

1.1.62 Test Excavation 162 (TE-162)

TE-162 was near the southeastern corner of the project area (Figure 249). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.64 mbs. The stratigraphy of TE-162 consisted of very dark brown, gravelly sandy loam Ap horizon (Stratum I) and brown, gravelly silt loam fill (Stratum II) overlying dark gray, natural extremely cobbly sand (Stratum III); grayish brown, natural gravelly silt loam (Stratum IV); and brown, natural gravelly loamy sand (Stratum V) (Figure 250 through Figure 252 and Table 62). No cultural materials were encountered.



Figure 249. TE-162, overview of the general location, view to northeast



Figure 250. TE-162, oblique view of the east wall, view to southeast



Figure 251. TE-162, close-up of the east wall, view to east

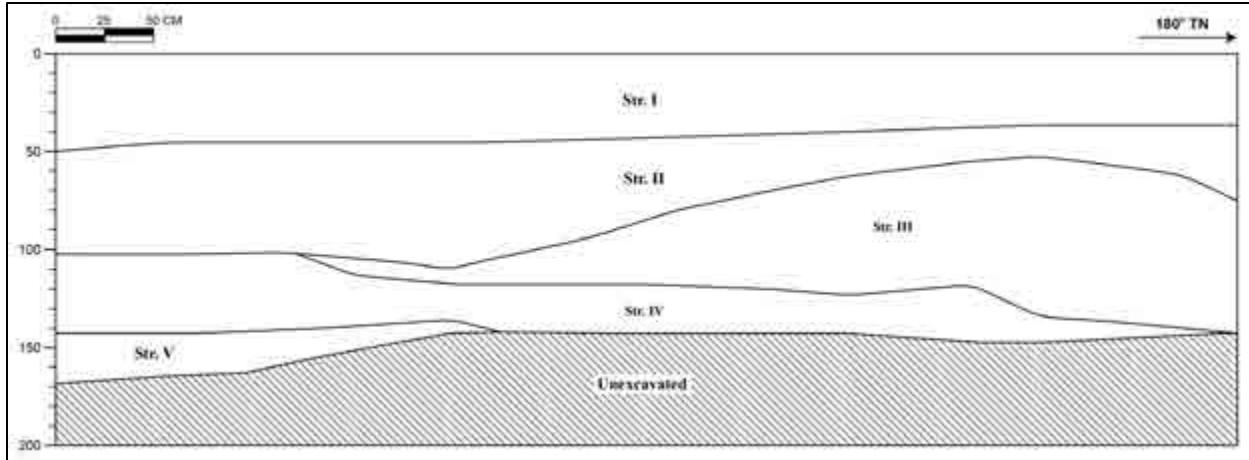


Figure 252. TE-162, stratigraphy of the east wall

Table 62. TE-162 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–45	Ap horizon; 7.5YR 2.5/3, very dark brown; gravelly sandy loam; moderate, fine blocky structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, smooth lower boundary; contained many mottles of 7.5YR 4/3, brown, loamy sand
II	33–106	Fill; 7.5YR 5/2, brown; gravelly silt loam; moderate, fine granular structure; moist, friable consistence; no cementation; plastic; terrigenous origin; clear, wavy lower boundary; contained common mottles of 7.5YR 3/1, very dark gray, loamy sand
III	50–140	Natural; 7.5YR 4/1, dark gray; extremely cobbly sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; many fine roots; clear, wavy lower boundary; contained common mottles of 10YR 5/2, grayish brown, silt loam
IV	100–146	Natural; 10YR 5/2, grayish brown; gravelly silt loam; moderate, fine granular structure; moist, friable consistence; no cementation; plastic; terrigenous origin; few fine roots; clear, irregular lower boundary; contained common mottles of 10YR 5/4, yellowish brown, silt loam
V	135–164	Natural; 10YR 5/3, brown; gravelly loamy sand; weak, fine granular structure; moist, loose consistence; no cementation; slightly plastic; mixed origin; lower boundary not observed

1.1.63 Test Excavation 163 (TE-163)

TE-163 was in the southeastern corner of the project area, west of the Waikapu Stream (Figure 253). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.64 mbs. The stratigraphy of TE-163 consisted of very dark brown, gravelly sandy loam Ap horizon (Stratum I) and brown, gravelly silt loam fill (Stratum II) overlying dark gray, natural extremely cobbly sand (Stratum III); grayish brown, natural gravelly silt loam (Stratum IV); and brown, natural gravelly loamy sand (Stratum V) (Figure 254 through Figure 256 and Table 63). No cultural materials were encountered.



