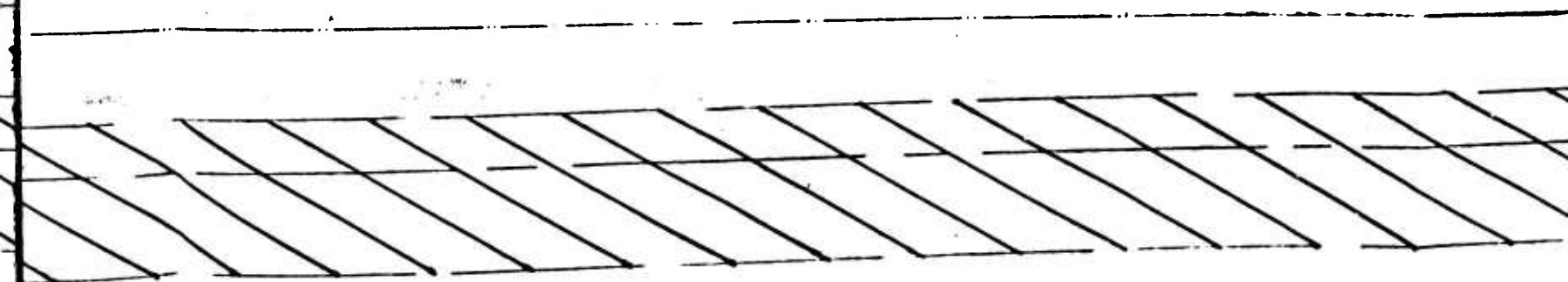
200-005

1,300.0

CONSUMERS
POWER
COMPANY



MATCH SH



MATCH SHEET 35

1,350.0'

15'
30'

BADOUR

PLOWED AND DIS

400 - 045

ED AND DISKED

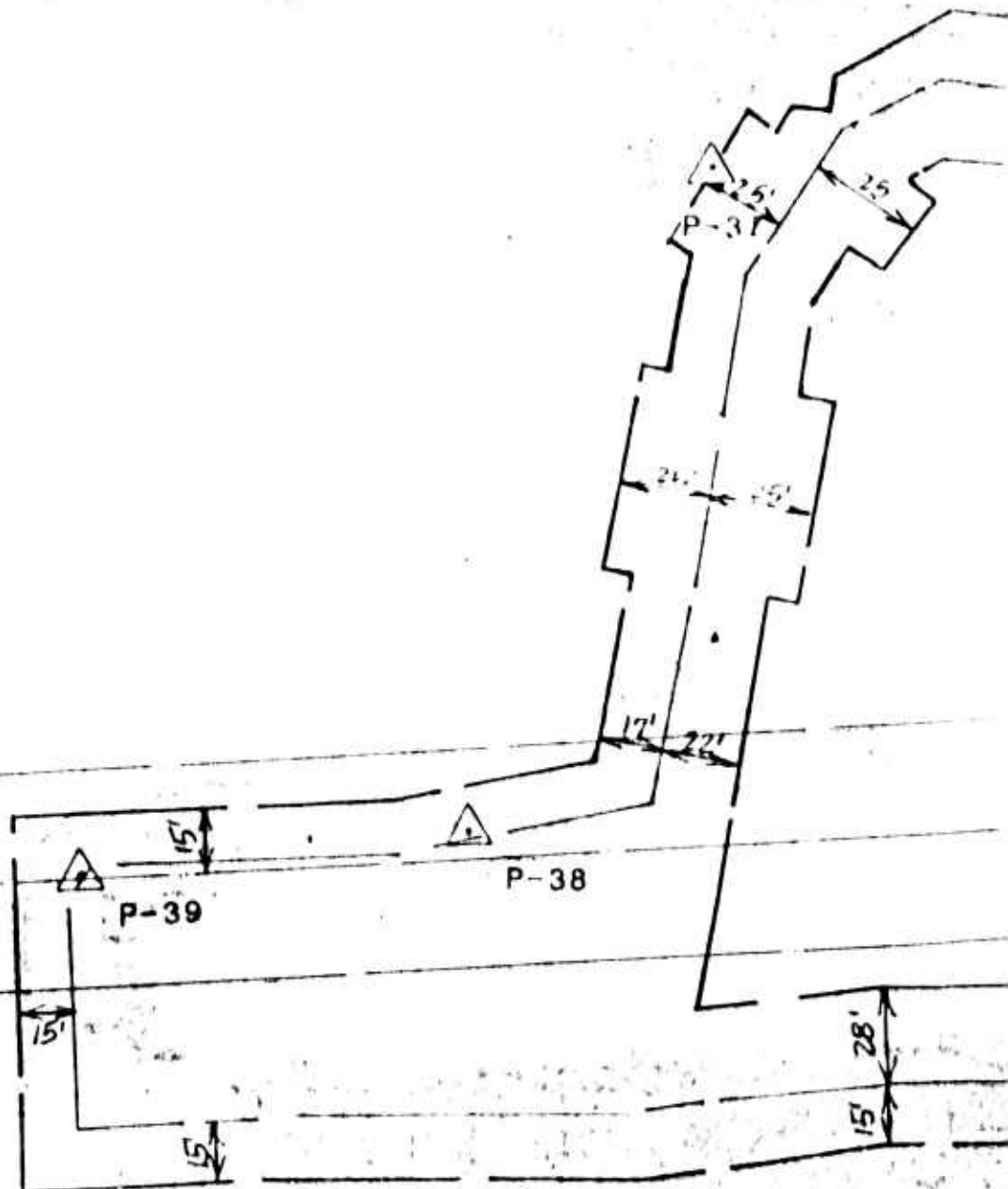
CONSUMERS
POWER
COMPANY

— PLOWED AND DISKED

P-41

1" = 50'

A. M. W



A. M. WILD



P-35

WORKING STORAGE
AREA

15' 18'

18' 15'



P-36

CONSUMERS POW

15' 28'

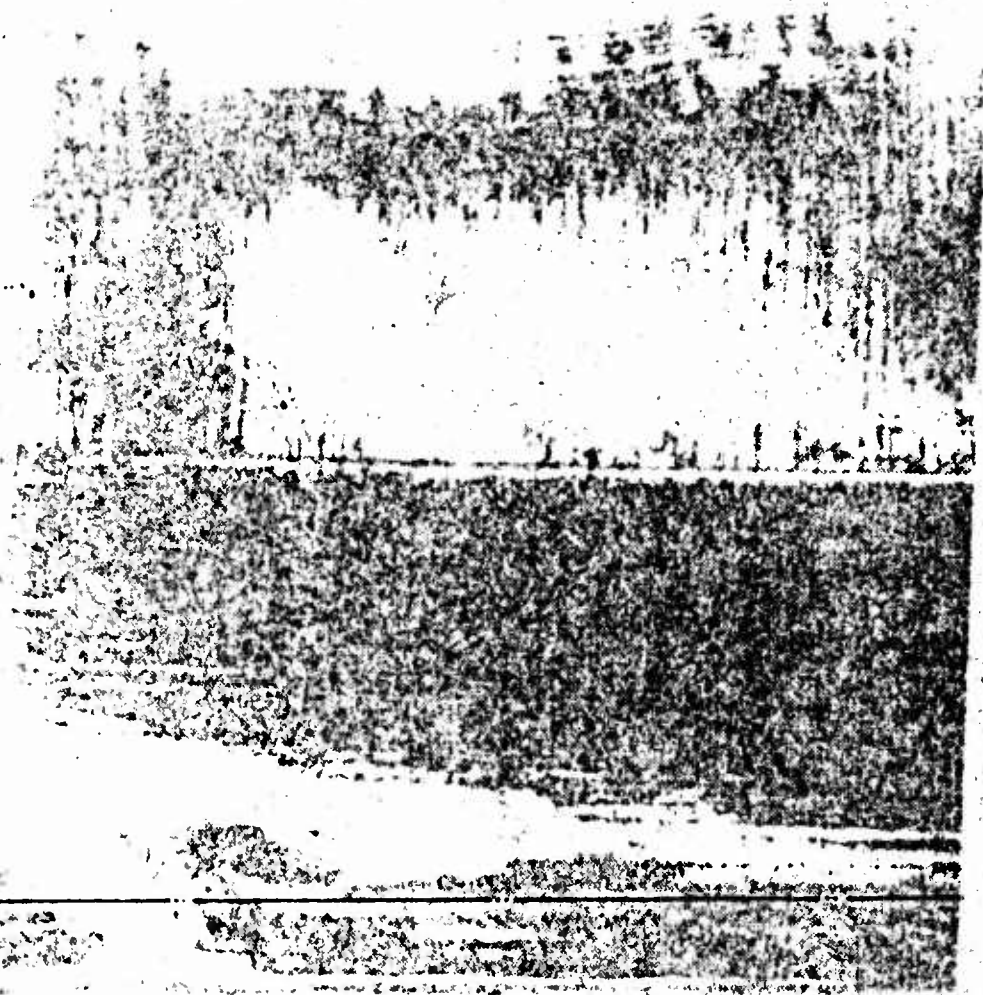
MATCH SHEET 38

WORKING STORAGE
AREA

CONSUMERS POWER COMPANY

50'

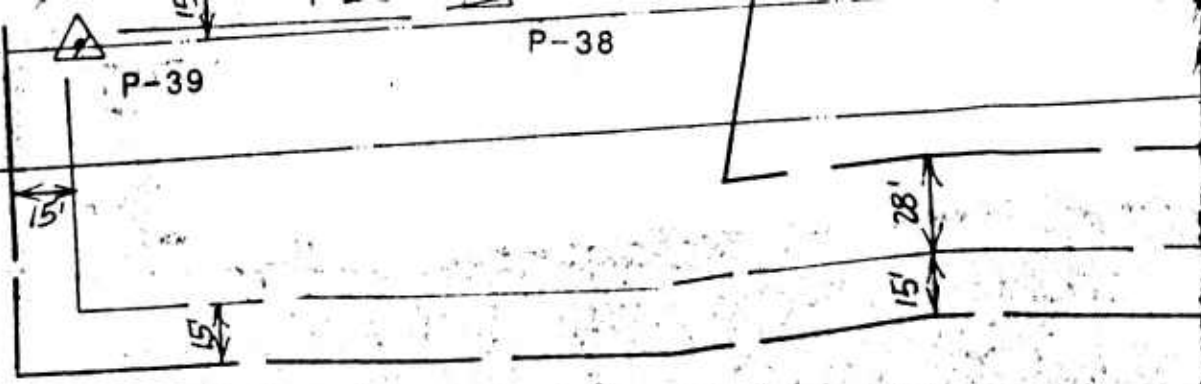
FINN ROAD



P-40

28'





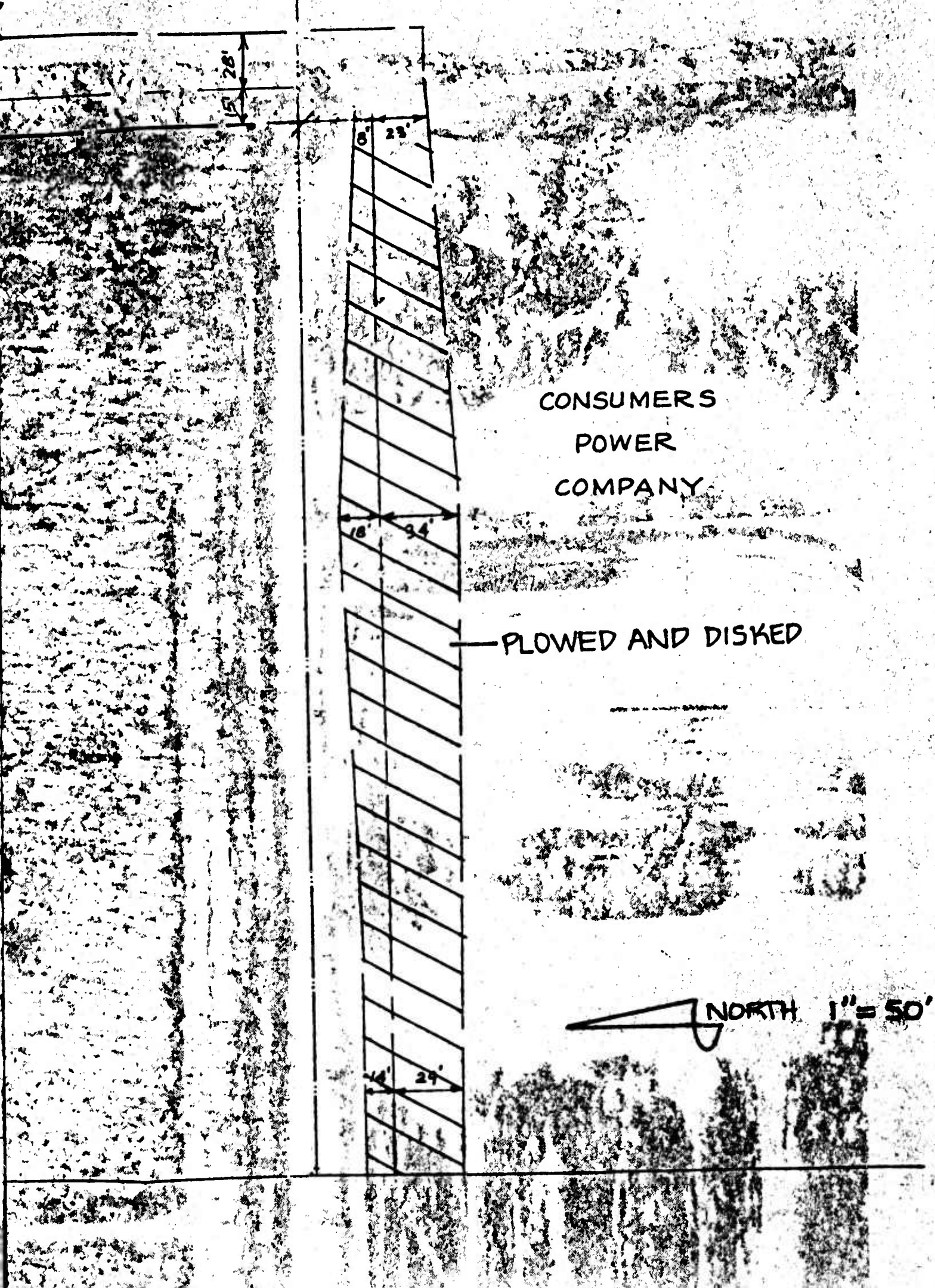
15' 28'

WILD

200-005

MATCH SHEET 36





and then narrows to 31 feet at the latter point. A 45-foot-wide path was plowed and disked, exclusive of the drainage ditches near each end of the corridor subsegment. Six transects spaced 2 meters apart were walked immediately after plowing and disking on September 3, 1987, and again on the afternoon of September 4, 1987. No cultural materials were found, and no major disturbances were noted.

CORRIDOR SEGMENTS 2 AND 4 (Figures 6, 7 and 8)

The stationing description for corridor segment 2 is 1+58(S) - 16+04(S) and is shown on real estate maps 39 and 40. This 45-foot-wide segment begins at Meilan Road on the west and runs 1250 feet to the east, ending just short of an abandoned residence. A shed and barn lie to the east of this structure. A dirt road, very light weeds, and standing corn are present within the corridor segment. Corridor segment 4 begins just east of the barn and runs east and then south to a ditch for a total length of 450 feet. The stationing description for this corridor segment is 22+34(S) - 26+45(S) and is shown on real estate maps 40 and 41. Standing corn, light weeds, a ditch, and a levee lie within the corridor. The width of this segment, exclusive of the present ditch and levee, is 28 feet.

The Gilbert/Commonwealth field crew was denied access to these segments (Parcel No. 042-400-010) by the property owner, Mr. Art Wild, until the afternoon of September 3, 1987. In order to facilitate completion of these segments, the survey strategy was slightly altered, with the approval of Mr. Keith Ryder (personal communication to Mr. D.J. Weir, September 4, 1987). The initial walkover was made on September 4, 1987, prior to plowing. Surface visibility on the dirt road was nearly 100 percent, in the weeds 30 percent, and in the standing corn 80 percent. Four transects spaced 3 meters apart were walked in segment 2 and four transects spaced 2 meters apart were walked in segment 4. A 45-foot-wide path in segment 2 and a 28-foot-wide path in segment 4 were subsequently plowed and disked on September 5, 1987. A second walkover was made on September 7 with the same number of transects at the same intervals. Neither walkover produced cultural materials. In comparison to the Essexville sandy loam found in segment 1, the soils of segments 2 and 4 had a much higher percentage of sand. This directly reflects the location of these segments immediately to the south of the 585-foot amsl beach ridge.

A. M. WILD

V
40

LD

194.5

P-31



21'

53'

WILD
400-025

GOOD BUDDIE
GUN CLUB

400-020

△
S4-5

388.0'

△
S4-4

△
S4-3

21'
26'

26'

33'

26'

P-31

△

22.5'
22.5'

BUDDIES
CLUB

0-020

250.0

400-015

△ S4-6

△ S4-8

309.7

352.0

△ S4-7

22.3

FLOWED AND DISKED

ART WILD



0

400-015

042-400-010

340.2



S4-8



S4-9



S4-10

309.7

22.5

22.5

T 40

TRE 10

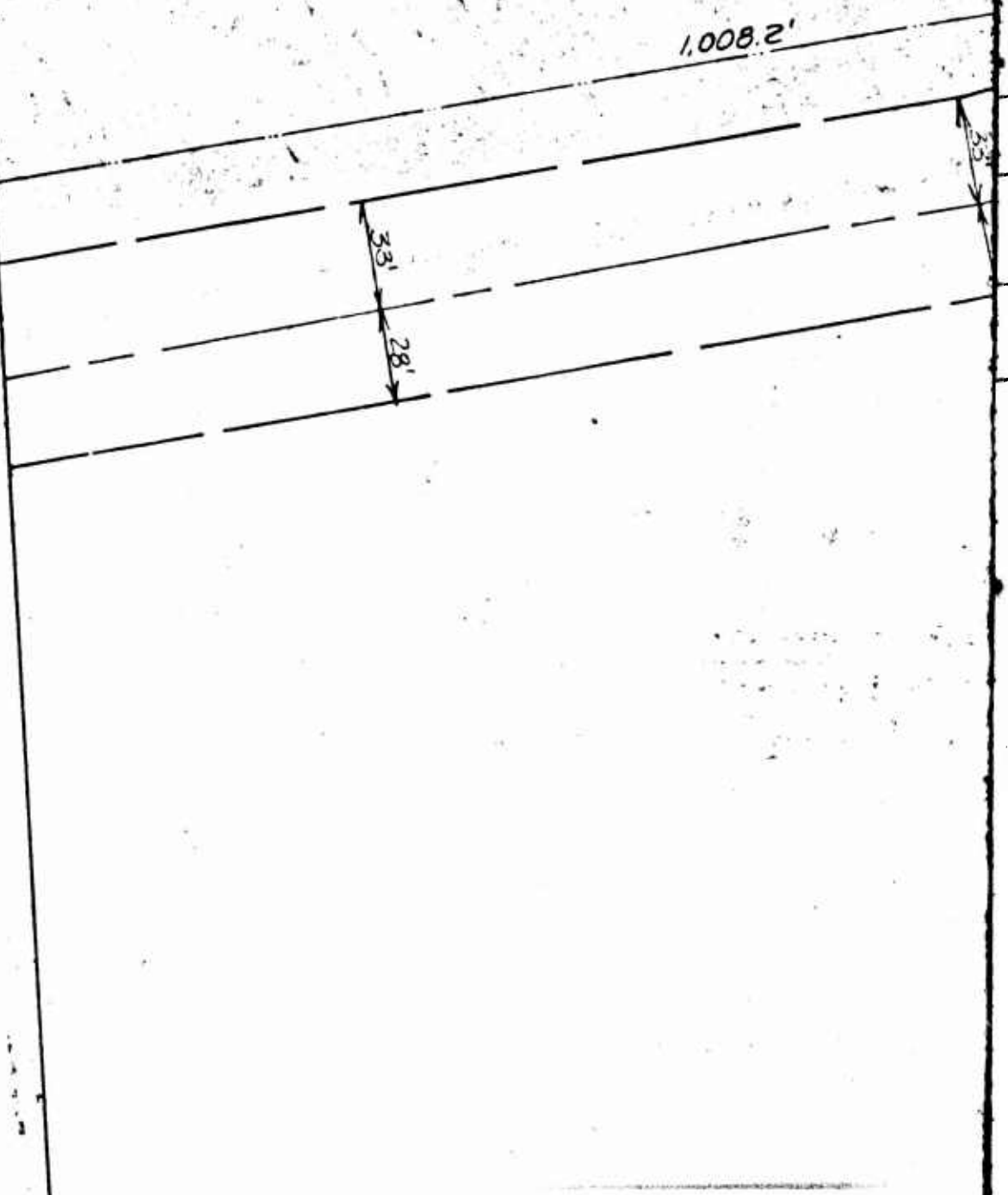
MATCH SHEET 38

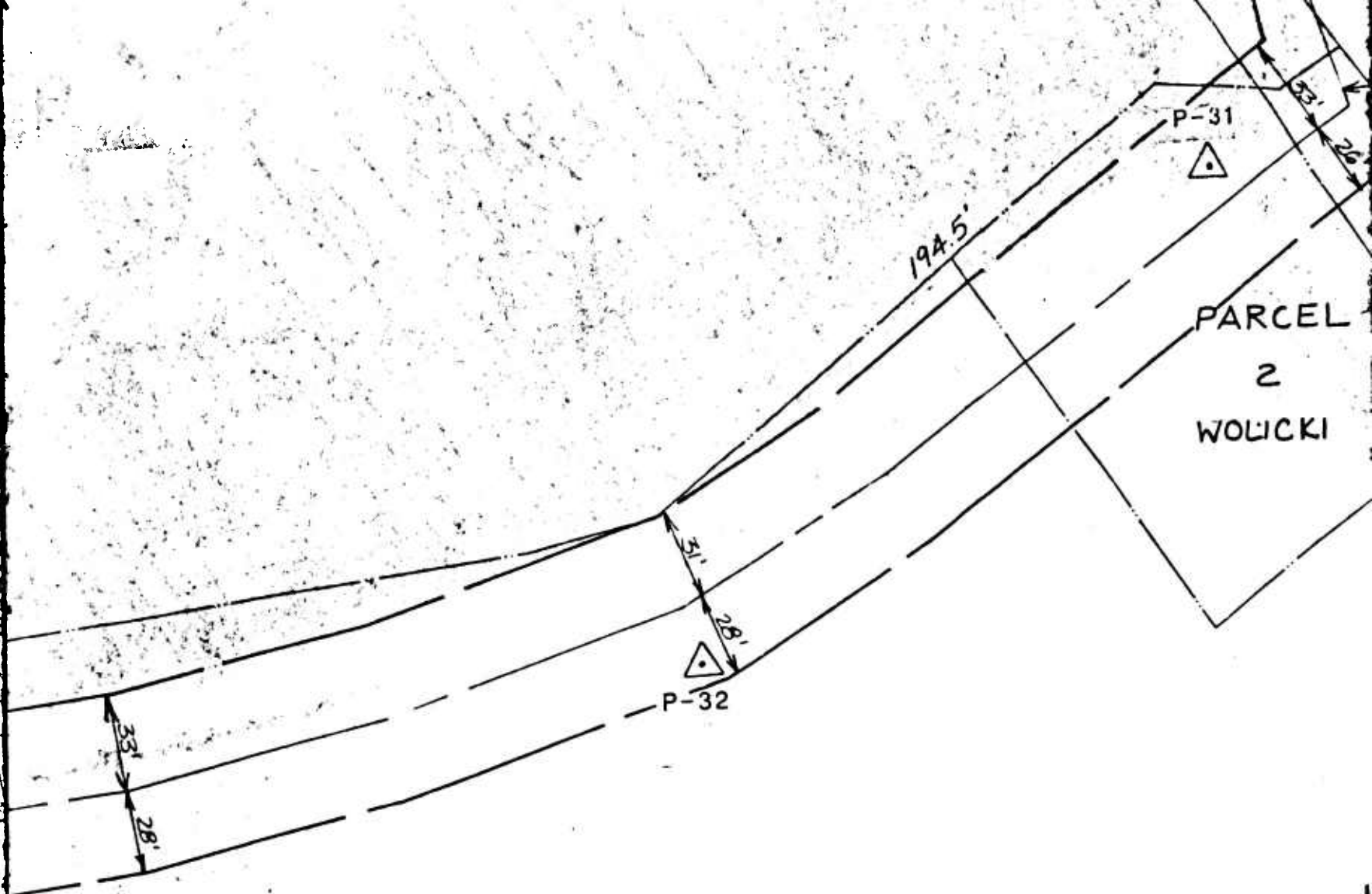
1,008.2'

33'

28'

33'





CONSUMERS POWER COMPANY

300-015-00

P-31



PARCEL

2

WOLICKI

BADOUR ROAD (MEILAN ROAD)



ART WILD

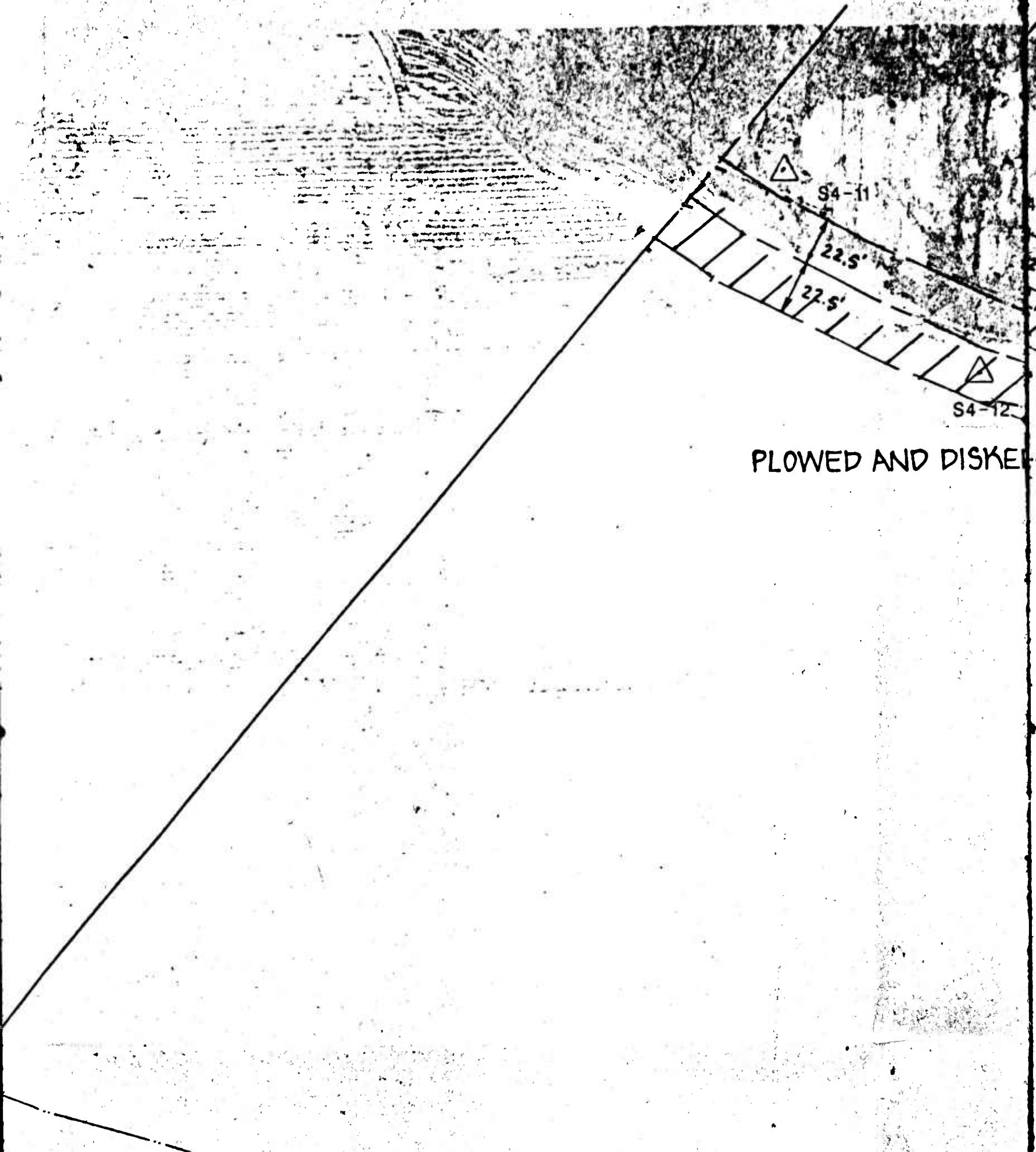
042 - 400 - 010

[MATCH SHEET 40]

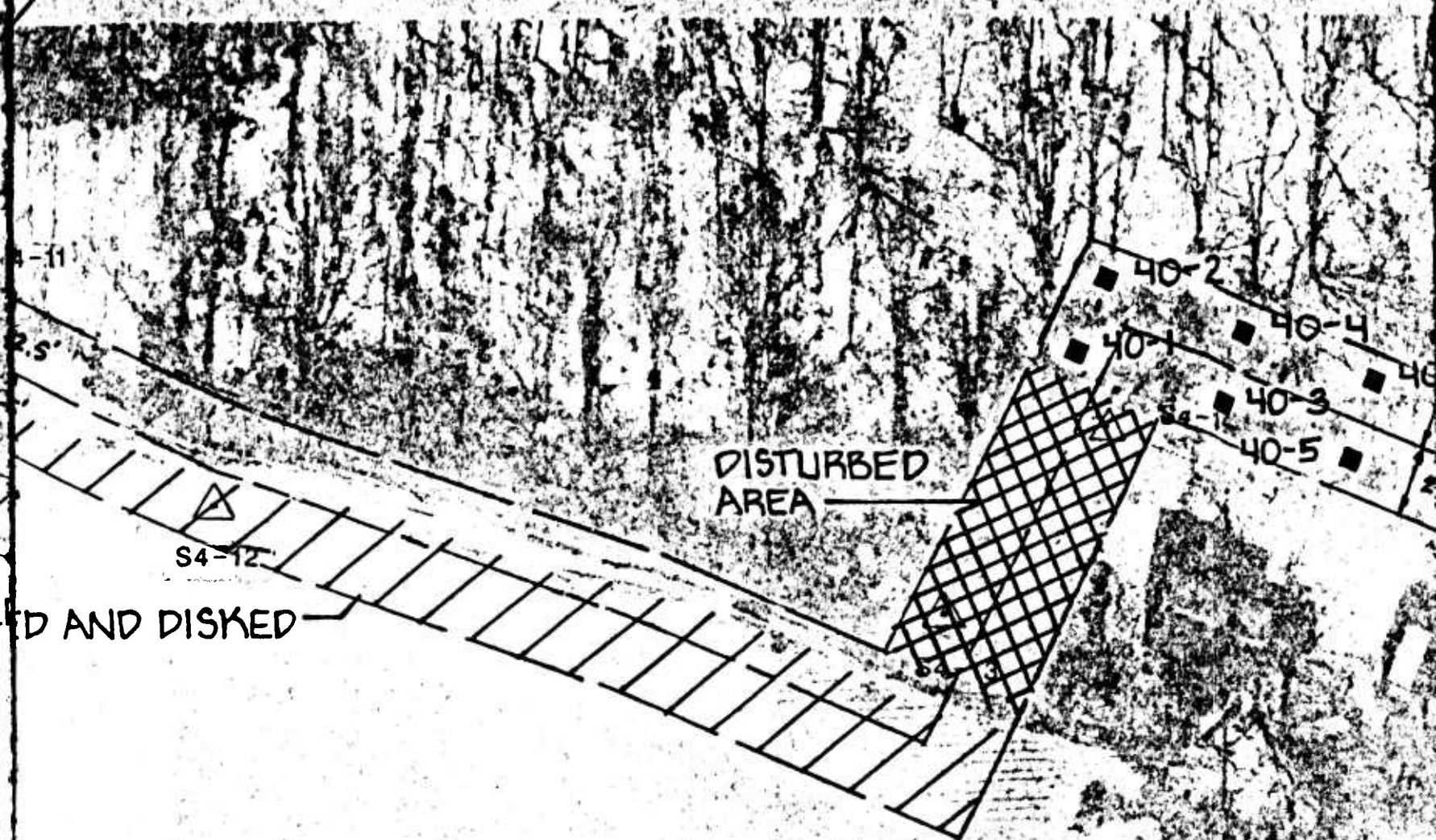
TIE 10



NORTH 1"=50'

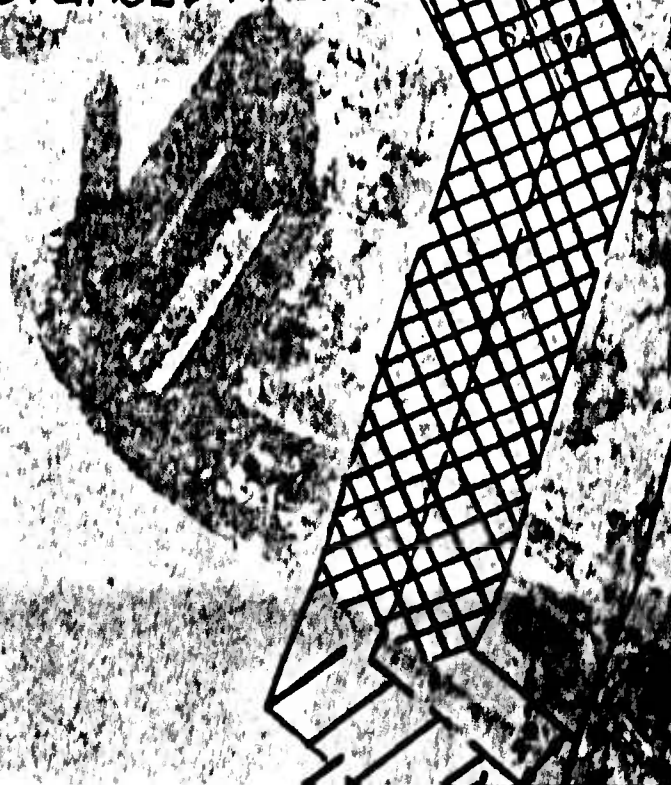


PLOWED AND DISKE



ART WILD

042-400-010





NORTH

1" = 50'

MATCH SHEET 39

CONSUMERS POWER

400-00

1,500.7

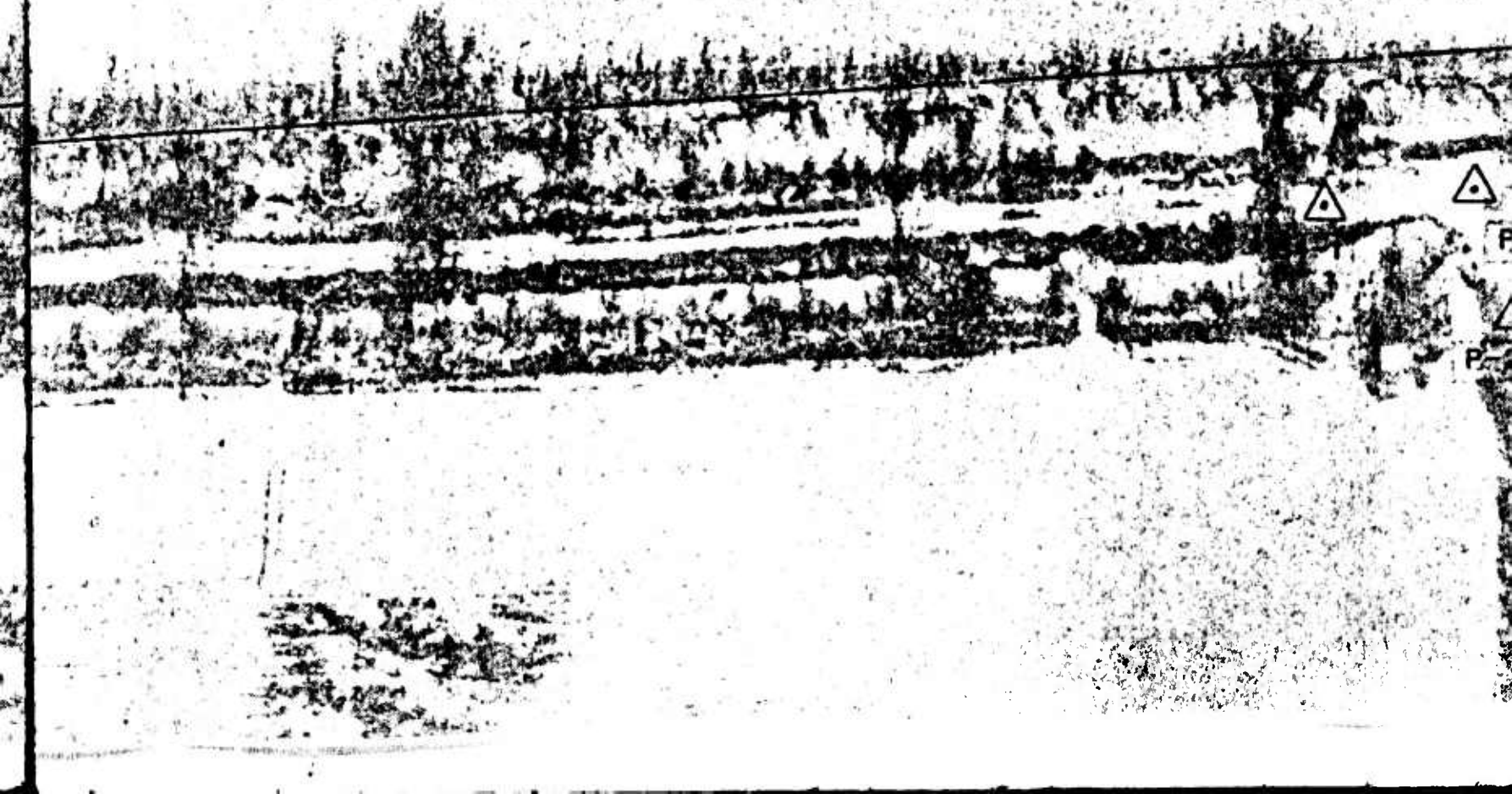
RS POWER COMPANY

400-005

ART WILD

042-400-010

1,500.7'



PLOWED AND
DISKED

■ SHOVEL TEST UNIT

P-29

P-30

MATCH SHEET 41

319.4'

ART WILD

042-400-010



505.1'

010

TALAGA

070 - 042 - 030

3500'

350.0'

DISTURBED AREA



AREA



01 311

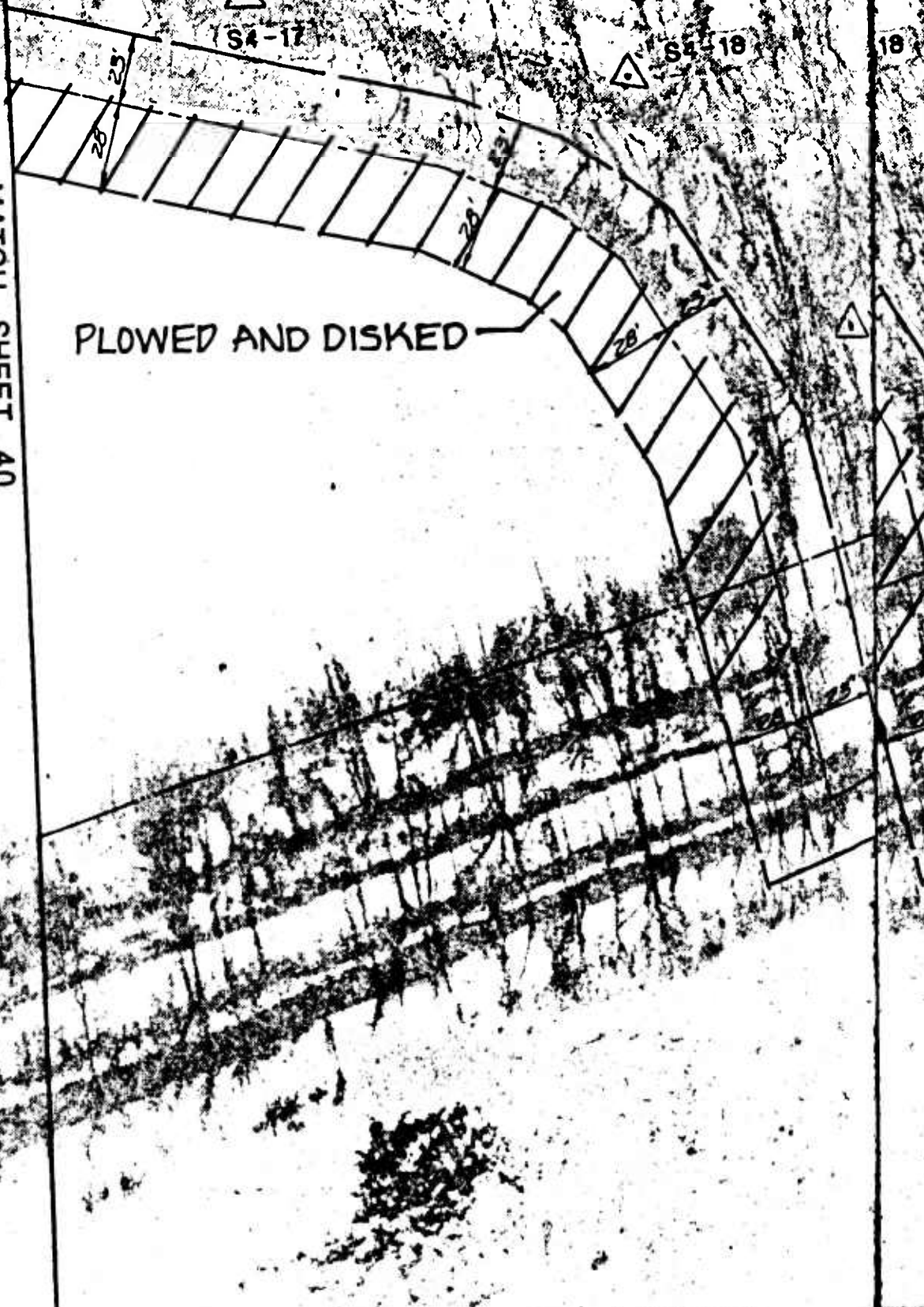
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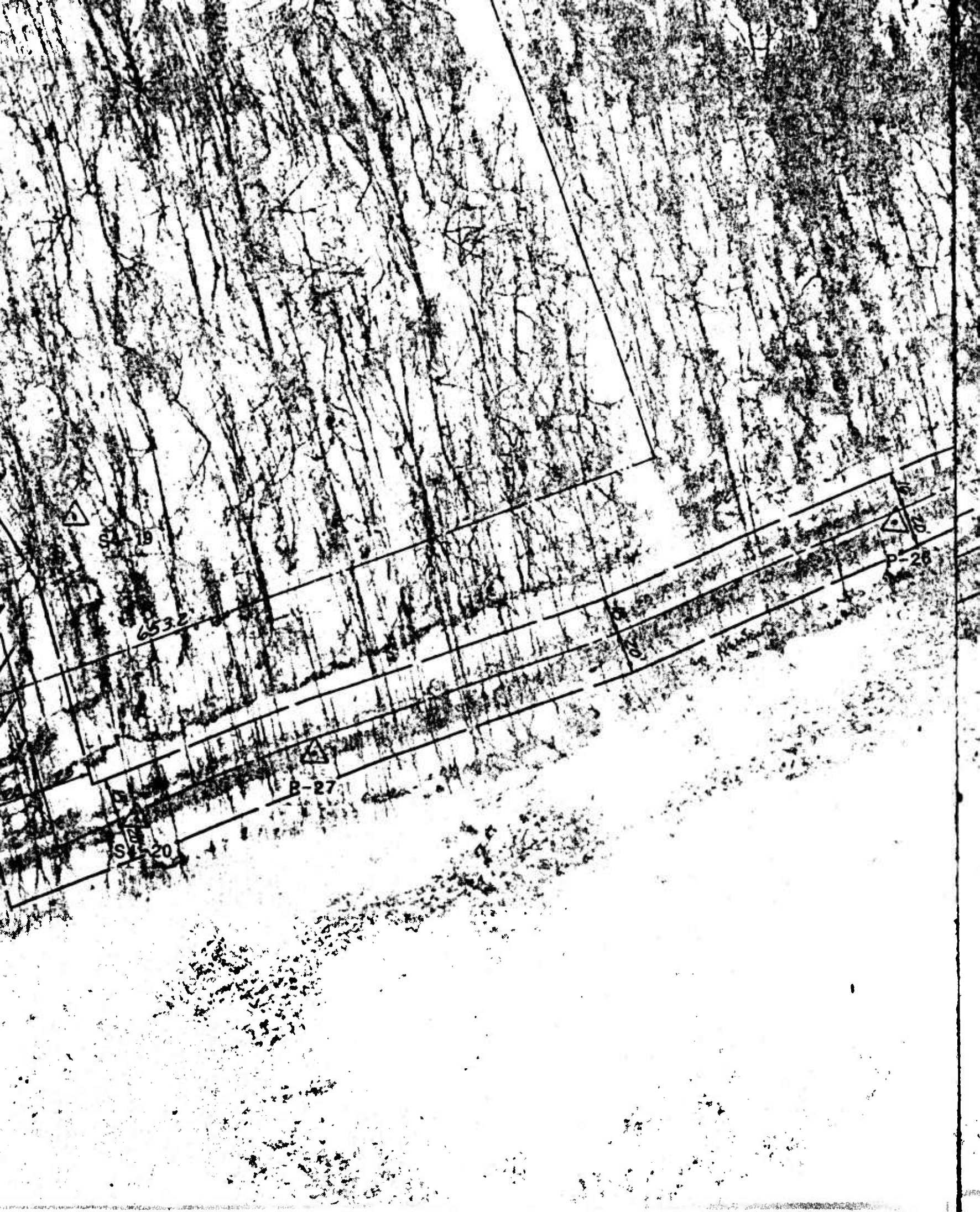
PLOWED AND DISKED

S4-17

S4-18

18







DISTURBED AREA

P-24

12' 21'

P-22

P-23

P-21

685

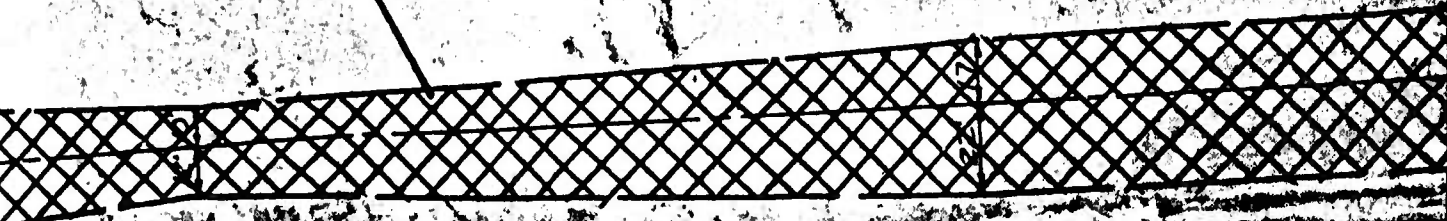
2900

065 - 01

FAIRLEY ROAD

250' ROAD

BED AREA



685.0'

100-065-02

290.0'

065-01

ENCLOSURE SHEET 2

71512

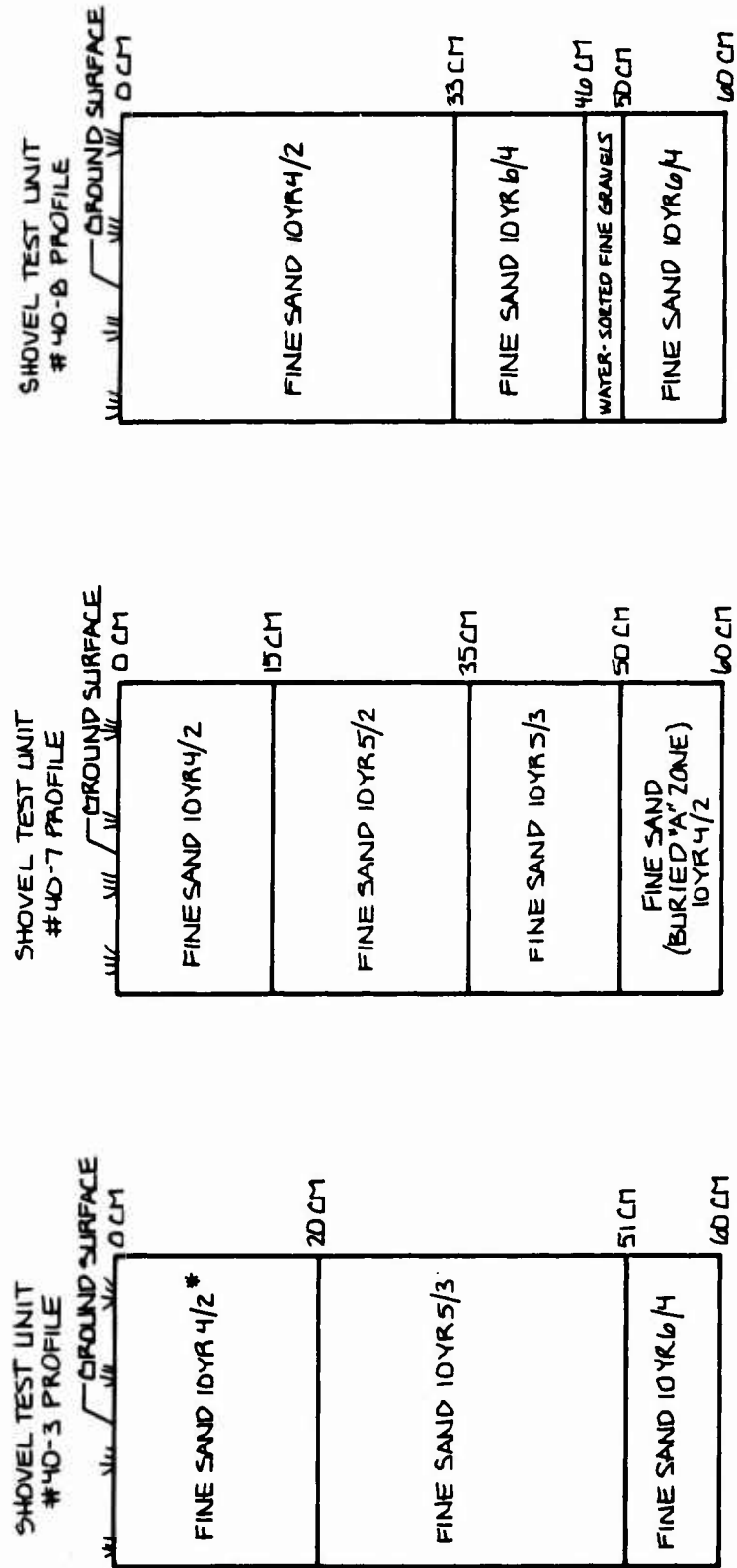
CORRIDOR SEGMENT 3 (Figure 7)

Corridor segment 3 required shovel testing. It is located to the sides and in back of the abandoned residence, shed, and barn connecting segments 2 and 4. The stationing description is 16+04(S) - 22+34(S) and is shown on real estate map 40. Corridor segment 3 is 675 feet long and 45 feet wide. The 100-foot-long section running parallel to the abandoned residence between stations S4-13 and S4-14 was not shovel tested. This area contained a ditch and levee and other disturbances related to their construction. A similar situation obtained for the section running parallel to and east of the barn. This 275-foot-long section traverses the same ditch and levee complex as well as running within a drainage path. The latter is a natural cut between two sections of the 585-foot amsl beach ridge complex. The only undisturbed portion of the corridor segment runs roughly east-west along this beach ridge in back of the structures for a linear distance of 300 feet.