Figure 253. TE-163, overview of the general location, view to northeast



Figure 254. TE-163, oblique view of the west wall, view to southwest



Figure 255. TE-163, close-up of the west wall, view to west

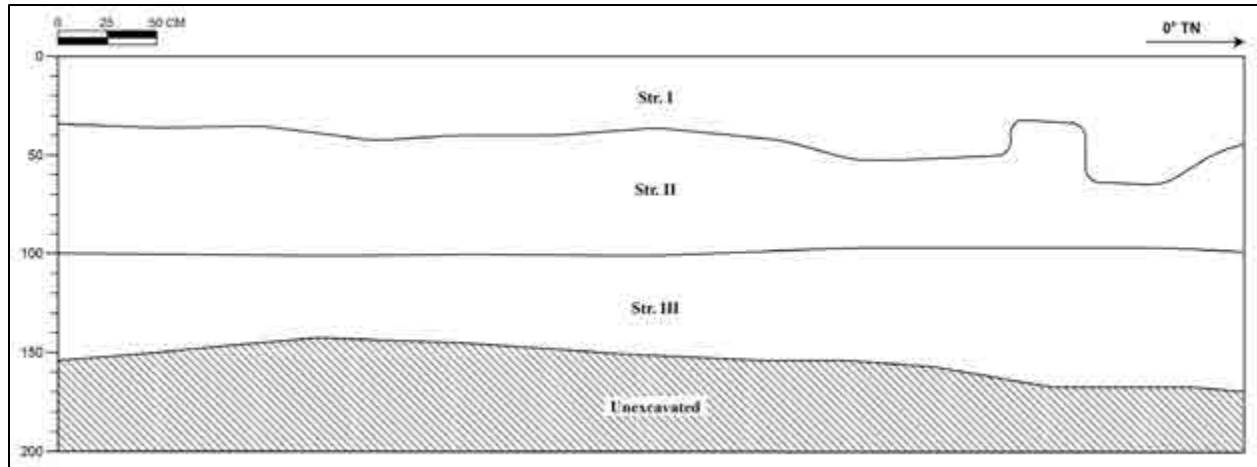


Figure 256. TE-163, stratigraphy of the west wall

Table 63. TE-163 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–45	Ap horizon; 7.5YR 2.5/3, very dark brown; gravelly sandy loam; moderate, fine blocky structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, smooth lower boundary; contained many mottles of 7.5YR 4/3, brown, loamy sand
II	33–106	Fill; 7.5YR 5/2, brown; gravelly silt loam; moderate, fine granular structure; moist, friable consistence; no cementation; plastic; terrigenous origin; fine roots common; clear, wavy lower boundary; contained common mottles of 7.5YR 3/1, very dark gray, loamy sand
III	50–140	Natural; 7.5YR 4/1, dark gray; extremely cobbly sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; terrigenous origin; many fine roots; clear, wavy lower boundary; contained common mottles of 10YR 5/2, grayish brown, silt loam
IV	100–146	Natural; 10YR 5/2, grayish brown; gravelly silt loam; moderate, fine platy structure; moist, friable consistence; no cementation; plastic; terrigenous origin; few fine roots; clear, irregular lower boundary; contained common mottles of 10YR 5/4, yellowish brown, silt loam
V	135–164	Natural; 10YR 5/3, brown; gravelly loamy sand; weak, fine granular structure; moist, loose consistence; no cementation; slightly plastic; mixed origin; lower boundary not observed

1.1.64 Test Excavation 164 (TE-164)

TE-164 was near the western boundary in the southern half of the project area (Figure 257). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.50 mbs. The stratigraphy of TE-164 consisted of a very dark brown, gravelly sandy loam Ap horizon (Stratum I) overlying dark yellowish brown, natural gravelly sandy clay loam (Stratum II) (Figure 258 through Figure 260 and Table 64). No cultural materials were encountered.