A total of 14 shovel test units spaced 12 meters apart at 15-meter intervals were excavated. The most common soil profile (Test Unit 40-3) (Figure 9) suggests the beach ridge was relatively stable, allowing organic materials to leach evenly. A series of bedded Pipestone fine sands (Weesies 1984) are present, with the amount of organics contained within each layer decreasing with depth. On the other hand, three shovel test units in the center of this area suggest more active processes have taken place. The profiles of shovel test units 40-8 and 40-7 (Figure 9) show that the lower sand deposit is interrupted by a lense of fine, water-sorted gravels. Such active deposition is typical of a foredune situation. In contrast, shovel test unit 40-7 exhibited a highly organic sand deposit at a depth of 50-60 cm below the surface (Figure 9). This was evidently a relatively stable surface subsequently buried by sterile sands. Resolution of the nature of these beach deposits cannot be made at this time and is beyond the scope of the present project.

Cultural remains were found in all but three shovel test units. All but two of the artifacts are undiagnostic or of recent origin. The lone exceptions are two fragments of a rectangular-based jar or bottle made out of a patinated green glass with raised lettering. Only one letter, an "A," is complete, and no words can

FIGURE 9
CORRIDOR SEGMENT 3 PROFILES
 Advance Measures Flood Control Project
 Hampton Township - Bay City, Michigan



* DENOTES SOIL COLOR ACCORDING TO MUNSELL SOIL COLOR CHARTS, 1975 EDITION

be inferred. These letters were produced by a slug-plate molding technique, which dates these artifacts to a pre-twentieth century context. This suggests the location was occupied from at least the late nineteenth and/or early twentieth century. This inference is supported by the presence of a structure here on the 1896 Bullock Map of Bay County and the 1919 USGS 15' topographic map of the Bay City Quadrangle. The low frequency of these isolated finds, their occurrence in a mixed scatter of relatively recent residential debris, and their location to the rear of the presently standing structures make the historical significance of these finds negligible.

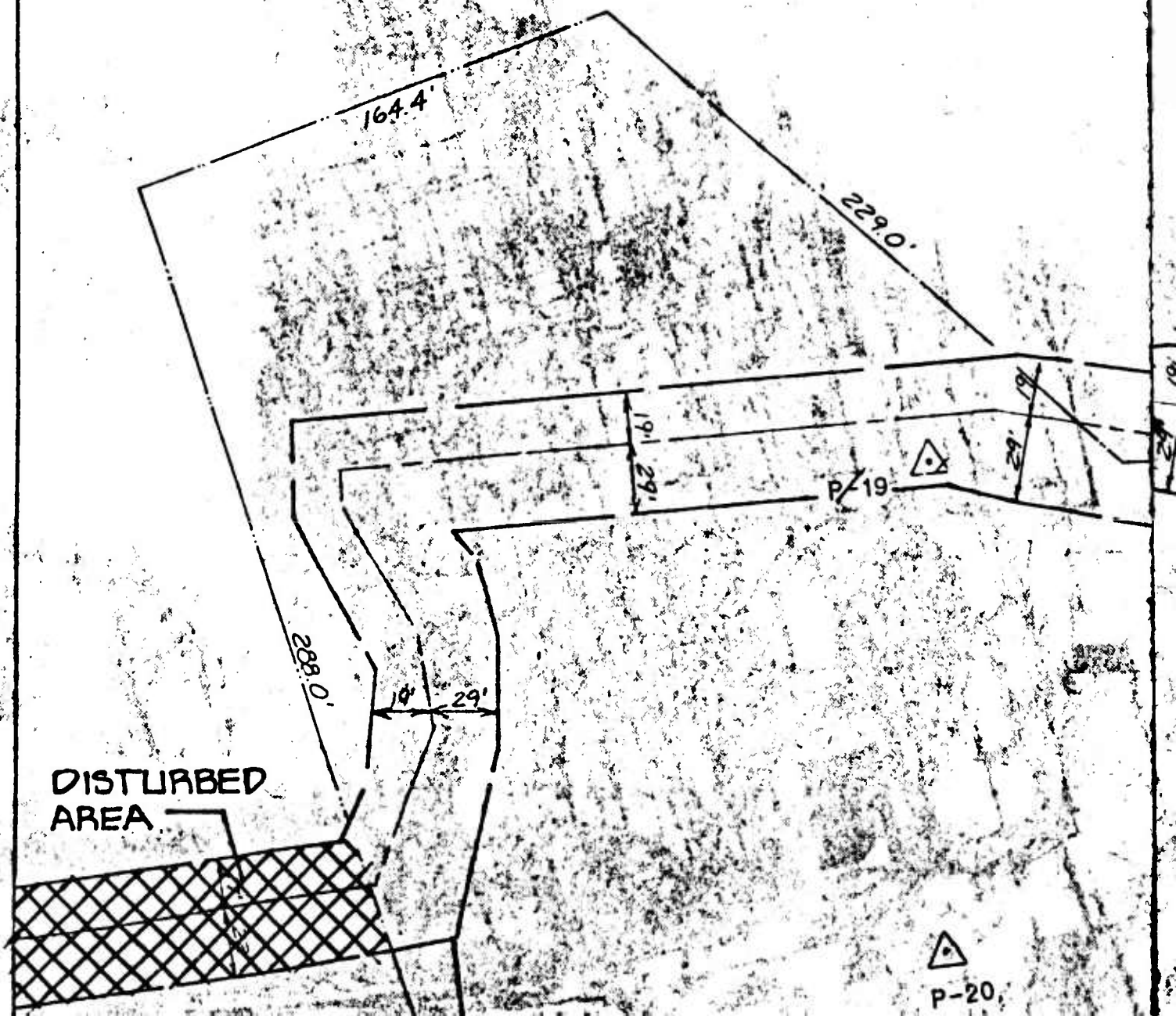
CORRIDOR SEGMENT 5 (Figures 8 and 10)

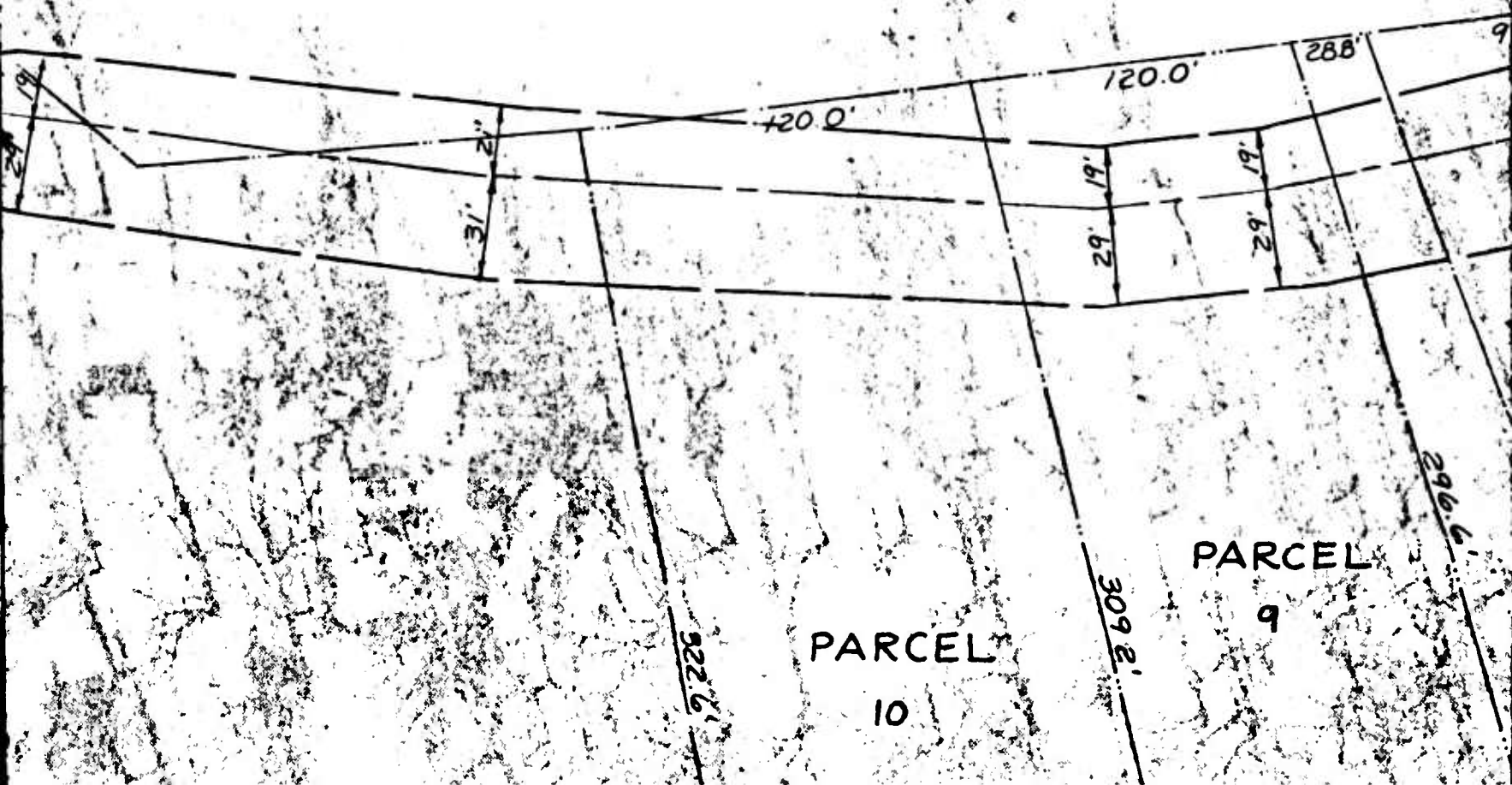
The stationing description of this corridor segment is 296+27(P) - 289+60(P) and is shown on real estate maps 41 and 42. This segment originates at station P-22 and runs 650 feet to the east. The corridor width varies between 31 feet and 39 feet. The entire corridor segment appeared to have been disturbed by the building of a dike-like earthwork within its boundaries. This area is shown on the 7.5' USGS topographic map, Essexville Quadrangle, as being between two major linear sections of the 585-foot amsl beach ridge. Both small rises and depressions of natural origin were present at one time. The dike may have been built to extend the length of the beach ridge across this area to protect it from flooding and/or to alter the natural drainage pattern.

Three shovel probes were made to confirm the nature of the disturbances. Profiles were not drawn nor were their contents screened, for all three revealed heavily compacted fill materials. Based upon this information, Mr. Keith Ryder of the Army Corps of Engineers approved a decision to abandon further investigations of this segment (personal communication to Mr. D. J. Weir, September 4, 1987).

CORRIDOR SEGMENT 6 (Figure 10)

Corridor segment 6 is 275 feet long, 45 feet wide, and located on parcel No. 5 (100-010-00), as shown on real estate sheet 42. The stationing description is 279+27(P) - 277+35(P). Two shovel tests on the northernmost extensions of this







TEMPORARY EASEMENT

220.2'

128.0'

21'

288'

91.2'

23'

35'

P-18

61'

62'

5'

308.8'

BARTOW

PARCEL 8

PARCEL 9

9

296.6'

301.8'

PARCEL

100-010

42-3

42-5

45'

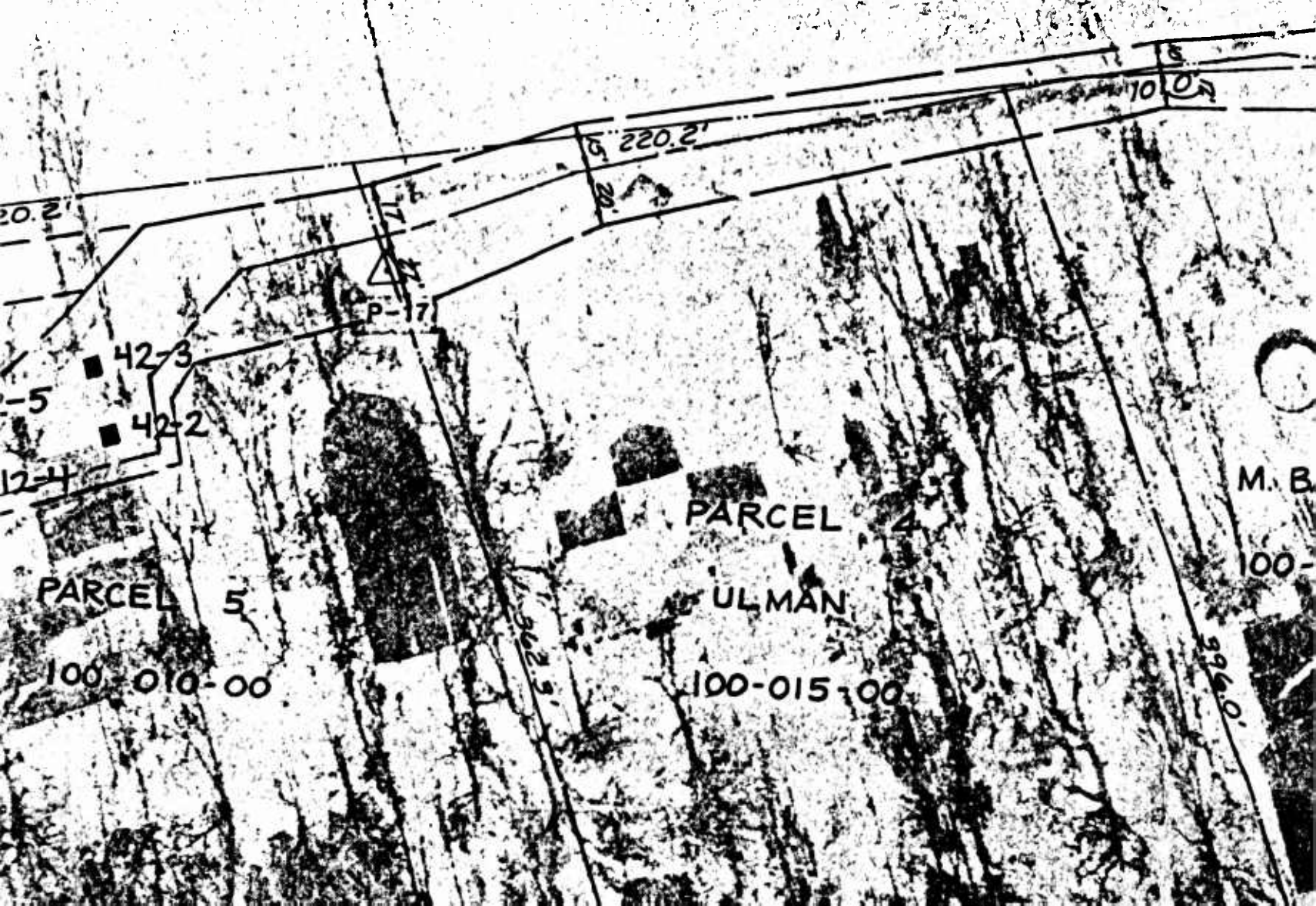
42-4

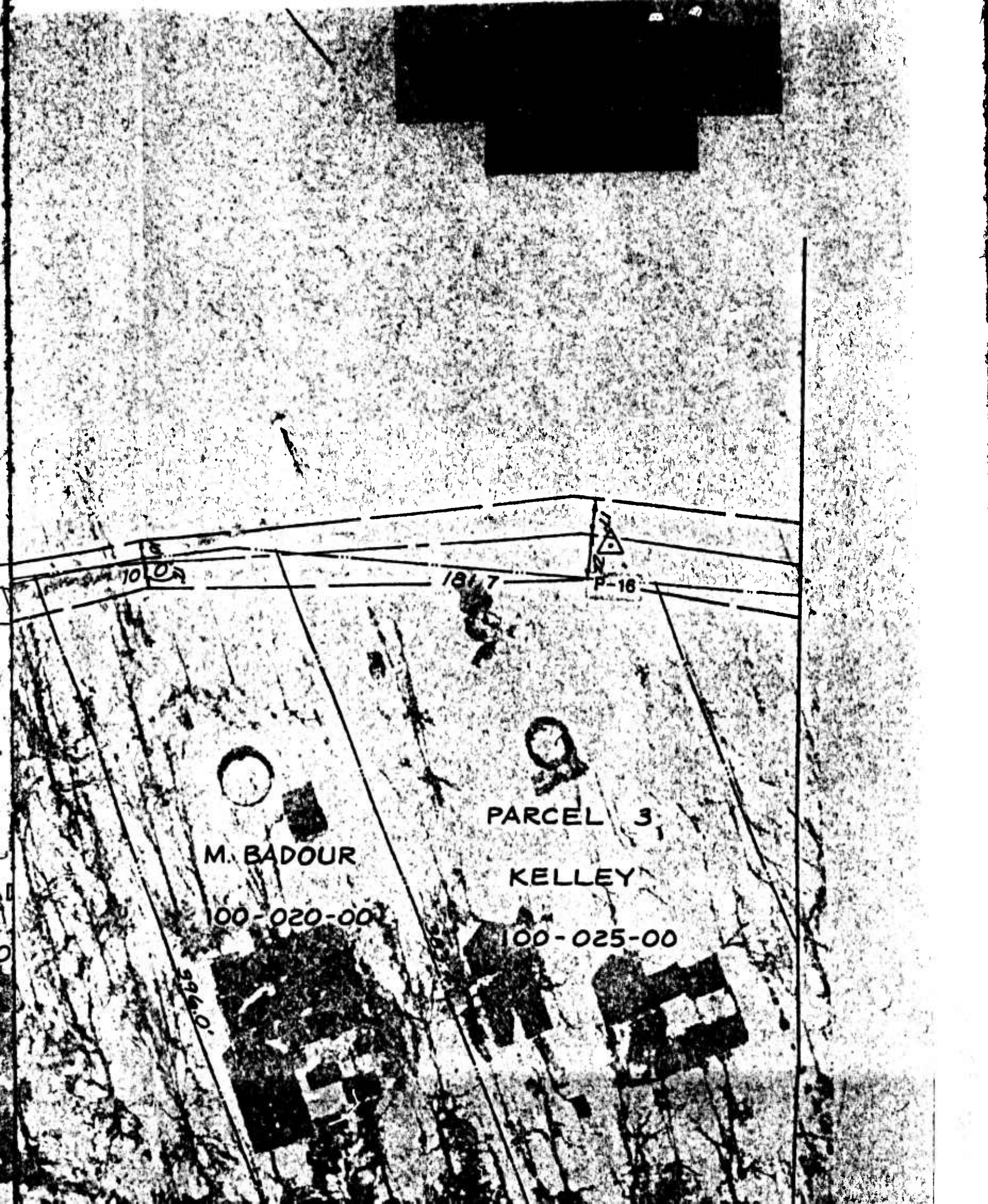
42-2

42-7

42-6

6'





10

181.7

P-16

M. BADOUR

PARCEL 3

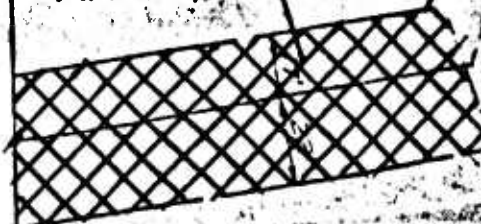
KELLEY

100-020-00

100-025-00

966.0

DISTURBED
AREA



0' 14' 29'



P-20

100-065-02

100-

20

296.8
309.2

PARCEL
9

PARCEL
10

322.6

309.2

134.0

134.0

100-065-00

BARTOW

100-01

PARCEL

8

PARCEL

9

296.6'

300.8'

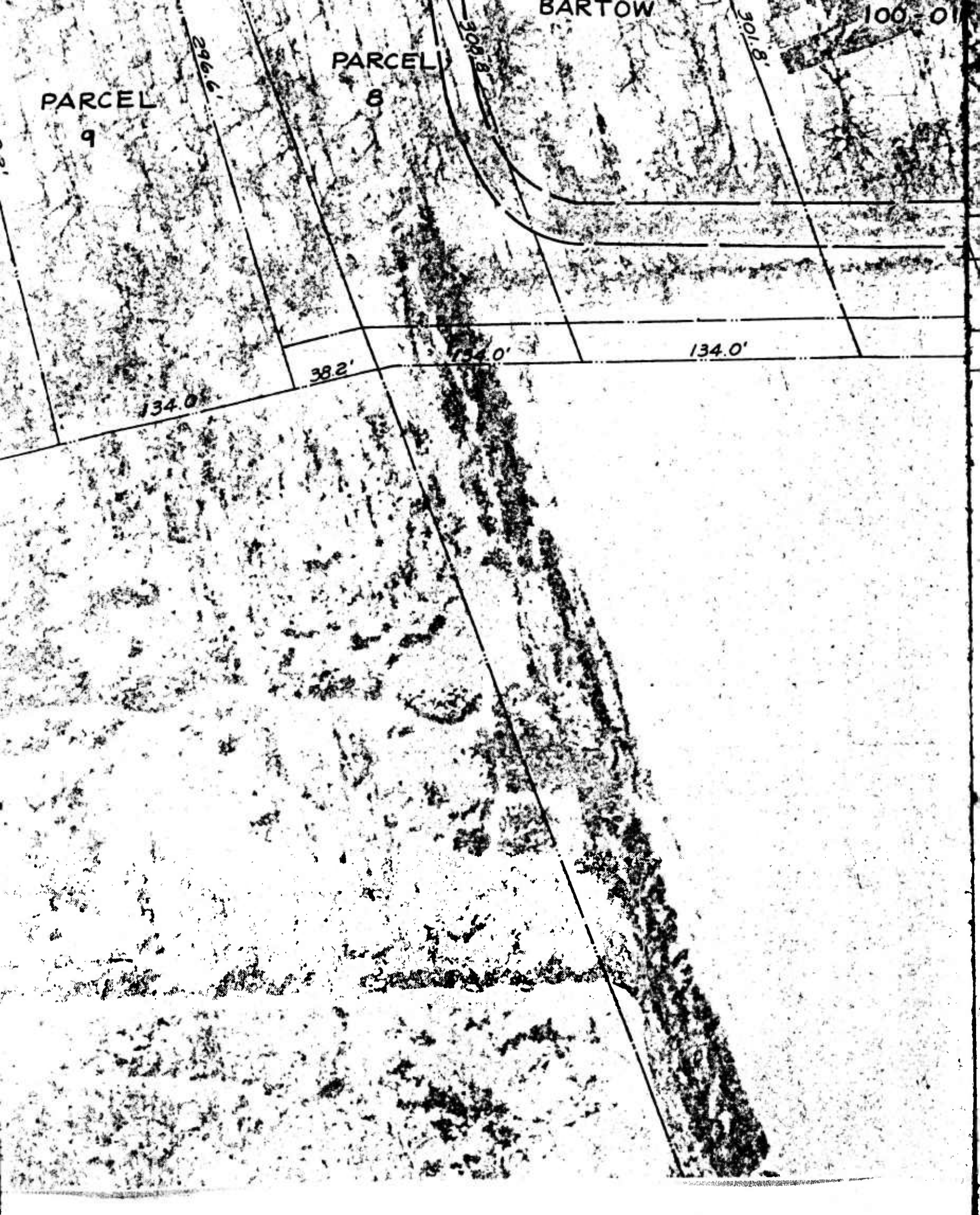
301.8'

134.0'

38.2'

134.0'

134.0'



100-010-00

229.9'

229.9'

PARCEL 7

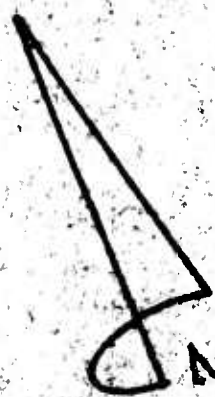
100-040-00



TIE IS

MATCH SHEET 43

■ SHOVEL TEST UNIT



NORTH

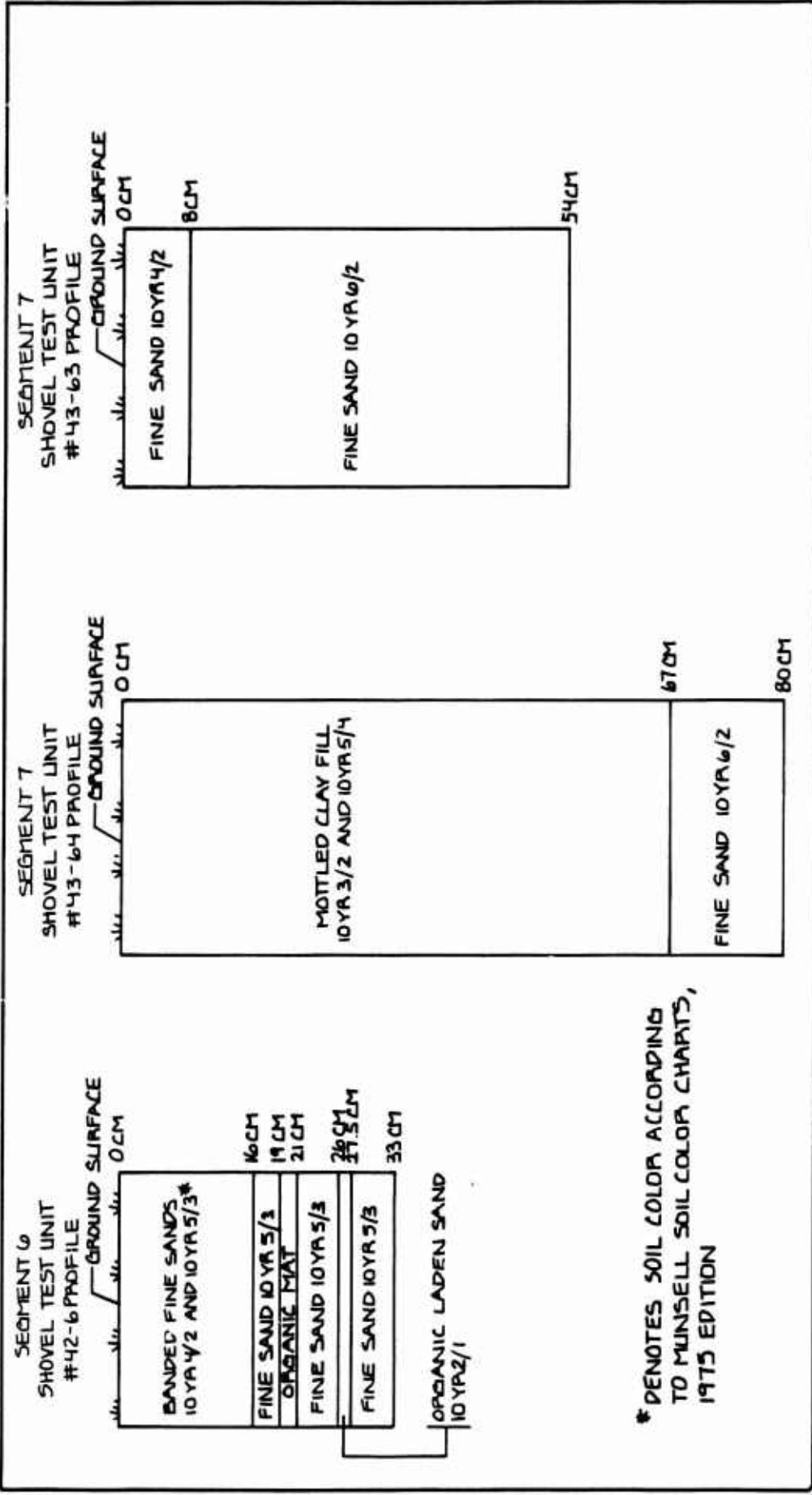
1"=50'

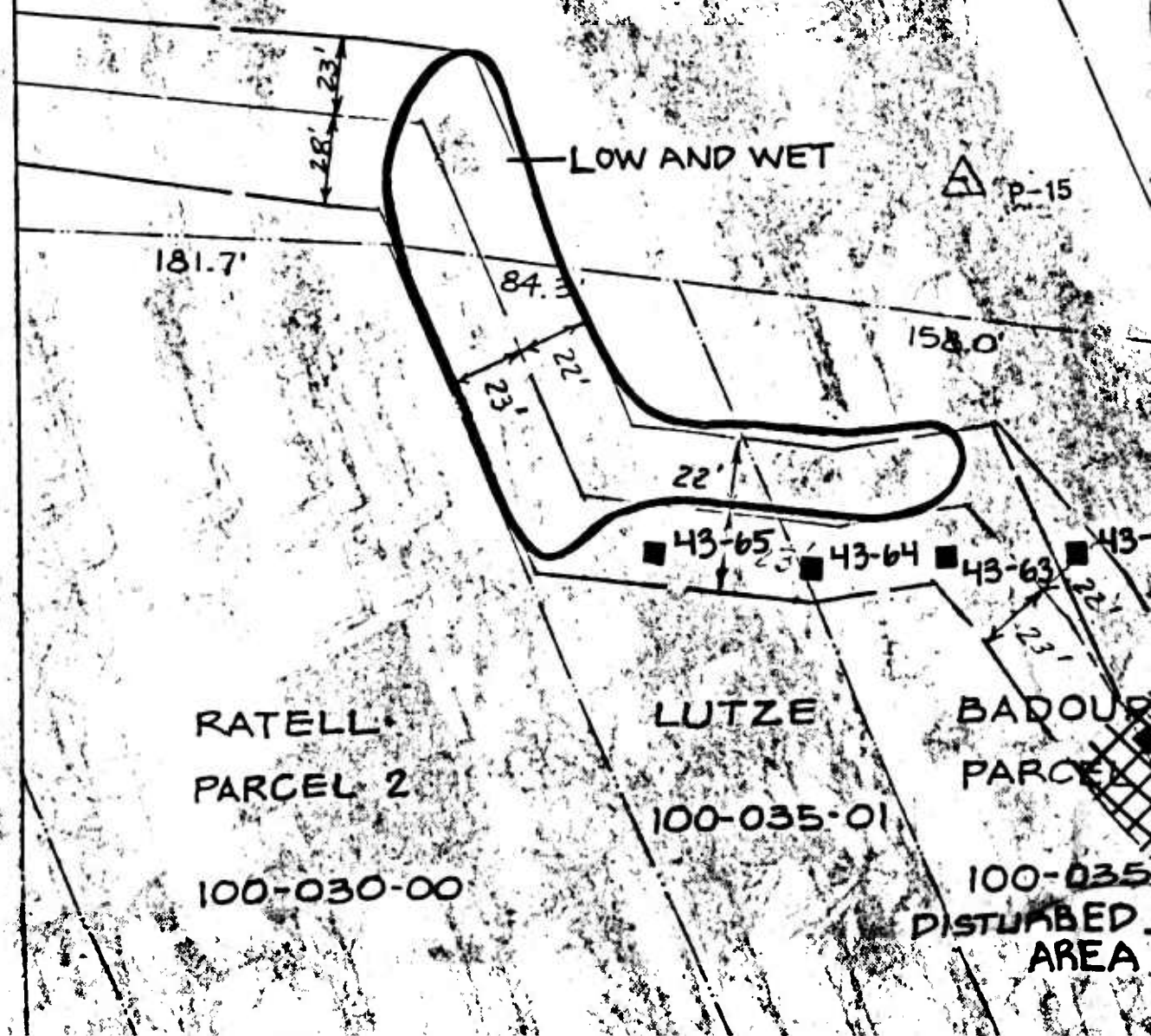
segment were located in wet sands, near the waterline of the actively eroding beach. These were not excavated. Based upon field observations, the remaining six shovel tests proved to be within an active beach zone as well. A typical shovel test profile 42-6 (Figure 11) had a series of banded sand and organic deposits to a depth of 26 cm below the surface. An older, more stable surface of black, organic-laden sands occurs between 26 and 27.5 cm, with leaching of these organics into the beach ridge sands below. All units were carefully screened, but no cultural remains were found.

CORRIDOR SEGMENT 7 (Figure 12)

The stationing description of segment 7 is 269+90(P) - 265+80(P) and is shown on real estate sheet 43. This segment is located just to the west of Callahan Road and Hugo Drain. Its width varies from 45 to 55 feet along its 400-foot length. The path of this corridor segment zig-zags across the narrow 585-foot amsl beach ridge on parcels 100-035-01 (Lutze) and 100-035-00 (Badour). A single transect of four shovel tests was gridded out on the southern half of the corridor segment which runs east to west on the north edge of the beach ridge. The northern half of this section and the section running to the north along the Lutze-Ratell property line are wet areas and were not shovel tested. Two of the shovel tests (No. 43-64 and No. 43-65) revealed only secondary fill (Figure 11), apparently used to widen the natural beach ridge. Two other shovel test units (No. 43-62 and No. 43-63) were comprised of culturally sterile beach sands (Pipestone fine sands) with varying amounts of accumulated organics (Figure 11). The remainder of this corridor segment runs parallel to and then cuts over to Hugo Drain. The ground surface appeared very uneven and disturbed. A single shovel probe (No. 43-66) was placed on the centerline. Secondary fill was encountered to a depth of 35 cm below the surface, at which point it became too compacted to continue excavation. These deposits appeared to be a combination of clay fill and dredgings from Hugo Drain. No other shovel testing was undertaken in this area, with the approval of Mr. Keith Ryder, Army Corps of Engineers (personal communication to Mr. D. J. Weir, September 3, 1987).

FIGURE 11
CORRIDOR SEGMENT 6 AND 7 PROFILES
 Advance Measures Flood Control Project
 Hampton Township - Bay City, Michigan





200-195-00

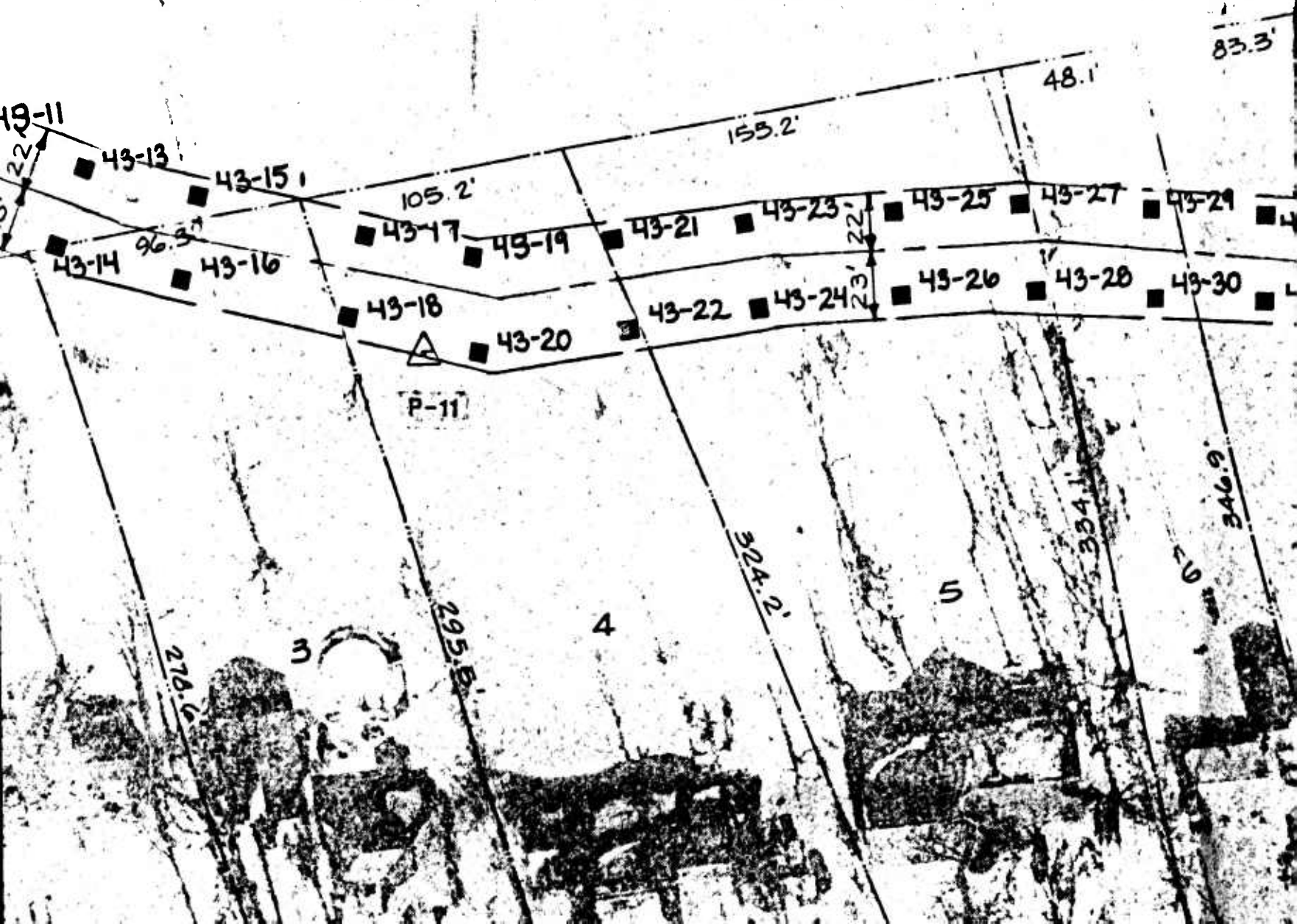
200-195-00

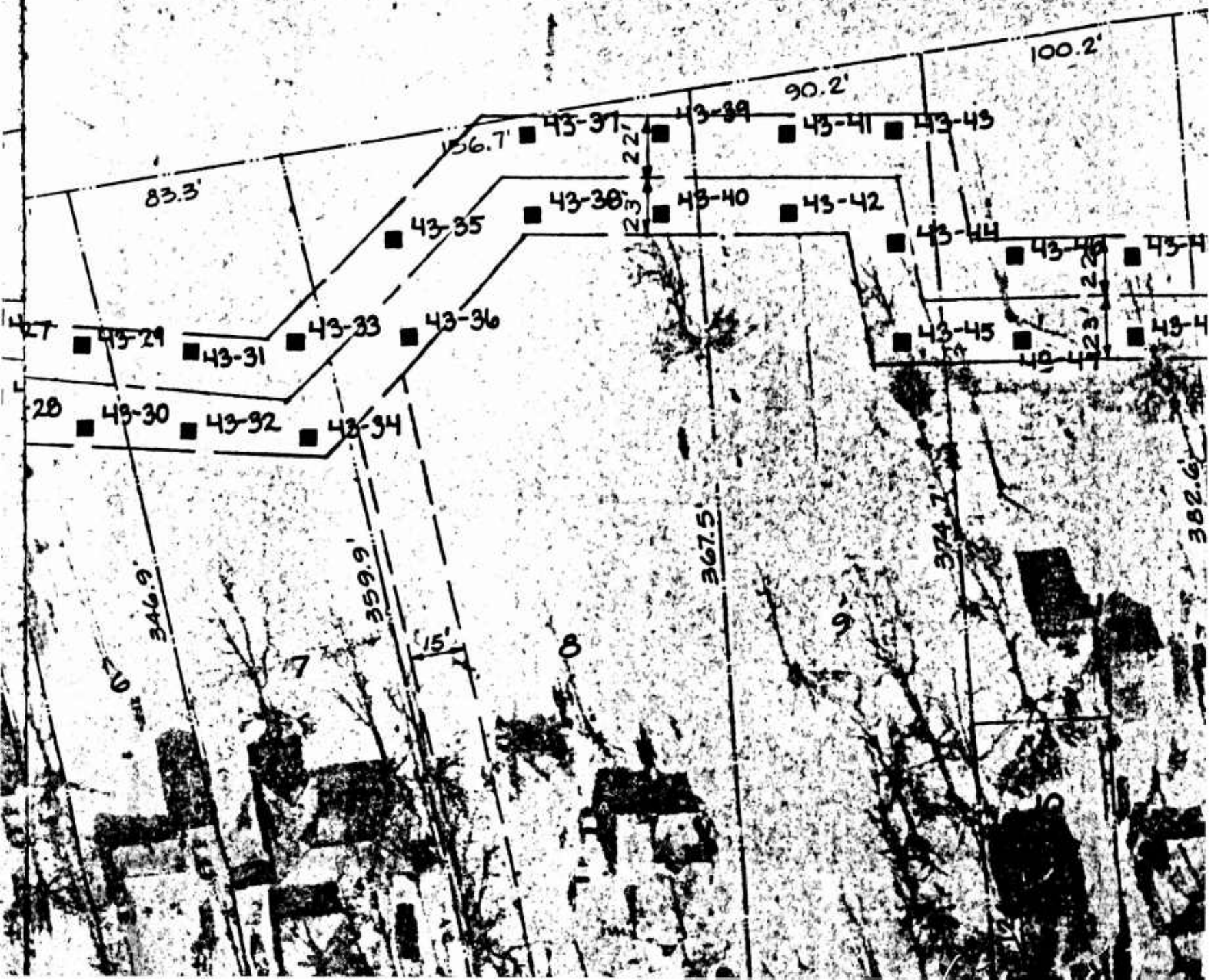
P-15

BADOUX 43-6
PARCEL 142

100-935

**DISTURBED
AREA**







RATELL

PARCEL 2

100-030-00

LUTZE

100-035-01

BARCO

PARCEL

100-035

DISTURBED
AREA

MATCH SHEET 42

172.4'

20'

80.0'

PARCEL NO. 7

100-040-00

BAROUX 47-0
PARCEL 140
100-035
DISTURBED
AREA

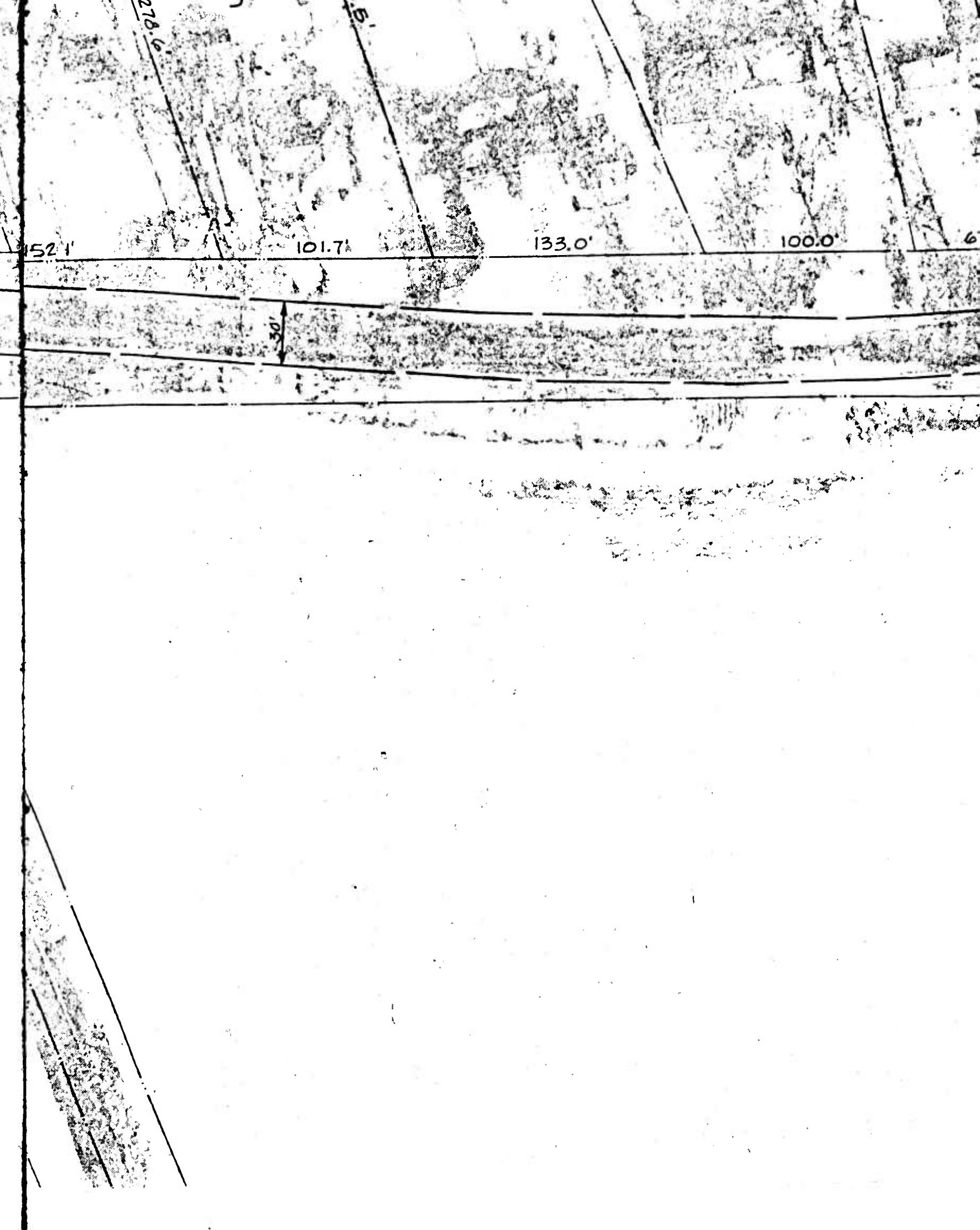


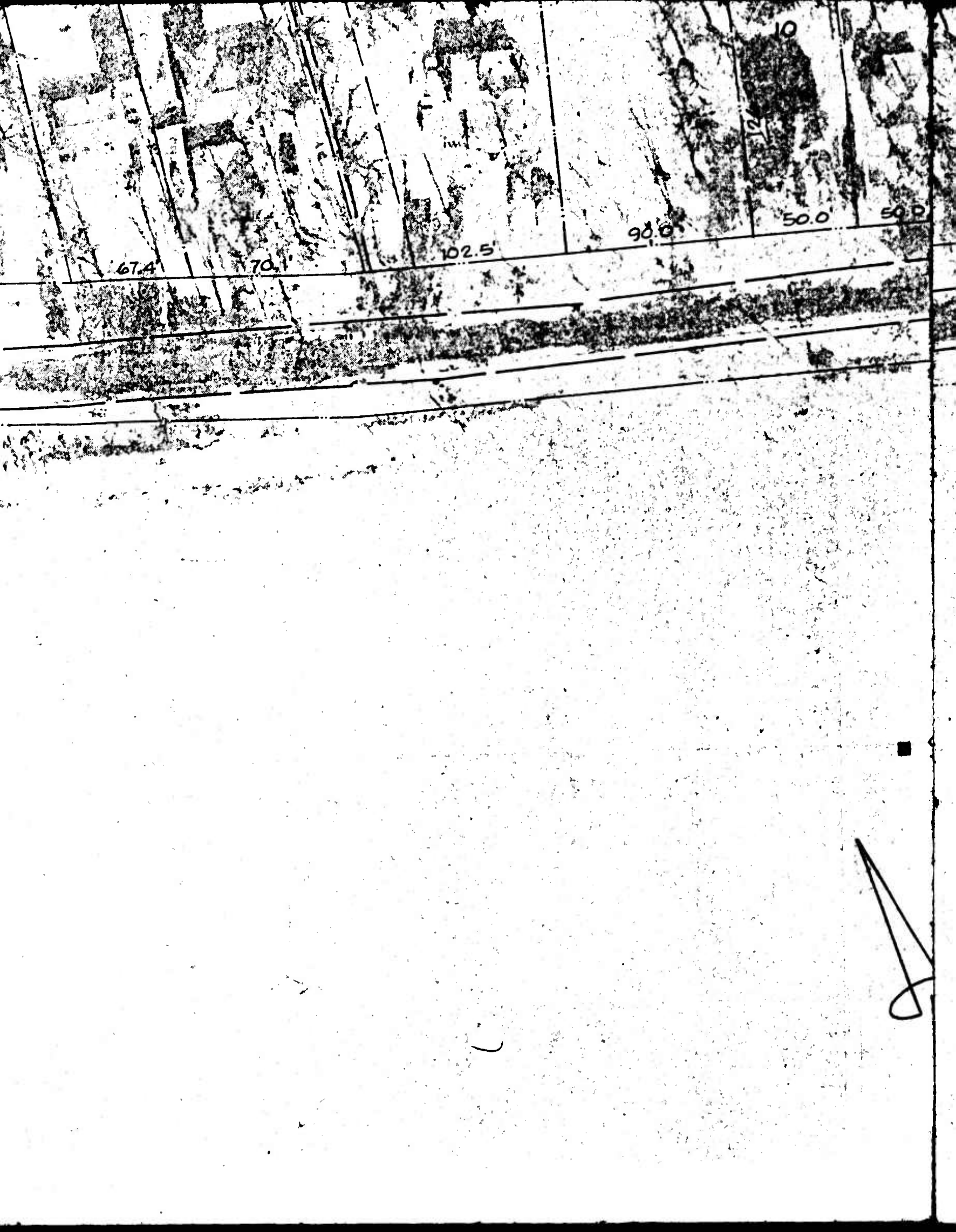
2
151.7'
48.4'
152.1'
178.6'