Figure 257. TE-164, overview of the general location, view to south



Figure 258. TE-164, oblique view of the east wall, view to southeast



Figure 259. TE-164, close-up of the east wall, view to east

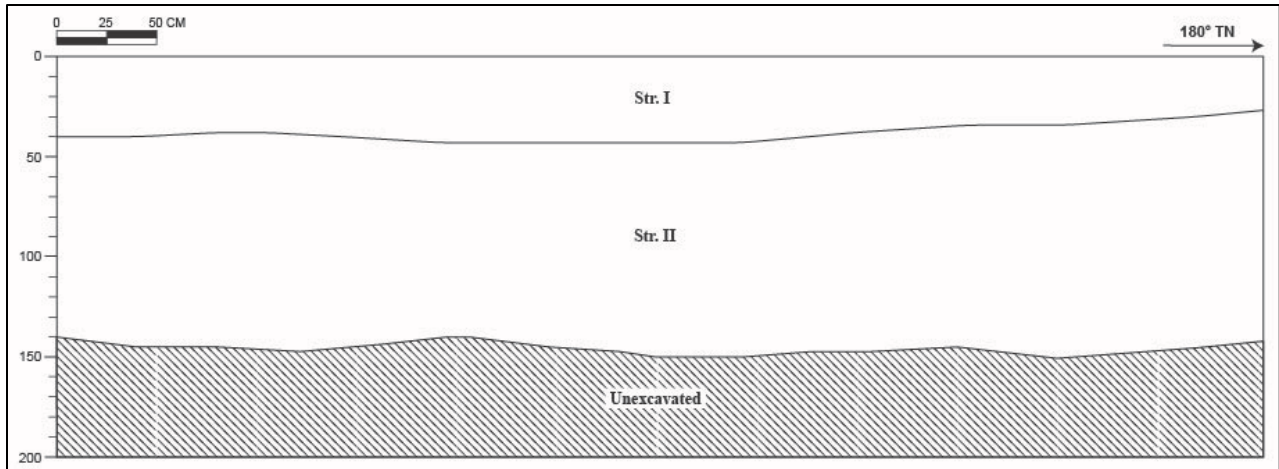


Figure 260. TE-164, stratigraphy of the east wall

Table 64. TE-164 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–43	Ap horizon; 7.5YR 2.5/2, very dark brown; gravelly sandy loam; moderate, fine granular structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine to medium roots; clear, smooth lower boundary
II	27–150	Natural; 10YR 3/6, dark yellowish brown; gravelly sandy clay loam; weak, fine granular structure; moist, friable consistence; no cementation; plastic; terrigenous origin; few fine to medium roots; lower boundary not observed; contained common mottles of 10YR 4/2, dark grayish brown, loamy sand

1.1.65 Test Excavation 165 (TE-165)

TE-165 was in the southwestern portion of the project area (Figure 261). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.65 mbs. The stratigraphy of TE-165 consisted of dark yellowish brown, gravelly sandy loam Ap horizon (Stratum I) and dark brown, gravelly sandy loam fill (Stratum II) overlying very dark brown, natural very gravelly sandy clay loam (Stratum III) and very dark brown, natural gravelly silty clay loam (Stratum IV) (Figure 262 through Figure 264 and Table 65). No cultural materials were encountered.