30.0'
155.2'

NO. 7
00

ECALAHAN ROAD





67.4

70.1

102.5

98.0

10

50.0

50.0



■ SHOVEL TEST UNIT



NORTH

1"=50'

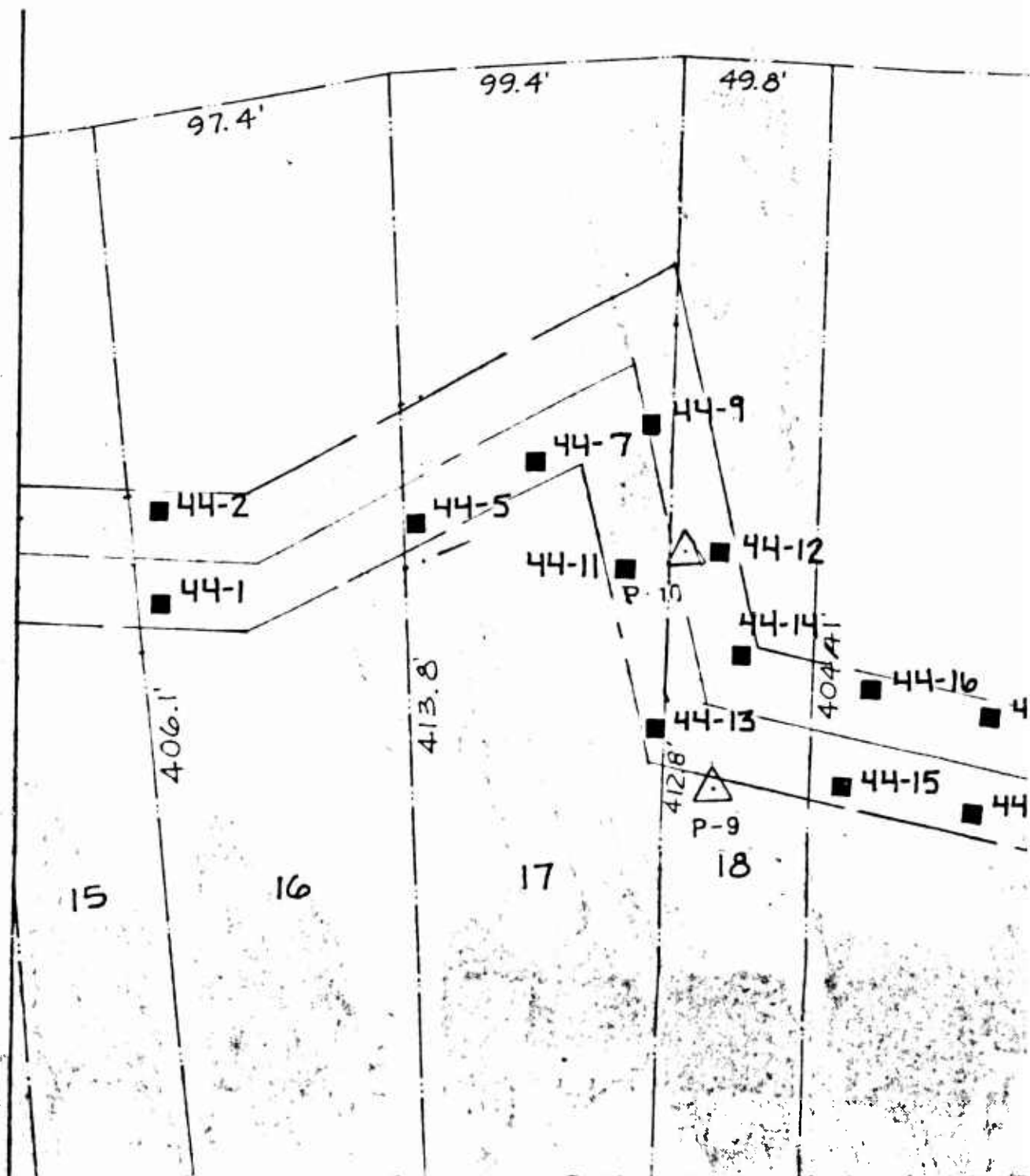
CORRIDOR SEGMENT 8 (Figures 12, 13 and 14)

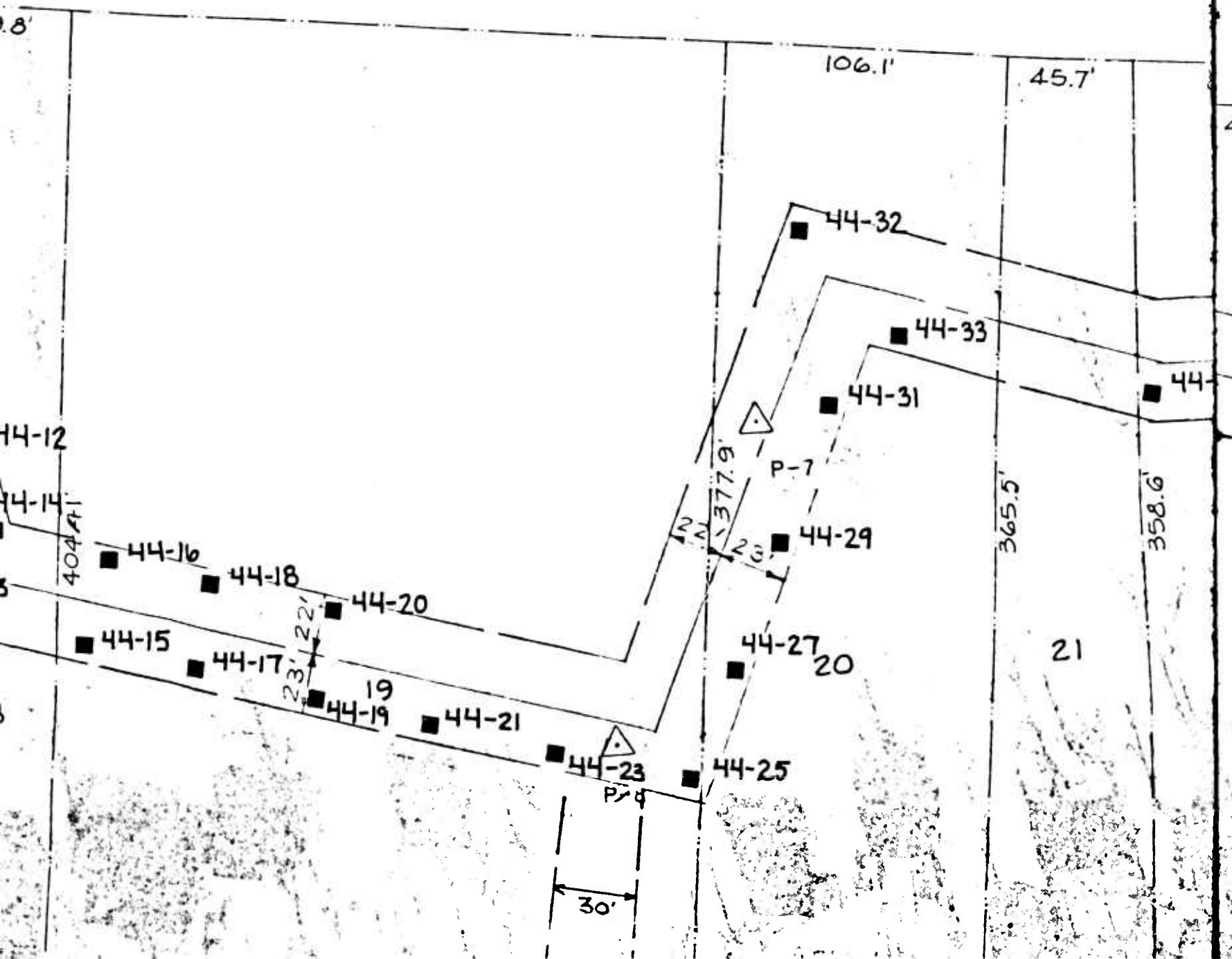
Corridor segment 8 is the longest segment surveyed. This segment is 3925 feet long along the centerline and 45 feet wide for all but a small section on its western end, which is 47 feet wide. Segment 8 starts at Callahan Road (P-1, real estate sheet 43) on the west and runs eastward in an irregular path roughly following the present beach line to station P-2, as shown on real estate sheet 45. This is parallel to the 585-foot amsl beach ridge and Knodt Road to the south. The stationing description is 263+17(P) - 225+86(P).

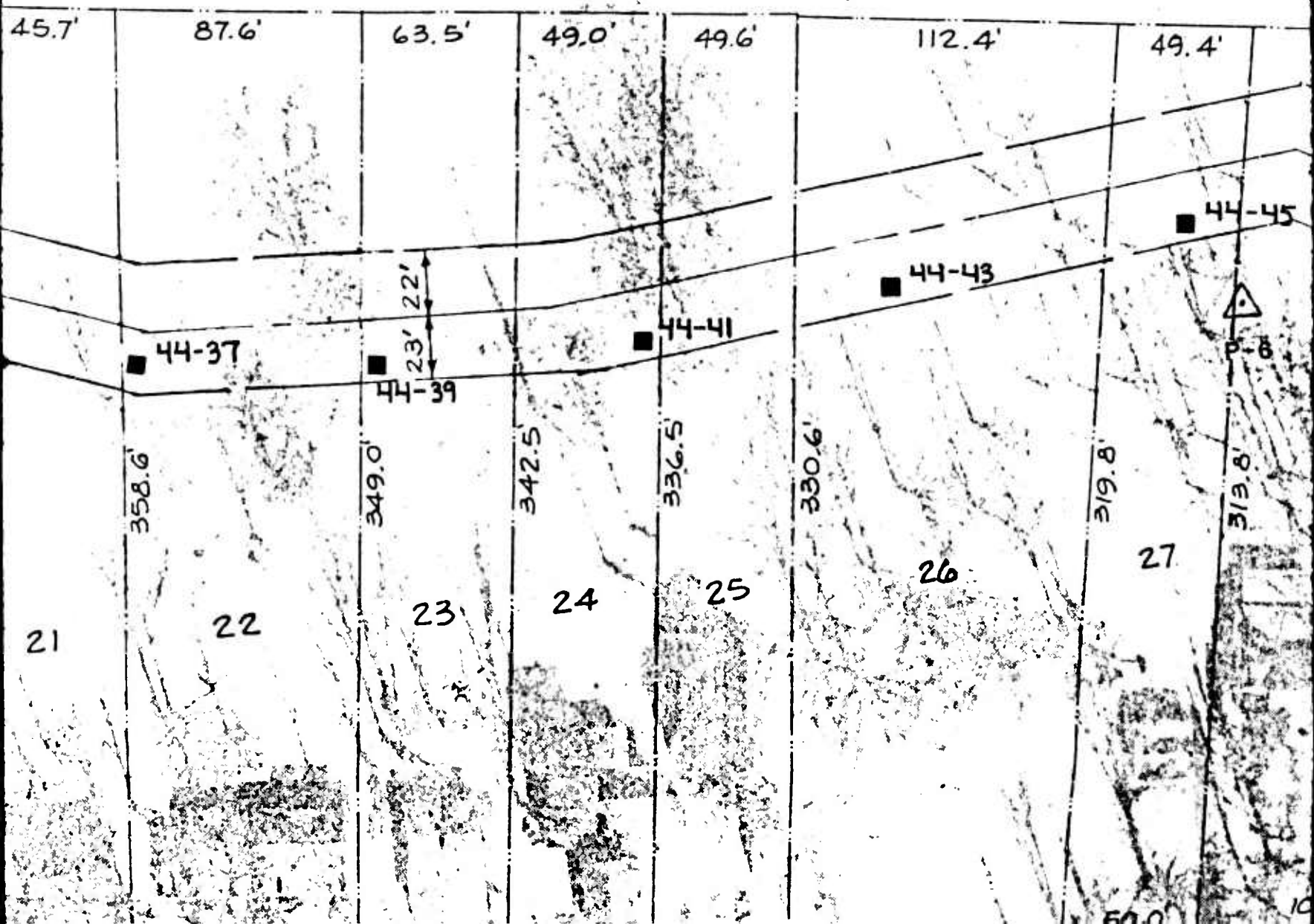
Inspection of the 1973 photo revised USGS 7.5' topographic map, Quanicassee Quadrangle; field observations; and interviews with local residents suggest considerable erosion and alteration of the general area surrounding this corridor segment. Since 1973, the Callahan Road causeway extending into Saginaw Bay has been truncated by nearly 0.5 mile. Only two of the five structures shown on the 1973 USGS topographic map are extant. Land no longer exists east of the causeway where residents said they once played softball and where other recreational activities often took place. They also noted that two cuts (verified on the 1973 USGS map) were made into this land for boat access. The easternmost of these was once part of a marina complex that no longer exists. A northerly extension of the 585-foot amsl beach ridge located approximately 1200 feet east-southeast of Callahan Road has also been lost to erosion. Residents informed the Gilbert/Commonwealth field crew that most of the existing residential properties surrounding the corridor segment had been built up and/or stabilized with various types of fill, including sand, clay, and rubble from a concrete factory.

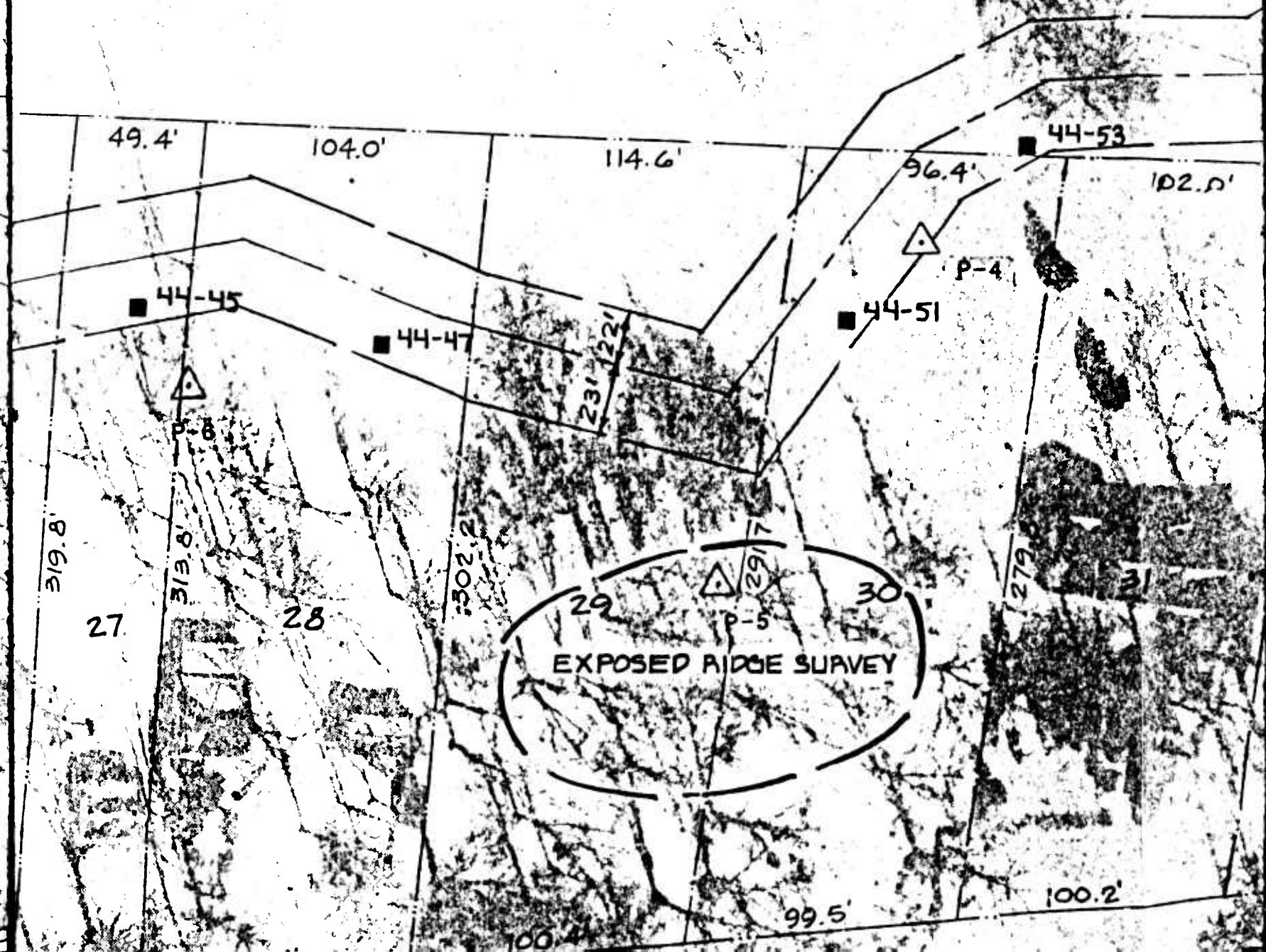
Since corridor segment 8 was placed as close to the waterline as possible, two depositional contexts militated against finding intact deposits: (1) actively eroding beaches and (2) intrusive fill. It was also observed during the preliminary walkover of segment sections to lay out the shovel test grid that very little of the corridor was actually on the 585-foot amsl beach ridge, the area of highest probability for finding significant cultural remains.

Shovel testing proceeded on September 1 and 2 according to the Army Corps of Engineers' specifications laid out in the scope of work, with test units



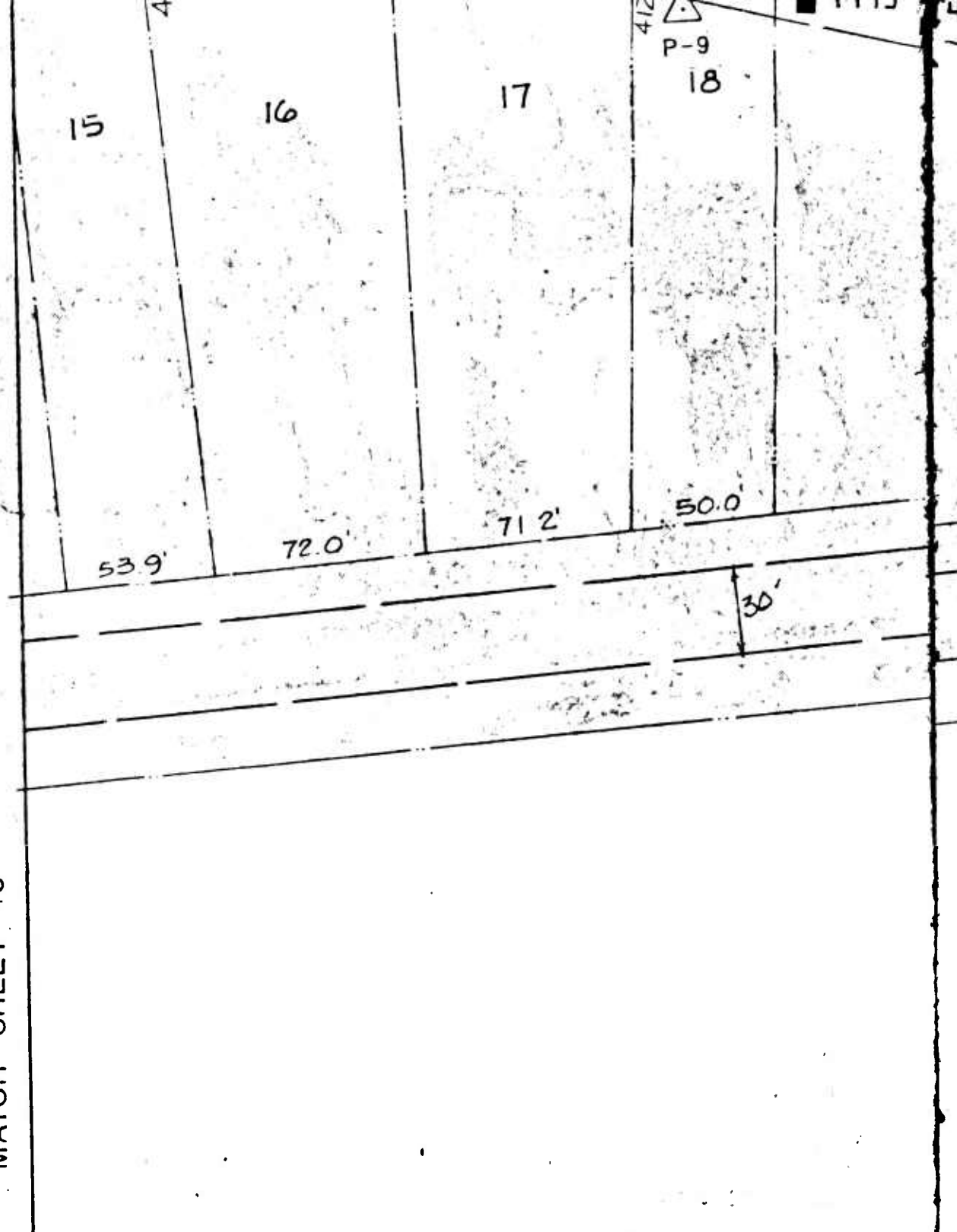


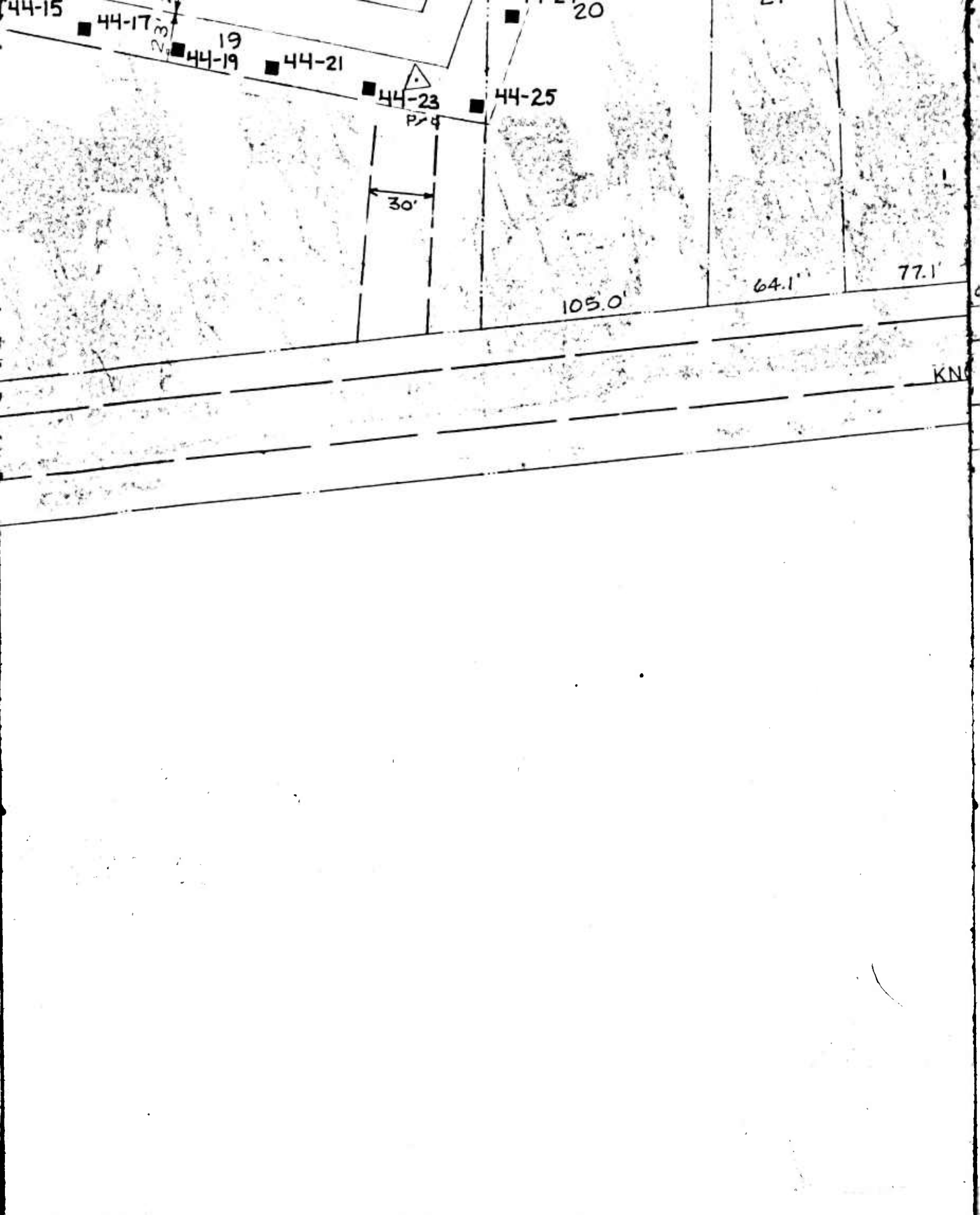






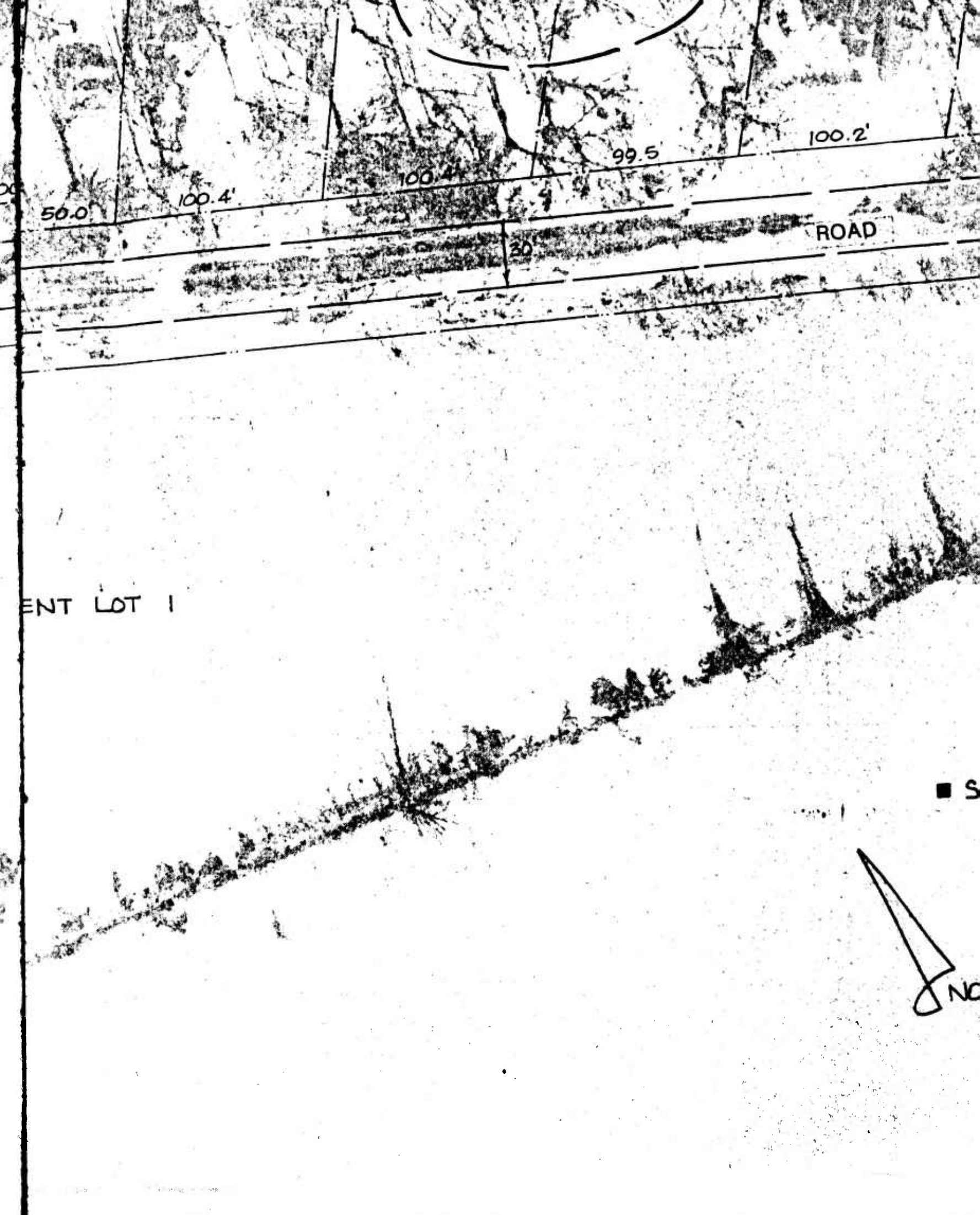
MATCH SHEET 43





64.1'	77.1'	53.4'	50.3'	50.0'	94.8'	50.0'	100'
KNODT							

GOVERNMENT LOT 1



50.0

100.4

100.4

99.5

100.2

30

ROAD

ENT LOT 1

■ S

ND

100.2'

137.7'

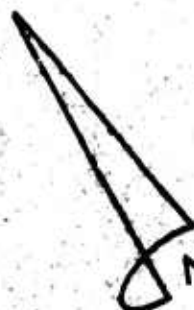
52.0'

ROAD

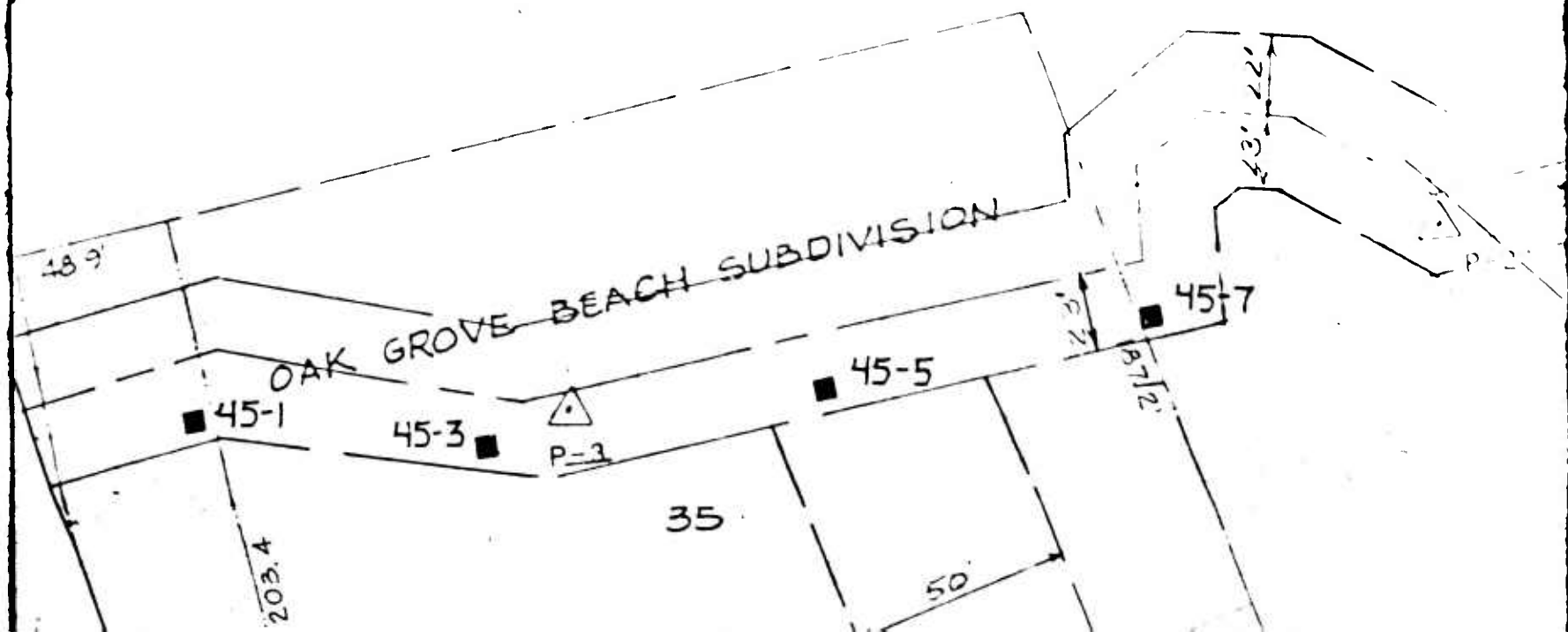
TIE 15-8-16

MATCH SHEET 45

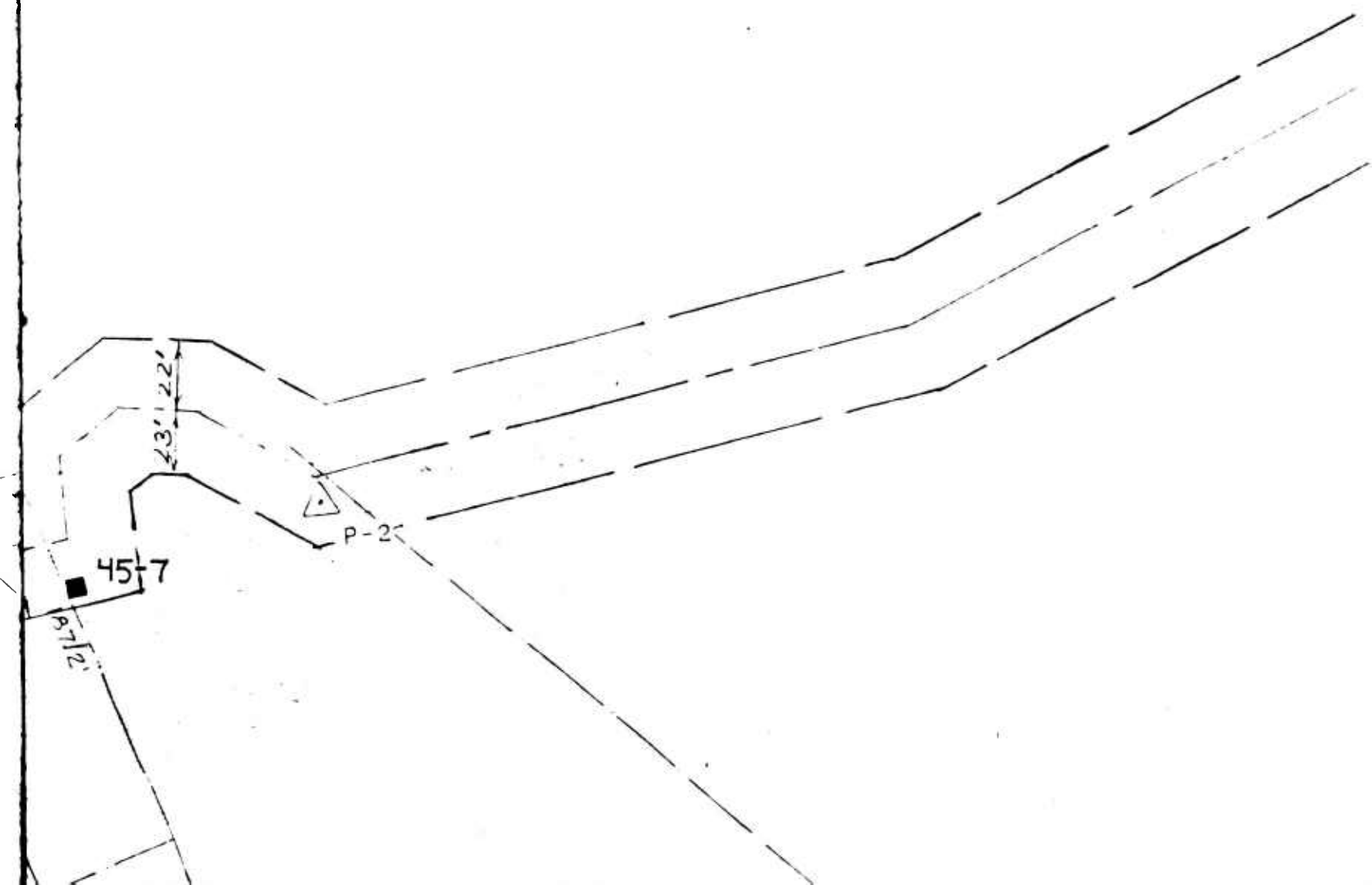
■ SHOVEL TEST UNIT

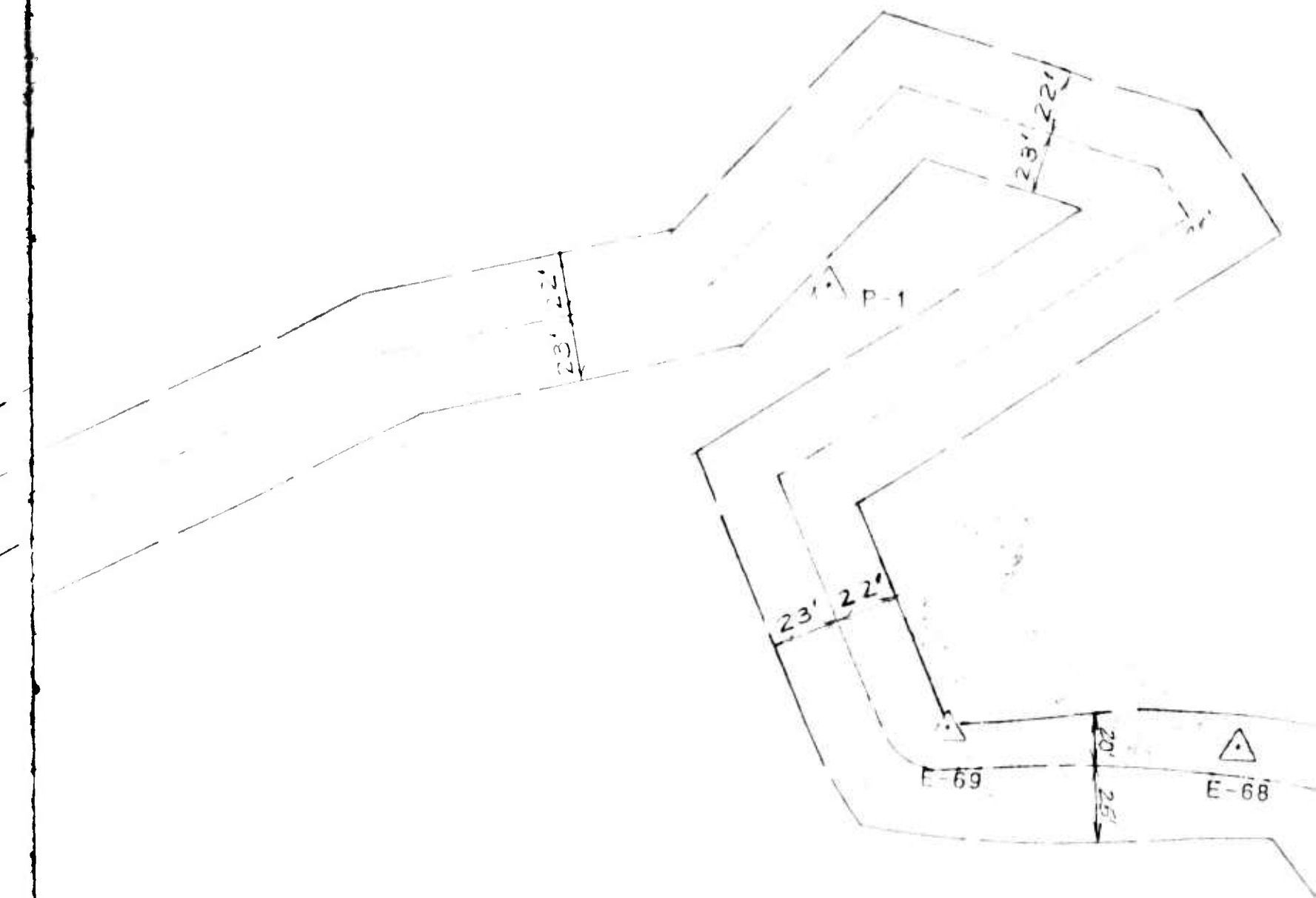


NORTH 1" = 50'



2.

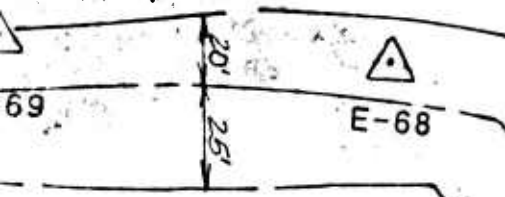
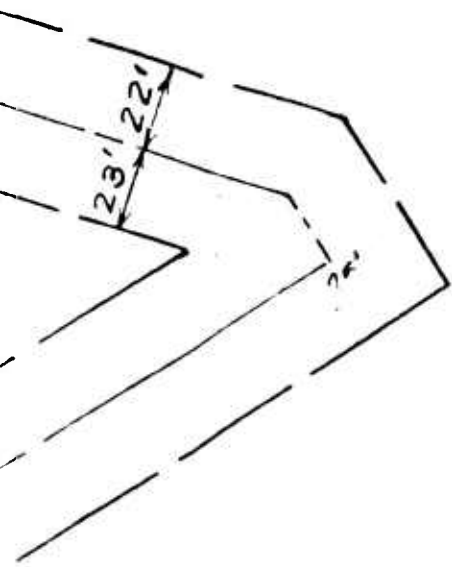




RECKINGER

100-015-

31



E-68



R

10

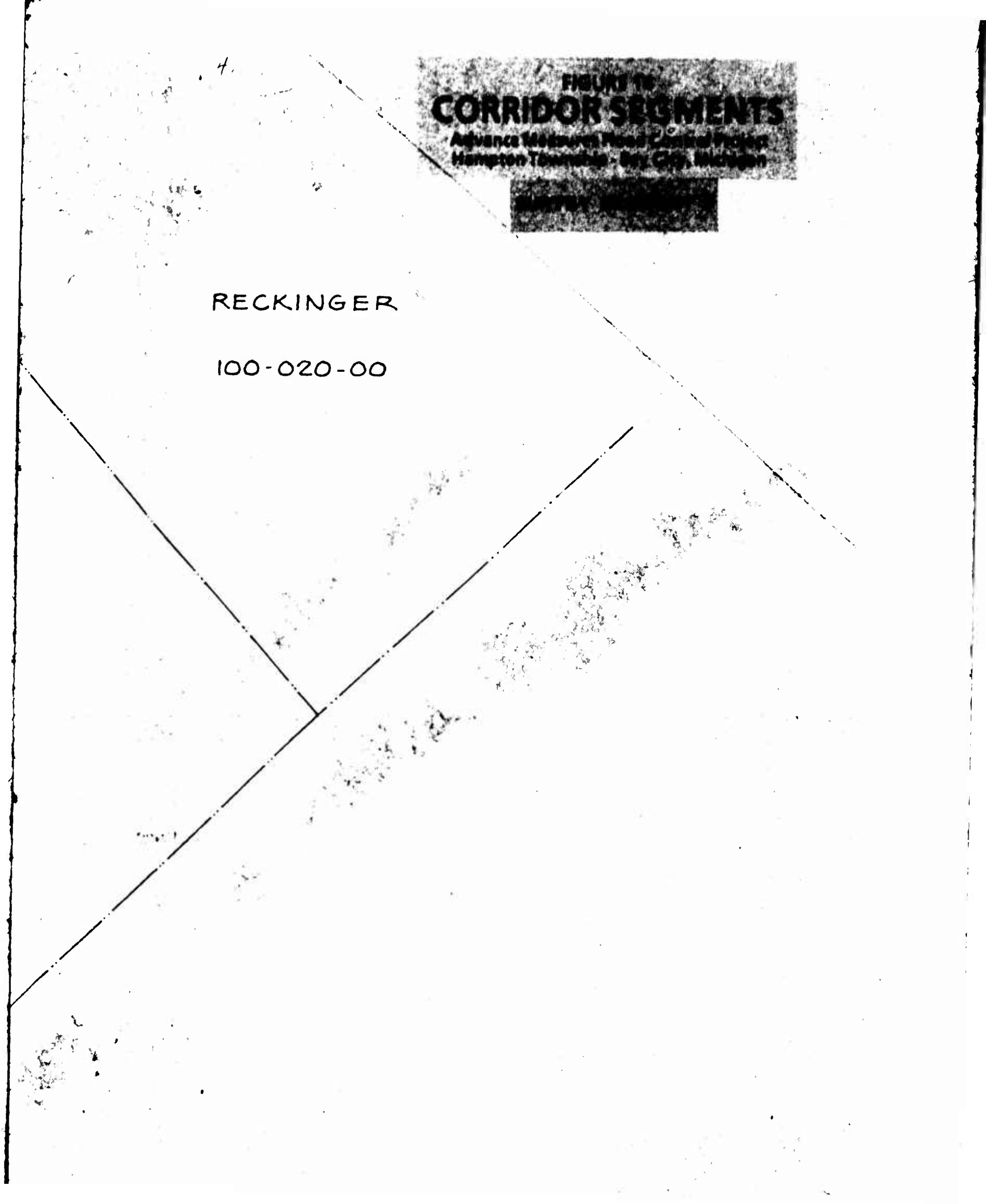
FIGURE 10
CORRIDOR SEGMENTS

Advance Measure Road Central Region
Hampton Township - Bay City, Michigan



RECKINGER

100-020-00



OAK GROVE BE

45-1

45-3

P-3

45-5

87/2

34

35

50'

287.8

50.0'

30'