Figure 261. TE-165, overview of the general location, view to southeast



Figure 262. TE-165, oblique view of the east wall, view to southeast



Figure 263. TE-165, close-up of the east wall, view to east

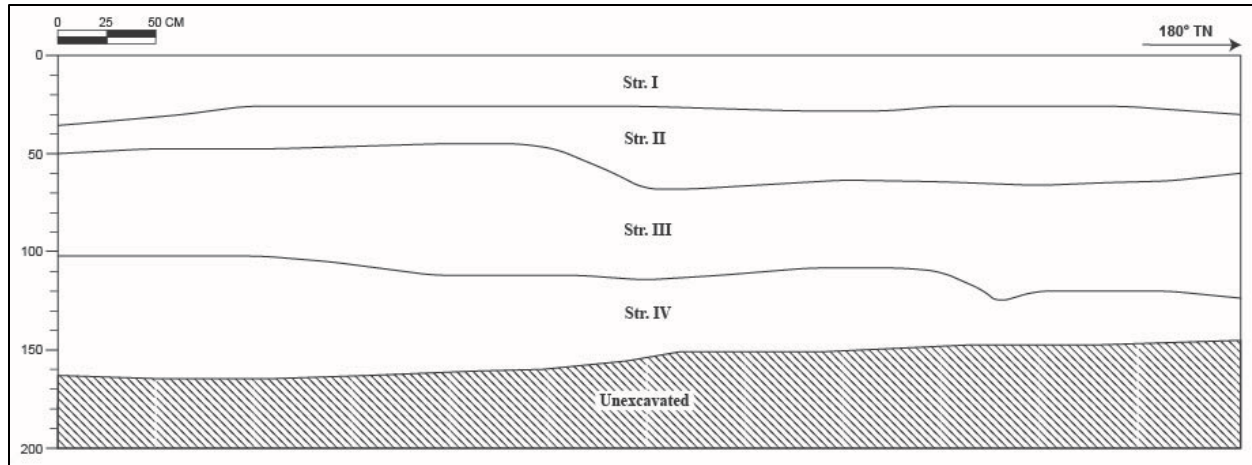


Figure 264. TE-165, stratigraphy of the east wall

Table 65. TE-165 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–35	Ap horizon; 10YR 4/2, dark grayish brown; gravelly sandy loam; moderate, fine granular structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, wavy lower boundary
II	23–67	Fill; 10YR 3/3, dark brown; sandy loam; weak, fine granular structure; dry, weakly coherent consistence; no cementation; non-plastic; mixed origin; few fine roots; clear, smooth lower boundary; contained common mottles of 10YR 4/4, dark yellowish brown, sand
III	45–124	Natural; 7.5YR 2.5/3, very dark brown; very gravelly sandy clay loam; moderate, fine granular structure; moist, friable consistence; no cementation; slightly plastic; mixed origin; few fine roots; clear, wavy lower boundary; contained common mottles of 10YR 5/1, gray, loamy sand
IV	103–165	Natural; 7.5YR 2.5/3, very dark brown; gravelly silty clay loam; moderate, fine granular structure; moist, friable consistence; no cementation; plastic; terrigenous origin; many fine roots; lower boundary not observed; contained many mottles of 10YR 3/4, dark yellowish brown, silty clay loam

1.1.66 Test Excavation 166 (TE-166)

TE-166 was near the southwestern portion of the project area (Figure 265). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.50 mbs. The stratigraphy of TE-166 consisted of dark brown, gravelly loam Ap horizon (Stratum I) overlying dark yellowish brown, natural very gravelly sandy clay loam (Stratum II); brown, natural gravelly silty clay loam (Stratum III); and very dark brown, natural silty clay loam (Stratum IV) (Figure 266 through Figure 268 and Table 66). No cultural materials were encountered.



Figure 265. TE-166, overview of the general location, view to south



Figure 266. TE-166, oblique view of the west wall, view to southwest



Figure 267. TE-166, close-up of the west wall, view to east

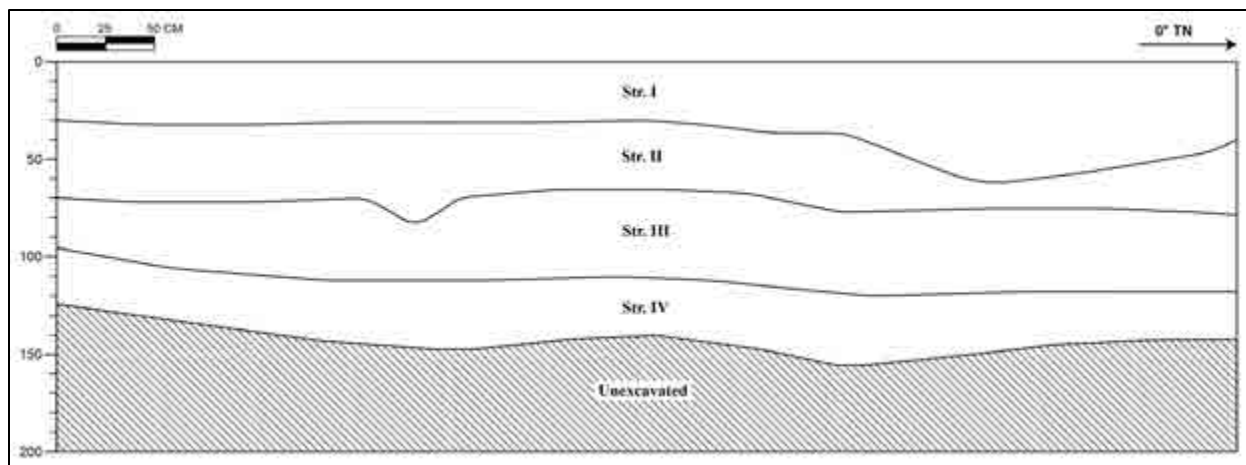


Figure 268. TE-166, stratigraphy of the west wall

Table 66. TE-166 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–62	Ap horizon; 10YR 3/3, dark brown; gravelly loam; moderate, fine granular structure; moist, friable consistence; no cementation; slightly plastic; mixed origin; many fine roots; abrupt, wavy lower boundary
II	30–80	Natural; 10YR 3/4, dark yellowish brown; very gravelly sandy clay loam; moderate, fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; fine roots common; clear, irregular lower boundary
III	65–118	Natural; 10YR 4/3, brown; gravelly silty clay loam; moderate, very fine columnar structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; few fine roots; clear, smooth lower boundary; contained common mottles of 10YR 5/1, gray, loamy sand
IV	96–150	Natural; 7.5YR 2.5/3, very dark brown; silty clay loam; strong, very fine platy structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; lower boundary not observed; contained few mottles of 10YR 5/1, gray, loamy sand