KNODT ROAD

MATCH SHEET 44

RECKINGER

100-010-00

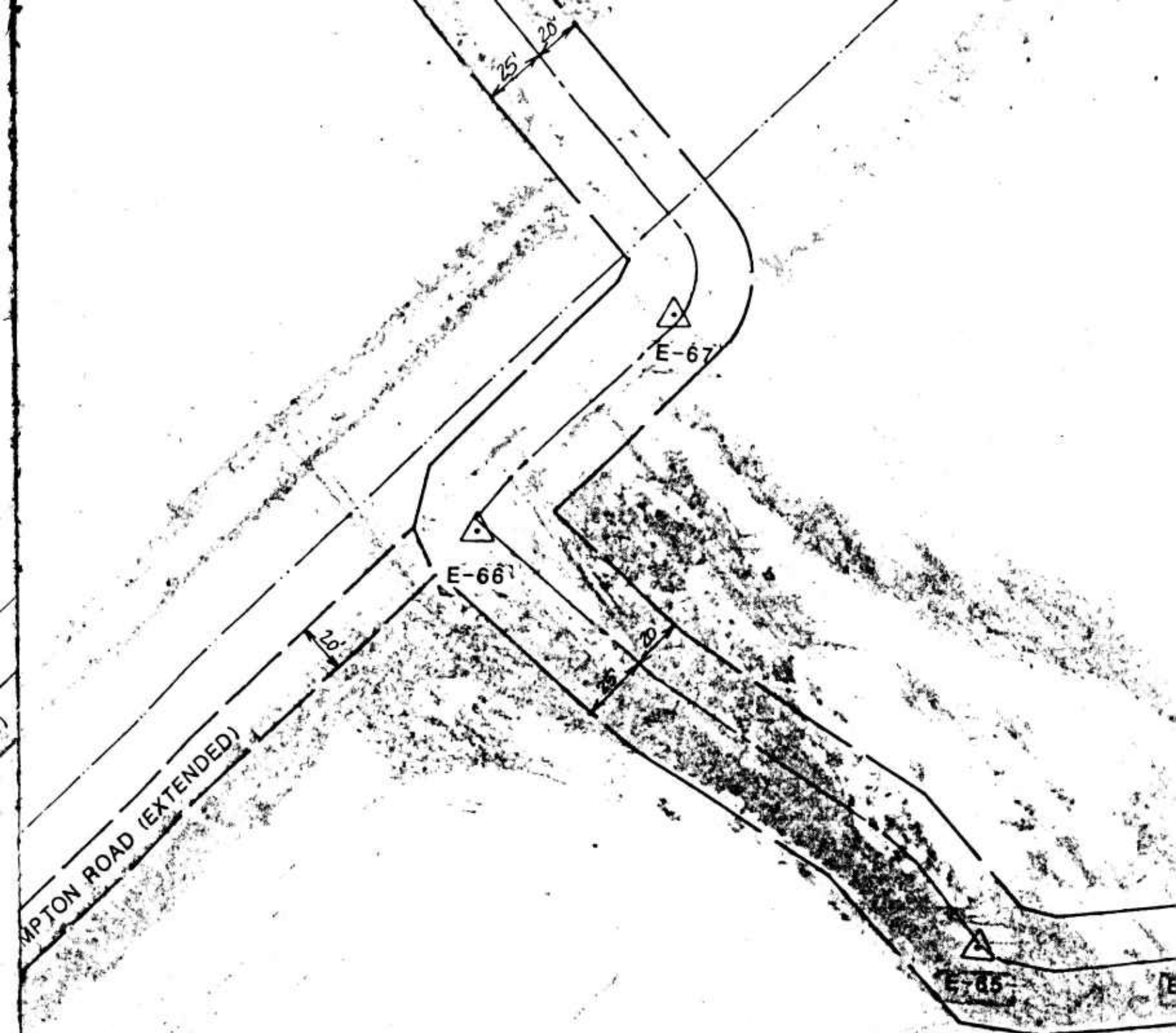
MATCH SHEET 46

RECKINGER

100-015-

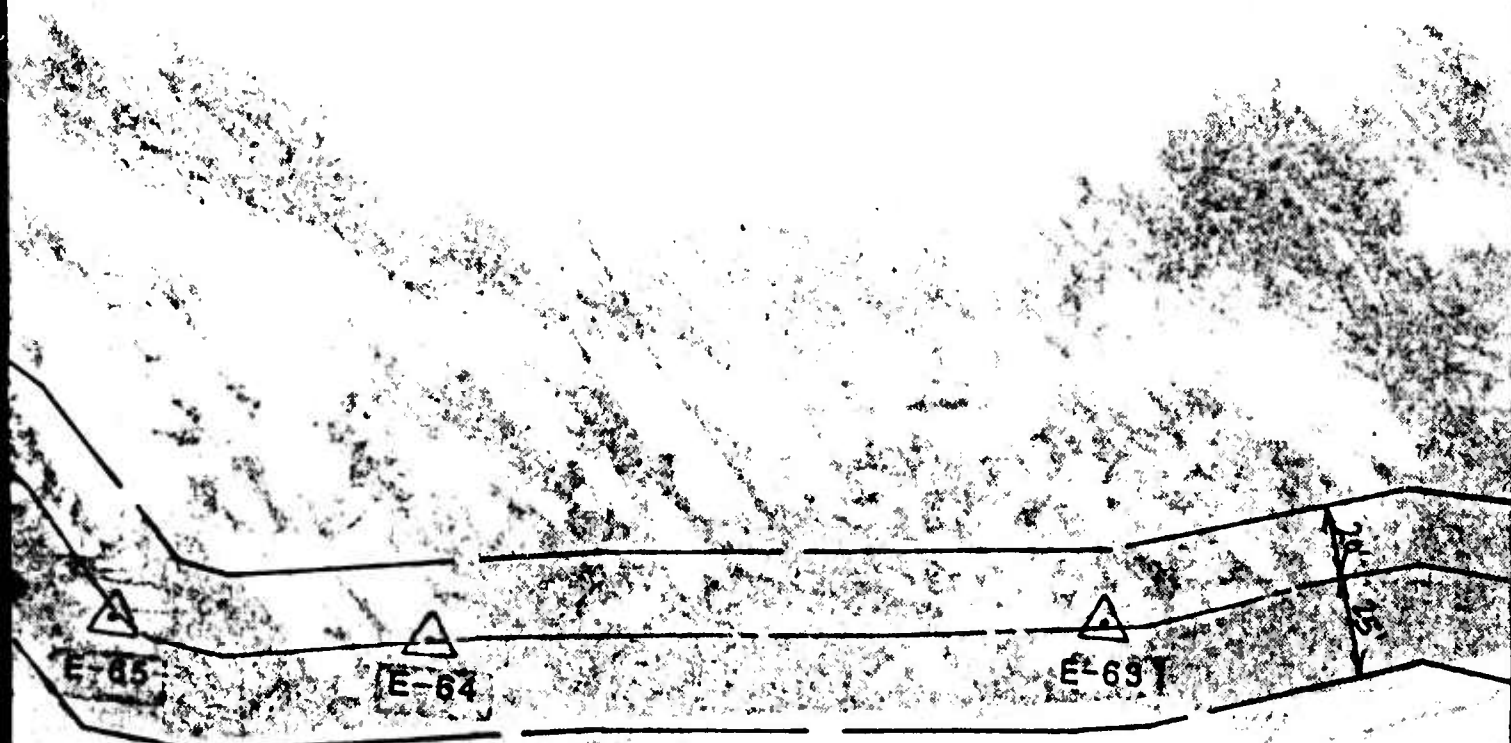
MATCH SHEET 46

HAMPTON ROAD (EXTENDED)

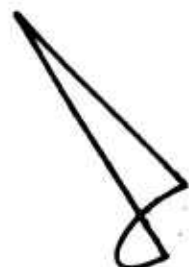


CONSUMERS POWER CO.

100-005



■ SHOVEL TEST UNIT

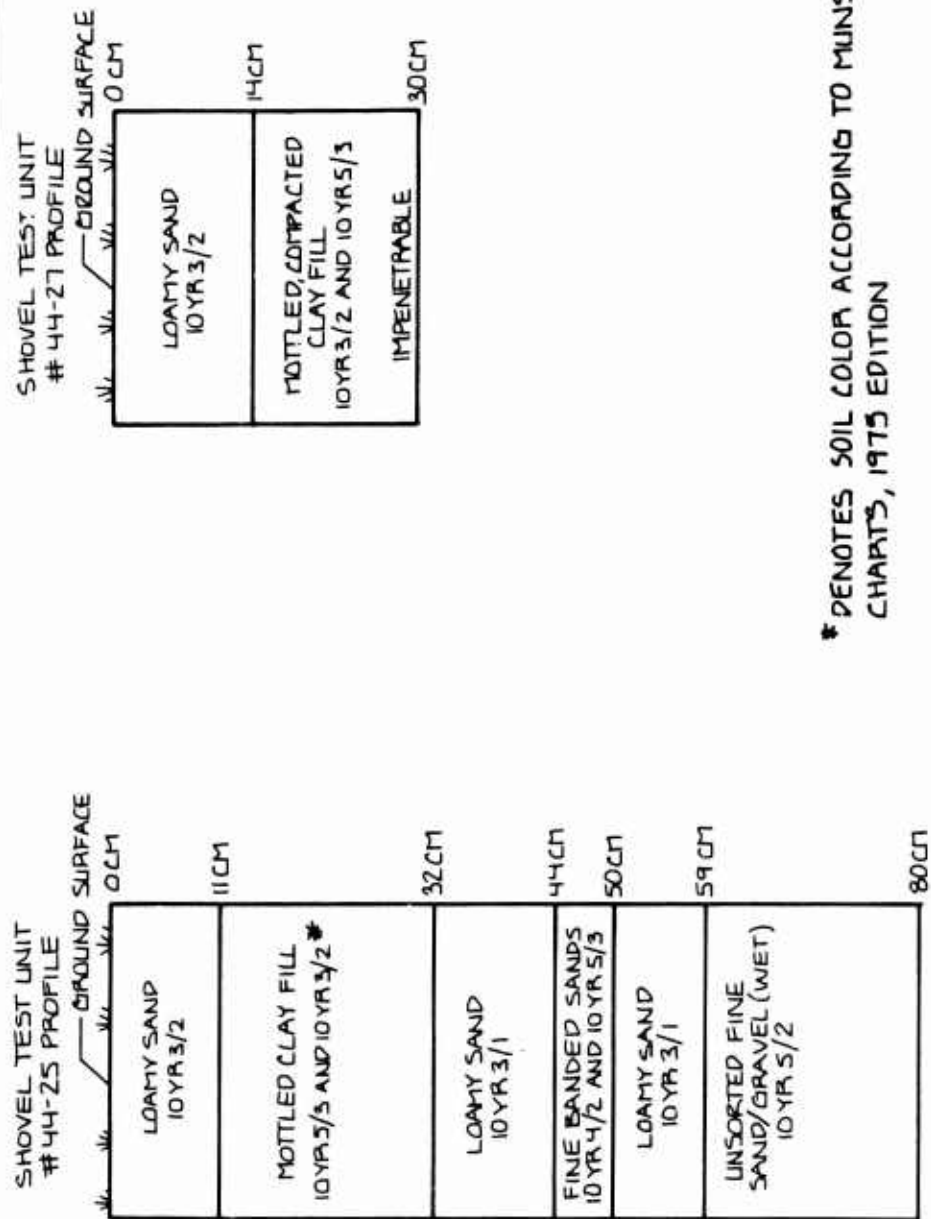


NORTH 1"=50'

12 meters apart and at 15 meter intervals. A total of 2225 linear feet was surveyed with 93 shovel test units. Fifteen of the shovel test units were not excavated, for they were located either under concrete and other heavy rubble, in standing water, or in obviously wet loci. Only one of these units, No. 44-25, was located on the beach ridge. Even this unit exhibited some disturbance, as Figure 15 illustrates. This profile shows clay fill from 11 and 32 cm below the surface, with natural deposits below this. The latter include a stable, highly organic soil unit from 32 to 44 cm below the surface, a series of alternating bands of sand with varying quantities of organics from 44 to 59 cm below the surface, and a unit comprised of poorly sorted gravelly sands to a depth of 80 cm. Soils below the clay fill were screened and found to be sterile. All other shovel test units excavated were disturbed to a depth of up to 80 cm below the surface or had soil profiles characteristic of active beach deposition and erosion. Typical profiles for the linear transect originating at shovel test unit No. 44-25 and ending at unit No. 44-31 are given in Figure 15. Shovel test units No. 44-27 and No. 44-29 are both severely disturbed by clay fill, while unit No. 44-31 has an active beach profile.

Given these results, it was decided, with the approval of the Chicago District Corps of Engineers Archeologist (Mr. Keith Ryder, personal communication to Mr. D. J. Weir, September 3, 1987), to modify the survey strategy. The shovel test interval was increased to 30 meters, and any units on obviously eroded beach were omitted. Subsequently, a total of 34 test units were gridded over the remaining 1700 linear feet of corridor segment 8. Nineteen of these were not excavated as they fell on active, eroded beach. Soil profiles of the remaining 15 test units continued to demonstrate that the corridor segment crosses only active beach and/or disturbed areas of fill. No cultural materials were found anywhere in segment 8 that could not be attributed to recent activities. Finally, a large area of the 585-foot amsl beach ridge was exposed in parcels 29 and 30 of real estate sheet 44. Surface reconnaissance of the area to the south of the corridor segment did not reveal any cultural materials.

FIGURE 15
CORRIDOR SEGMENT 8 PROFILES
 Advance Measures Flood Control Project
 Hampton Township - Bay City, Michigan

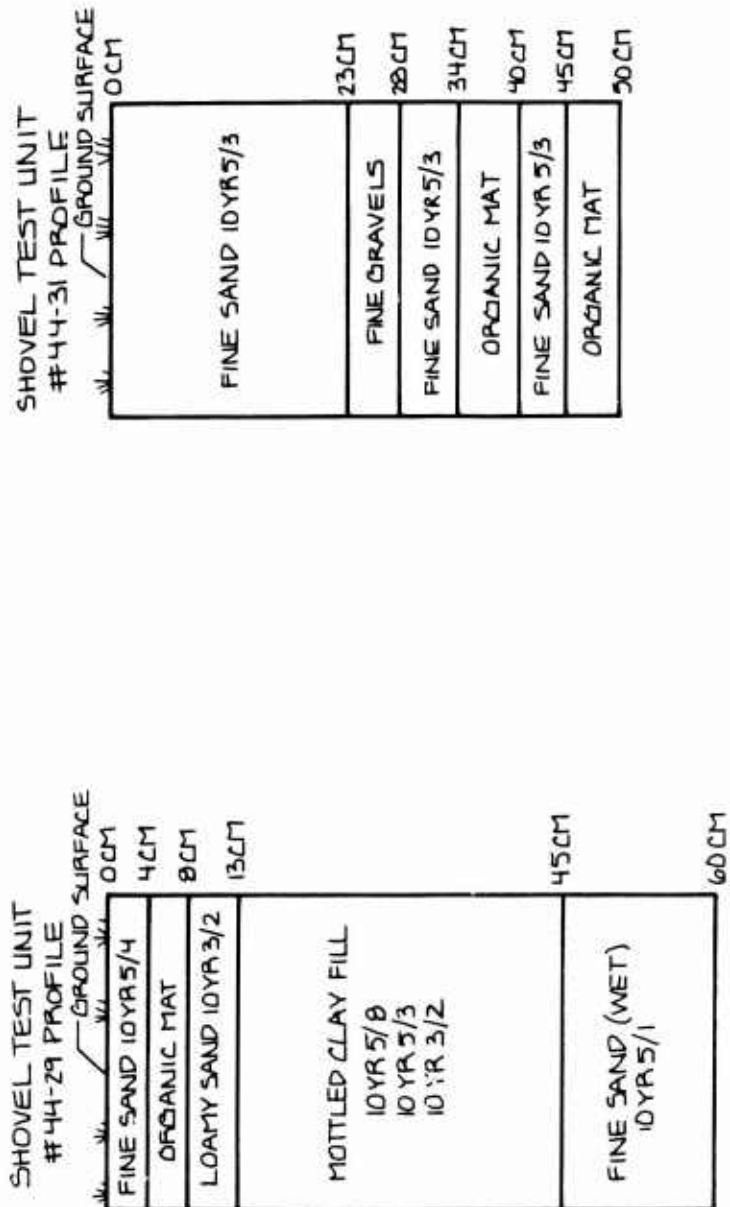


* DENOTES SOIL COLOR ACCORDING TO MUNSELL SOIL COLOR CHARTS, 1975 EDITION

FIGURE 15 con't.

CORRIDOR SEGMENT 8 PROFILES

Advance Measures Flood Control Project
Hampton Township - Bay City, Michigan



CONCLUSIONS AND RECOMMENDATIONS

Survey of corridor segments 1-8 did not produce anything of historic or prehistoric significance. No impact on cultural resources in these corridor segments surveyed is anticipated in light of these finds; therefore, construction clearance is recommended in these areas. Should additional realignments or construction activities directly impinge upon the 585-foot amsl beach ridge, additional archeological investigations employing the same or similar survey methodology should be conducted since sites are known to occur on this landform (Prahl 1987). Additional realignments or construction activities away from this beach ridge should require further investigation only if the area can be shown to be undisturbed. It is further recommended, if undisturbed areas away from the beach ridge require survey, that the survey methodology employed be modified to take into account the vastly lower potential for finding significant cultural resources here.

Both the previous investigation (Prahl 1987) and this investigation failed to locate any evidence of significant archeological material. This is due in part to the nature of the area investigated. The portions immediately along the Saginaw Bay shore were found to be generally modified by private landowners as a response to the fluctuating water level in the bay. Evidence of both filling and diking was widespread throughout the area. Those shore edge deposits found to be intact showed widespread evidence of mixing and sorting due to near-shore wave action. Those portions of the corridor below the 585-foot amsl beach ridge were most likely submerged or existed as low, wet areas throughout most of prehistory and are unlikely to contain archeological remains. However, additional surveys should be conducted on these areas to confirm this observation. As stated above, areas at or about the 585-foot amsl beach ridge are likely to contain archeological sites and should be considered sensitive areas.

REFERENCES CITED

Lovis, William A. (editor)

- 1986 Archeological Investigation at Sites 20BY77, 20BY78, 20BY79 at the Third Street Bridge Replacement, Bay City, Michigan. Report submitted to the City of Bay City, Michigan Department of Transportation, Michigan Department of State, Federal Highway Administration, U.S. Department of Transportation.

Prahl, Earl J.

- 1987 Proposed Advance Measures Flood Control Project, Hampton Township, Bay County, Michigan, Intensive Archaeological Survey, Volume 1. Caminos Associates, Bay City, Michigan.

Weesies, Glenn A.

- 1980 Soil Survey of Bay County, Michigan. U.S. Department of Agriculture, Soil Conservation Service, Washington, D.C.

APPENDIX A
PROJECT PERSONNEL VITAE

CURRICULUM VITAE OF DONALD J. WEIR

PERSONAL INFORMATION

Address and Phone: Gilbert/Commonwealth
209 East Washington Avenue
Jackson, Michigan 49201

Citizenship: United States

Position: Manager, Cultural Resources

EDUCATION

1979 M.A. Anthropology (Archeology) Michigan State University
1970 B.S. Divisional Social Science (with honors), Michigan State University

EMPLOYMENT AND EXPERIENCE

1974 to Present Gilbert/Commonwealth, Jackson, Michigan
1987 Principal Investigator/Project Manager, cultural resource study
Cherry Run McConnellsburg, 230 kV Transmission Line, Pennsylvania.

Project Manager, Archeological Mitigation of four sites located on the Ohio River floodplain, Wm. H. Zimmer Generating Station, Moscow, Ohio.

Principal Investigator/Project Manager Phase I Archeological Survey on a proposed pipeline right-of-way in central Michigan.

1986 Project Manager, survey and testing at the Wm. H. Zimmer Generating Station, Ohio.

Principal Investigator/Project Manager, 1986 cultural resource investigation, Hiawatha National Forest, Michigan.

Principal Investigator/Project Manager, Phase I cultural resource survey, U.S. 27 St. Johns Bypass, Michigan.

Project Manager, Phase II archeological testing, Chrysler's Auburn Hills Technology Center, Michigan.

1985 Principal Investigator/Project Manager, archeological investigation along the Ohio portions of the Erie Pipeline Project, Ohio.

Principal Investigator/Project Manager, archeological survey of the Amarillo Pipeline Upgrade IV Project, Iowa.

DONALD J. WEIR (Cont'd.)

Project Manager, archeological testing, St. Aubin Park Site, Detroit, Michigan.

Project Manager, archeological monitoring, Harborside Development, Detroit, Michigan.

Project Manager, archeological monitoring, East Jefferson, East Grand Boulevard Interchange Project, Michigan.

Principal Investigator/Project Manager, 1985 cultural resource investigation, Hiawatha National Forest, Michigan.

Principal Investigator/Project Manager, archeological testing, Site 20BZ16, Platte River Campground, Sleeping Bear Dunes National Lakeshore, Michigan.

1984

Co-Principal Investigator/Project Manager, archeological mitigation of the Millender Center Project, Detroit, Michigan.

Principal Investigator/Project Manager, cultural resource investigation, Hiawatha National Forest (1984), Michigan.

Co-Principal Investigator/Project Manager, archeological mitigation of the Detroit CATS System, Detroit, Michigan.

Principal Investigator/Project Manager, archeological and geoarcheological site location survey, M-47 Bridge Replacement Project, Michigan.

Principal Investigator/Project Manager, archeological survey of the Presque Isle Pipeline, Michigan.

Principal Investigator/Project Manager, archeological, historical and architectural evaluation, Ecorse Creek Flood Control Project, Michigan.

Principal Investigator/Project Manager, cultural resource investigation, M-49 Bridge Replacement Project, Michigan.

Principal Investigator/Project Manager, archeological survey of portion of the Sleeping Bear Dunes National Lakeshore, Michigan.

Project Director, archeological survey, Fritz Creek to Soldotna Transmission Line, Alaska.

1983

Principal Investigator/Project Manager, archeological and geoarcheological investigation of the I-94 Blue Water Bridge Project, Port Huron, Michigan.

Project Manager, cultural resource investigation of Hiawatha National Forest (1983), Michigan.

DONALD J. WEIR (Cont'd.)

Project Manager, land-use history of the proposed Woodward Light-Rail System, Detroit, Michigan.

Co-Principal Investigator/Project Manager, Phase II archeological investigations of the Detroit CATS System, Detroit, Michigan.

Principal Investigator, archeological/historical investigation of the ELF System, Upper Peninsula of Michigan.

Co-Principal Investigator/Project Manager, cultural resource investigation of the M-43 improvement project, Van Buren County, Michigan.

Principal Investigator/Project Manager, archeological investigation of the Amarillo upgrade pipeline project, Southwest Iowa.

Co-Principal Investigator, archeological/historical investigation of the proposed Chene II Park, Detroit, Michigan.

1982

Project Manager, Class I cultural resources overview for the proposed Frontier Pipeline, Wyoming.

Project Manager, Class III cultural resources survey, Frontier Pipeline, Wyoming.

Principal Investigator/Project Manager, archeological survey for a new service drive, Saginaw Valley State College, Michigan.

Principal Investigator/Project Manager, cultural resource reconnaissance for a proposed harbor for light-draft vessels, Cross Village, Michigan.

Project Manager, archeological survey of a proposed 8-inch pipeline, West Virginia.

Principal Investigator/Project Manager, cultural resource survey along M-49, Hillsdale County, Michigan.

Principal Investigator/Project Manager, Phase II archeological testing for the proposed connection between M-62 and US-31, Berrien County, Michigan.

Co-Principal Investigator/Project Manager, historic and archeological resource survey for the I-94 Blue Water Bridge Plaza Revision, Port Huron, Michigan.

Principal Investigator/Project Manager, archeological survey for Northwest Perimeter Road, Oakland County, Rochester, Michigan.

Project Manager, Phase I cultural resource survey of a proposed natural gas pipeline, Pennsylvania.

DONALD J. WEIR (Cont'd.)

- 1981**
- Principal Investigator/Project Manager, archeological and historical investigation of Site MUP-2-3, Michigan.
- Project Manager, cultural resource inventory of the Trailblazer Pipeline, Nebraska, Wyoming and Colorado.
- Principal Investigator/Project Manager, archeological and historical assessment, Flint Area Plant Site, Michigan.
- Principal Investigator/Project Manager, cultural resource investigation, Williamsburg Green No. 3 Development, Michigan.
- Project Manager, cultural resource investigation of Hiawatha National Forest (1981), Michigan.
- Principal Investigator/Project Manager, cultural resource survey, U.S. 10, Oakland County, Michigan.
- Project Manager, cultural resource investigation, Ottawa National Forest (1981), Michigan.
- Principal Investigator/Project Manager, Phase II cultural resource investigation of three sites along M-59, Michigan.
- Principal Investigator/Project Manager, archeological and historical investigation, M-25, Bay City, Michigan.
- Principal Investigator/Project Manager, archeological investigation at Mile Post 41.55, Minnesota.
- Project Manager, archeological survey of U.S.A. - Lynn-DeBryan No. 1-24 Drill Site, Michigan.
- Project Manager, archeological testing, Trailblazer Pipeline Project, Nebraska, and Wyoming.
- 1980**
- Principal Investigator/Project Manager, cultural resource evaluation of U.S. 12 in Southeastern Michigan.
- Project Manager, cultural resource investigation of the Hiawatha National Forest, Michigan.
- Principal Investigator/Project Manager, cultural resource investigation M-32 in Northeastern Michigan.
- Principal Investigator/Project Manager, archeological and historical survey, City of Harbor Beach, Michigan.
- Principal Investigator/Project Manager, archeological investigation of Mile Post 149.25, Minnesota.

DONALD J. WEIR (Cont'd.)

Principal Investigator/Project Manager, archeological survey of treatment site for Genesee County sewage disposal system, Michigan.

Principal Investigator/Project Manager, archeological survey State Road (Beebe Creek) bridge replacement, Michigan.

1979

Project Manager, archeological survey of the Red Run-Lower Clinton River Flood Control Project, Macomb County, Michigan.

Project Manager, cultural resources inventory, Ridgewood Vista Housing Project, Jackson County, Michigan.

Project Manager, archeological survey, Eau Claire County Airport, Chippewa County, Wisconsin.

Principal Investigator, cultural resources inventory of the St. Vincent, Minnesota, to St. Clair, Michigan gas pipeline for the Great Lakes Gas Transmission Company.

Principal Investigator, cultural resource assessment level survey of eight candidate power plant sites for Consumers Power Company.

1978

Crew Member, archeological and historical investigations at the Riverfront Ice Arena Site, Wayne County, Michigan for Detroit Historical Society.

Project Manager, archeological investigations of Austin Lake Marsh fill area, Kalamazoo County, Michigan for U.S. Army Corps of Engineers.

Field Director, archeological survey of microwave tower location, Minnesota and North Dakota, for Cooperative Power Association.

Project Manager, archeological investigation, Indian River and Bay, Delaware for U.S. Army Corps of Engineers.

Project Manager, 40 percent archeological sample of 62,400 acres of the St. Croix National Scenic Riverway, Wisconsin and Minnesota, for the National Park Service.

Project Coordinator, archeological testing at Lowes Island, Virginia for Fairfax County Water Authority.

1977

Field Director, archeological survey and testing, Nicolet National Forest, Oneida County, Wisconsin for U.S. Forest Service.

Field Director, archeological and historical survey and test excavation for 100 miles of pipeline, southeastern Minnesota, for Williams Brother Inc.

DONALD J. WEIR (Cont'd.)

Field Director, archeological excavations at site of War of 1812, River Raisin Battlefield, Monroe County, Michigan for Monroe County Historical Society.

Field Director, archeological survey for 45 miles of transmission lines, Cass and Crow Wing Counties, Minnesota for United Power Association.

Field Director, archeological survey of transmission and water pipelines, McLean County, North Dakota for Cooperative Power Association.

Project Manager, 40 percent archeological sample of 62,400 acres of St. Croix National Scenic Riverway, Wisconsin and Minnesota for the National Park Service.

1976

Field Director, archeological survey for an environmental report on a nuclear power plant site, Erie County, Ohio for Ohio Edison Company.

Field Director, archeological survey for a nuclear power plant site environmental study, Lorain County, Ohio, for Ohio Edison Company.

Field Director, archeological survey for an environmental report for 120 miles of transmission line, East Central Pennsylvania, for Pennsylvania Power and Light Company.

Field Director, archeological survey and testing in the Nicolet National Forest, Forest and Florence Counties, Wisconsin for U.S. Forest Service.

Crew Member, underwater archeological survey and historic wreck identification in Detour Harbor, Chippewa County, Michigan, for U.S. Army Corps of Engineers.

Field Director, archeological survey of 13,500 acre Louisville Lake Reservoir, Clay and Effingham Counties, Illinois for U.S. Army Corps of Engineers.

Field Member, archeological mitigation in Foote Wash and No Name Wash, Graham County, Arizona, for the National Park Service.

Field Director, archeological survey and testing, Nicolet National Forest, Oconto, Wisconsin, for U.S. Forest Service.

Field Director archeological survey and testing in the Nicolet National Forest, Langlade County, Wisconsin, for U.S. Forest Service.

Field Director, archeological and historical survey and evaluation of Madrid Bend Levee, Fulton County, Kentucky, for U.S. Army Corps of Engineers.

DONALD J. WEIR (Cont'd.)

Crew Member, archeological survey of 20 percent sample of 62,400 acres of St. Croix National Scenic Riverway, eastern Minnesota and western Wisconsin, for National Park Service.

Field Director, archeological and historical survey of Mississippi River dikes and revetments, Fulton and Hickman Counties, Kentucky.

1975

Principal Investigator, archeological survey of Loran-C Mini Chain Site, Drummond Island, Chippewa County, Michigan for Ninth Coast Guard District.

Field Director, archeological survey of East Bend Station, fossil fuel plant site, Boone County, Kentucky for Cincinnati Gas and Electric Company.

Field Director, statistical sampling of the 58,000 acre Choptank Watershed and determination of channel improvement impact on archeological and historic sites, Kent County, Delaware and Caroline and Queen Anne Counties, Maryland for Soil Conservation Service.

Field Director, archeological survey of 30 miles of transmission lines, Boone and Campbell Counties, Kentucky; Ohio and Switzerland Counties, Indiana for Cincinnati Gas and Electric Company.

Field Director, archeological survey of the Middle Branch of the Cass River, Sanilac County, Michigan for Soil Conservation Service.

1974

Field Director, archeological Survey I-275 Highway, Wayne and Monroe Counties, Michigan, for Michigan History Division.

Field Director, archeological survey for 25 miles of transmission line, Clermont and Hamilton Counties, Ohio, and Campbell County, Kentucky for Cincinnati Gas and Electric Company.

1970

Michigan State University, East Lansing, Michigan
Field Crew Member, various prehistoric sites in northern Michigan.

Assistant Field Director, excavation Classic Mayan Site, Guatemala, for Foundation for Latin American Anthropological Research.

1968

Field Crew Member - O'Neil Site

PUBLICATIONS

Review of: The Late Prehistory of the Lake Erie Drainage Basin.
The Michigan Archaeologist, Volume 25, Nos. 3-4, 1979.

With David G. Anderson, Archeological Testing at the Herman Farm Site (20 BE 189): An Example of the Utility of Controlled Surface

DONALD J. WEIR (Cont'd.)

Collection for Site Evaluation. The Michigan Archaeologist.
Volume 32, No. 4, 1986.

Technical Reports: (Reports with major responsibility)

- 1986 A Phase I Cultural Resource Survey of The Southern Terminal of the US-27 St. Johns Bypass, Clinton County, Michigan. Gilbert/Commonwealth Technical Report R-2849.
- 1984 Archeological Survey of the Presque Isle Pipeline, Presque Isle County, Michigan. Gilbert/Commonwealth Technical Report R-2650.
- 1984 Phase I Archeological and Geoarcheological Site Location Survey for the M-49 Bridge Replacement Project, Camden, Michigan. Gilbert/Commonwealth Technical Report R-2674.
- 1984 Cultural Resource Survey Hiawatha National Forest (1983). Gilbert/Commonwealth Technical Report R-2589.
- 1984 Phase I Archeological and Geoarcheological Site Location Survey for the M-49 Bridge Replacement Project, Cemelia, Michigan. Gilbert/Commonwealth Technical Report R-2674.
- 1983 Archeological Investigation of Portions of the Amarillo Pipeline Upgrade. Gilbert/Commonwealth Technical Report R-2590.
- 1983 A Cultural Resource Investigation of the Chene Park II Site, Detroit, Michigan. Gilbert/Commonwealth, R-2523.
- 1983 Archeological and Geoarcheological Phase II Evaluation for the I-94 Blue Water Bridge Plaza Revision. Gilbert/Commonwealth Technical Report R-2542.
- 1983 Archeological and Historical Investigation of the M-43 Improvement Project, I-96 to the West Village Limits of Bangor, Van Buren County, Michigan. Gilbert/Commonwealth, Technical Report R-2577.
- 1983 Historical and Archeological Reconnaissance Survey of the U.S. Navy's Proposed Extremely Low Frequency Communication System (ELF), Marquette and Dickinson Counties, Michigan. Gilbert/Commonwealth Technical Report R-2547.
- 1983 Preliminary Historic and Archeological Resource Survey for the I-94 Blue Water Bridge Plaza Revision, Port Huron, Michigan. Gilbert/Commonwealth Technical Report R-2507.
- 1983 Phase II Archeological Testing and Historical/Architectural Review for the Connector Between M-62 and US-31, Berrien County, Michigan. Gilbert/Commonwealth Technical Report R-2503.

DONALD J. WEIR (Cont'd.)

- 1982 Archeological Survey of the Northwest Perimeter Road, Oakland University, Oakland County, Michigan. Gilbert/Commonwealth Technical Report R-2472.
- 1982 Archeological Survey for a New Service Drive, Saginaw Valley State College. Gilbert/Commonwealth Technical Report R-2452.
- 1982 Cultural Resource Investigation of the US-10 Improvement Project. Gilbert/Commonwealth Technical Report R-2406.
- 1982 1981-1982 Cultural Resource Survey of the Ottawa National Forest. Gilbert/Commonwealth Technical Report R-2434.
- 1982 Cultural Resource Reconnaissance for a Proposed Harbor for Light-Draft Vessels at Cross Village, Michigan. Gilbert/Commonwealth Technical Report R-2442.
- 1982 Phase I Preliminary Cultural Resource Site Identification for a Curve Realignment on M-49 Between Litchfield and Allen, Hillsdale County, Michigan. Gilbert/Commonwealth Technical Report R-2486.
- 1981 Archeological Survey of Proposed Bridge Replacement, Beebe Creek, Hillsdale County, Michigan. Gilbert/Commonwealth Technical Report R-2256.
- 1981 A Cultural Resource Survey of the Hiawatha National Forest (1980). Gilbert/Commonwealth Technical Report R-2247.
- 1981 Archeological and Historical Investigation of Site MUP 2-3. Gilbert/Commonwealth Technical Report R-2296.
- 1981 Preliminary Archeological and Historical Survey, Wastewater Treatment Plant, Harbor Beach, Michigan. Gilbert/Commonwealth Technical Report R-2279.
- 1981 An Archeological Resource Inventory - Trailblazer Pipeline, Nebraska, Colorado, and Wyoming.
- 1981 Archeological Survey of U.S.A. - Lynn DeBruyn No. 1-24, Lee Township, Calhoun County, Michigan. Gilbert/Commonwealth Technical Report R-2328.
- 1980 Cultural Resource Investigation for the M-32 Project. Gilbert/Commonwealth Technical Report R-2227.
- 1980 Archeological Investigation Mile Post 149.25. Gilbert/Commonwealth Technical Report R-2173.
- 1980 Cultural Resource Investigations of the Hilltop and Douglas Avenue Sites, Kalamazoo, Michigan. Gilbert/Commonwealth Technical Report R-2184.

DONALD J. WEIR (Cont'd.)

- 1980 Archeological Survey of Treatment Site Genesee County Disposal System No. 7. Gilbert/Commonwealth Technical Report R-2222.
- 1979 Cultural Resource Management Assessment Study of Eight Candidate Power Plant Sites. Gilbert/Commonwealth Technical Report R-2098.
- 1979 Archeological Investigations, Eau Claire County Airport, Chippewa County, Wisconsin. Gilbert/Commonwealth Technical Report R-2081.
- 1979 Cultural Resource Inventory Ridgewood Vista Housing Project. Gilbert/Commonwealth Technical Report R-2056.
- 1978 Cultural Resource Overview Indian River and Bay, Delaware. Gilbert/Commonwealth Technical Report R-1980.
- 1978 Archeological Investigation Potomac River Raw Water Facility, Pump Station. Gilbert/Commonwealth Technical Report R-1977.
- 1978 Archeological Survey of Red Run-Lower Clinton River Flood Control Project-Macomb County, Michigan. Gilbert/Commonwealth Technical Report R-1967.
- 1978 Archeological Investigations, Austin Lake Marsh Fill Area. Gilbert/Commonwealth Technical Report R-1904.
- 1978 Archaeological Survey of the St. Croix National Scenic Riverway, Phase II. Gilbert/Commonwealth Technical Report R-1897.
- 1976 An Archeological Inventory of a Portion of the Nicolet National Forest, Oneida County, Wisconsin. Gilbert/Commonwealth Technical Report R-1806.
- 1976 An Archeological Inventory of a Portion of the Nicolet National Forest, Oneida County, Wisconsin. Gilbert/Commonwealth Technical Report R-1805.
- 1976 Survey and Assessment of Archeological and Historical Resources to be Affected by Revetment Construction along the Mississippi River, Heckman and Fulton Counties, Kentucky. Gilbert/Commonwealth Technical Report R-1780.
- 1976 Survey and Assessment of Archeological, Architectural, Historical Resources, to be Affected by the Reconstruction of Madrid Bend Levee, Fulton County, Kentucky. Gilbert/Commonwealth Technical Report R-1779.
- 1976 Archeological Inventory of Proposed Exchange Areas in the Nicolet National Forest, Langlade County (TeeN-R9E) Sections 16, 17 and 22. Gilbert/Commonwealth Technical Report R-1772.

DONALD J. WEIR (Cont'd.)

- 1976 Archeological Inventory of Proposed Exchange Area in Nicolet National Forest, Oconto County (T33N-R16E) Section 15. Gilbert/Commonwealth Technical Report R-1771.
- 1976 Archeological Inventory of Proposed Exchange Area Nicolet National Forest, Oconto County (T31N-R16E) Section 13. Gilbert/Commonwealth Technical Report R-1770.
- 1976 Archeological Inventory of a Proposed Exchange Area in the Nicolet National Forest, Oconto County, Wisconsin. Gilbert/Commonwealth Technical Report R-1769.
- 1976 Archeological Inventory of a Proposed Exchange Area in the Nicolet National Forest, Florence County, Wisconsin. Gilbert/Commonwealth, R-1768.
- 1976 Final Report and Evaluation of Archeological Resources of the Upper East Bend Bottom. Gilbert/Commonwealth Technical Report R-1724.
- 1975 Cultural Resource Survey of the Middle Branch of Cass River and Hyslop Drain Sanilac County, Michigan. Gilbert/Commonwealth Technical Report R-1710.
- 1975 Archeological Inventory of Proposed Land Exchanges within the Nicolet National Forest, Florence County, Wisconsin. Gilbert/Commonwealth Technical Report R-1709.
- 1975 Drummond Island Archeological Survey. Gilbert/Commonwealth Technical Report R-1672.
- 1974 I-275 Archeological and Historical Survey. Gilbert/Commonwealth Technical Report R-1610.

Papers Presented:

- 1986 "Archeological and Geomorphic Mitigation of Eight Sites Associated with the Intermountain Power Project, paper presented at the Third National Conference on Cultural Record Management in the Electric Utility Industry, St. Louis, Missouri.
- 1982 "Managing the Trailblazer Natural Gas Pipeline Project: An Example of Management Oriented Archeology." Presented at the 40th Plains Anthropological Conference and 15th Chacmool Symposium, Calgary, Alberta. November.
- 1982 "Archeological Resource Management on the Trailblazer Natural Gas Pipeline Project, Nebraska, Colorado and Wyoming." Paper presented at the Oil and Gas Exposition in Detroit, Michigan. October.
- 1982 "Identifying Archeological Remains." Seminar conducted for the Natural Gas Pipeline Company of America in Joliet, Illinois. August.

DONALD J. WEIR (Cont'd.)

PROFESSIONAL MEMBERSHIPS/AFFILIATIONS

Society for American Archeology
Society for Historical Archeology
Michigan Archeological Society
Conference on Michigan Archeology (Executive Board 1984-1987) (Vice President 1987)
SAA - COPA State Representative

REFERENCES

Dr. William A. Lovis
Michigan State University
(517) 355-3485

Dr. Charles E. Cleland
Michigan State University
(517) 353-7861

Dr. Curtis E. Larsen
USGS National Center
(703) 860-6464

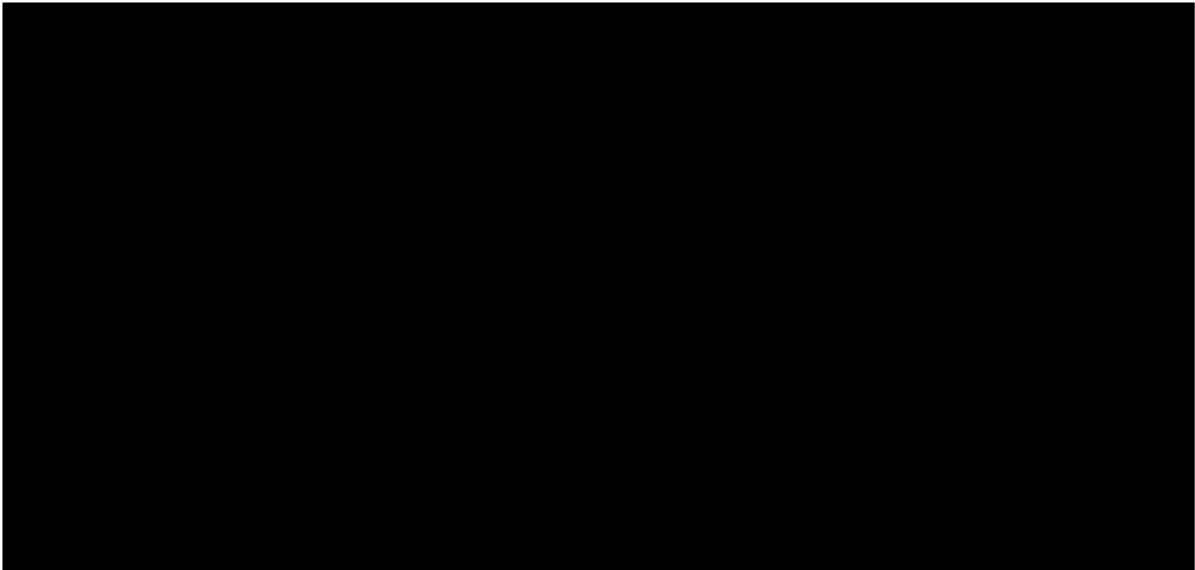
Dr. John R. Kern
Director
Division of Historical and Cultural
Affairs
State of Delaware
Dover, Delaware
(302) 436-5313

Willaim W. Schivley
Manager - Environmental Science Dept.
Gilbert/Commonwealth
209 E. Washington
Jackson, Michigan 49201
(517) 788-3000

James A. Robertson

CURRICULUM VITAE

PII Redacted



EDUCATION:

Hinsdale Central High School, Hinsdale, Illinois: College Preparatory, 1970.

College of Wooster, Wooster, Ohio: B.A. History, 1974.

University of Illinois - Chicago: M.A. Anthropology, 1980.

Michigan State University, East Lansing, Michigan: PhD, 1987.

RESEARCH INTERESTS:

Eastern North American Archaeology and Ethnology, Hunter - Gatherer Adaptations, Settlement Systems, Spatial Analysis.

AREAS OF ANALYTICAL EXPERTISE:

Lithic Classification, Microwear/Use Polish Analysis of Stone Tools, Techniques of Spatial Analysis.

FIELD AND RESEARCH EXPERIENCE:

1977 June-September. Summer Staff. Dayton Museum of Natural History, Dayton, Ohio. Archaeological Field Technician.

1977 October. Archaeological Survey, I-270 Mitigation Project. University of Illinois - Chicago. Archaeological Field Technician.

1978 June-September. Summer Staff. Dayton Museum of Natural History, Dayton, Ohio. Field Supervisor for the excavation of the Ceremonial Lodge at the Incinerator Site (23 MY 57).

1978-1979 Analysis of the Incinerator Site (33 MY 57) lithic assemblage for M.A. Thesis.

1980 June-September. Summer Staff. Dayton Museum of Natural History, Dayton, Ohio. Flotation Laboratory Supervisor.

1981 June-September. Archaeological Field Technician. Huron-Manistee National Forest, Cadillac, Michigan. Cultural Resource Survey.

1982 August-September. Supervisor for the excavation of the Weber I site (20 SA 581). Phase III Archaeological Mitigation, Dehmel Road Bridge Project, Frankenmuth, Michigan.

1982-1983 October-April. Research Assistant, Michigan State University Museum. Analysis of the Weber I (20 SA 581) lithic assemblage.

1984 July-September. Archaeological Field Technician. Phase III Archaeological Mitigation of 20 BY 77, 20 BY 78, 20 BY 79; Third Street Bridge Project, Bay City, Michigan.

1984-1985 October-September. Research Assistant, Michigan State University Museum. Analysis of the lithic assemblages from 20 BY 77, 20 BY 78, and 20 BY 79.

TEACHING EXPERIENCE:

1977 Fall. Graduate Teaching Assistant. University of Illinois - Chicago. Department of Anthropology.

1978 Winter, Spring, Fall. Graduate Teaching Assistant. University of Illinois - Chicago. Department of Anthropology.

1979 Fall. Graduate Teaching Assistant. Michigan State University. Department of Anthropology.

1980 Winter, Spring, Fall. Graduate Teaching Assistant. Michigan State University. Department of Anthropology.

1981 Winter, Spring, Fall. Graduate Teaching Assistant. Michigan State University. Department of Anthropology.

1982 Winter. Graduate Teaching Assistant. Michigan State University. Department of Anthropology.

1983 Spring. Instructor. Michigan State University.
Department of Anthropology. Course: ANP 100 "Human
Evolution."

1986 Winter. Instructor. Michigan State University.
Department of Anthropology. Course: ANP 100 "Human
Evolution."

AWARDS AND SCHOLARSHIPS:

1981 Graduate Fellowship. Michigan State University.
Department of Anthropology. Awarded for Spring 1982.

PROFESSIONAL ORGANIZATIONS:

Society for American Archaeology.

PUBLICATIONS AND MANUSCRIPTS:

1980 "Chipped Stone and Socio-cultural Interpretations."
Unpublished M.A. Thesis. University of Illinois -
Chicago. Department of Anthropology.

"Distribution of the Lithic Materials at the Incinerator
Site, Dayton, Ohio." Paper presented to the 45th Annual
Meeting of the Society for American Archaeology,
Philadelphia, Pennsylvania. May 1, 1980.

1983 "The Incinerator Site: A Late 12th Century Fort Ancient
Village in the Great Miami River Valley." Paper
presented to the Upper Grand Valley Chapter of the
Michigan Archaeological Society. November, 1983.

"The Lithic Assemblage of 20 SA 581: Description and
Analysis." Chapter 4 in Archaeological Investigations
at the Weber I (20 SA 581) and Weber II (20 SA 582) Sites,
Frankenmuth Township, Saginaw County, Michigan. Edited
by William A. Lovis. The Museum, Michigan State
University.

(with William A. Lovis) "The Archaic of the Saginaw
Valley: The View from Weber I." Chapter 9 in
Archaeological Investigations at the Weber I (20 SA 581)
and Weber II (20 SA 582) Sites, Frankenmuth Township,
Saginaw County, Michigan. Edited by William A. Lovis.
The Museum, Michigan State University.

"Description and Preliminary Analysis of the Lithic
Assemblages at the Weber I Site." Paper presented at
the Midwest Archaeological Conference, October 24, Iowa
City, Iowa.

(with William A. Lovis) "Intra-site Organization at the Weber I Site." Paper presented at the Midwest Archaeological Conference, October 24, Iowa City, Iowa.

- 1984 "Stone Tools and Behavioral Inferences." Paper presented at the seminar titled "Human Values and the Built Environment Seen through a 12th Century Reconstruction," jointly funded by the Ohio Arts Council and the Ohio Humanities Council. Dayton, Ohio.

"Chipped Stone and Functional Interpretations: A Fort Ancient Example." Midcontinental Journal of Archaeology 9 (2): 251-267.

- 1985 "Stone Tool Function and Morphology: Two Contrasting Examples from the Incinerator Site." Paper presented at the seminar titled "Human Values and the Built Environment Seen through a 12th Century Reconstruction," jointly funded by the Ohio Arts Council and the Ohio Humanities Council. Dayton, Ohio.

(with William A. Lovis) "Rethinking the Archaic Chronology of the Saginaw Valley, Michigan." Paper presented at the 12th Annual Symposium of the Ontario Archaeological Society, October 26, London, Ontario.

- 1986 "Fort Ancient and the Persistence of Blade-Core Industries." Pennsylvania Archaeologist 56 (1-2): 29-36.

"The Lithic Assemblages of 20 BY 77, 20 BY 78, and 20 BY 79: Description and Analysis." In The Third Street Bridge Mitigation Project, Bay City, Michigan: Archaeological Investigations of 20 BY 77, 20 BY 78, and 20 BY 79. Edited by William A. Lovis. The Museum, Michigan State University.

SURVEY REPORTS:

- 1983 (With M. Holman and R. Kingsley) "An Archaeological Survey of the Proposed Hannah Technology and Research Center, Meridian Township, Michigan." Michigan State University Museum Archaeological Survey Report No. 57.

(with M. Holman and R. Kingsley) "An Archaeological Survey of the Genesee County Sewage Disposal System No. 5, Goodrich, Michigan." Michigan State University Museum Archaeological Survey Report No. 58.

(with M. Holman and R. Kingsley) "An Archaeological Survey of the Pero Lake Project Site, Lapeer County, Michigan." Michigan State University Museum Archaeological

Survey Report No. 61.

(with M. Holman and R. Kingsley) "An Archaeological Survey of M-13 from Verne Road to South Washington Road, Saginaw County, Michigan." Michigan State University Museum Archaeological Survey Report No. 65.

1984 (with M. Holman and R. Kingsley) "An Archaeological Survey of the Proposed M-49 Curve Realignment Alternate, Hillsdale County, Michigan." Michigan State University Museum Archaeological Survey Report No. 69.

(with M. Holman and R. Kingsley) "An Archaeological Survey of the Proposed Summer Ridge Apartments, St. Charles, Michigan." Michigan State University Museum Archaeological Survey Report No. 70.

(with M. Holman and R. Kingsley) "An Archaeological Evaluation of Caseville Township Airport, Huron County, Michigan." Michigan State University Museum Archaeological Survey Report No. 73.

1985 (with M. Holman) "An Archaeological Survey of a Proposed Wastewater Treatment Facility in Genoa Township, Livingston County, Michigan. Michigan State University Museum Archaeological Survey Report No. 81.

REFERENCES:

William A. Lovis
Curator of Great Lakes Anthropology
Michigan State University Museum
East Lansing, Michigan 48824
517-355-3485

Lawrence H. Keeley
Assistant Professor of Anthropology
Department of Anthropology
University of Illinois - Chicago
Box 4348 Chicago, Illinois 60680
312-996-2581

J. M. Heilman
Curator of Anthropology
Dayton Museum of Natural History
2629 Ridge Avenue
Dayton, Ohio 45414
513-275-7431

Margaret B. Holman
Research Associate
The Museum
Michigan State University
East Lansing, Michigan 48824
517-355-3496