1.1.67 Test Excavation 167 (TE-167)

TE-167 was in the southwestern portion of the project area (Figure 269). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.52 mbs. The stratigraphy of TE-167 consisted of a very dark brown, gravelly sandy loam Ap horizon (Stratum I) and yellowish brown, sand fill (Stratum II) overlying brown, natural gravelly silty clay loam (Stratum III); dark brown, natural very gravelly silty clay loam (Stratum IV); and brown, natural gravelly silt loam (Stratum V) (Figure 270 through Figure 272 and Table 67). No cultural materials were encountered.



Figure 269. TE-167, overview of the general location; natural drainage in background, view to northeast



Figure 270. TE-167, oblique view of the east wall, view to northeast



Figure 271. TE-167, close-up of the east wall, view to east

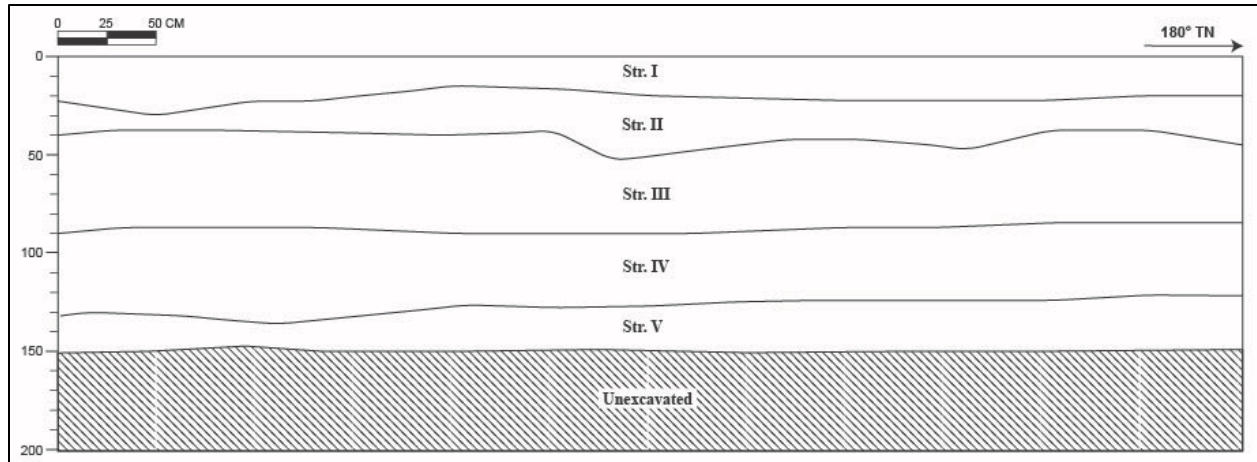


Figure 272. TE-167, stratigraphy of the east wall

Table 67. TE-167 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–30	Ap horizon; 10YR 2/2, very dark brown; gravelly sandy loam; moderate, medium granular structure; moist, firm consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, irregular lower boundary
II	16–52	Fill; 10YR 5/6, yellowish brown; very gravelly sand; structureless (single grain); moist, loose consistence; non-plastic; marine origin; many fine roots; clear, wavy lower boundary
III	37–90	Natural; 10YR 4/3, brown; gravelly silty clay loam; weak, fine platy structure; moist, friable consistence; no cementation, plastic; terrigenous origin; fine roots common; clear, smooth lower boundary
IV	85–135	Natural; 10YR 3/3, dark brown; very gravelly silty clay loam; moderate, fine platy structure; moist, friable consistence; no cementation; plastic; terrigenous origin; few fine roots; clear, smooth lower boundary
V	123–152	Natural; 10YR 4/3, brown; silt loam; weak, fine platy structure; moist, friable consistence; no cementation; plastic; terrigenous origin; no roots; lower boundary not observed

1.1.68 Test Excavation 168 (TE-168)

TE-168 was in the southwestern portion of the project area (Figure 273). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.81 mbs. The stratigraphy of TE-168 consisted of dark brown, gravelly sandy loam Ap horizon (Stratum I) overlying gray, natural very cobbly loamy sand (Stratum II) and dark yellowish brown, natural gravelly silt loam (Stratum III) (Figure 274 through Figure 276 and Table 68). No cultural materials were encountered.



Figure 273. TE-168, overview of the general location, view to northeast



Figure 274. TE-168, oblique view of the east wall, view to northeast



Figure 275. TE-168, close-up of the east wall, view to east

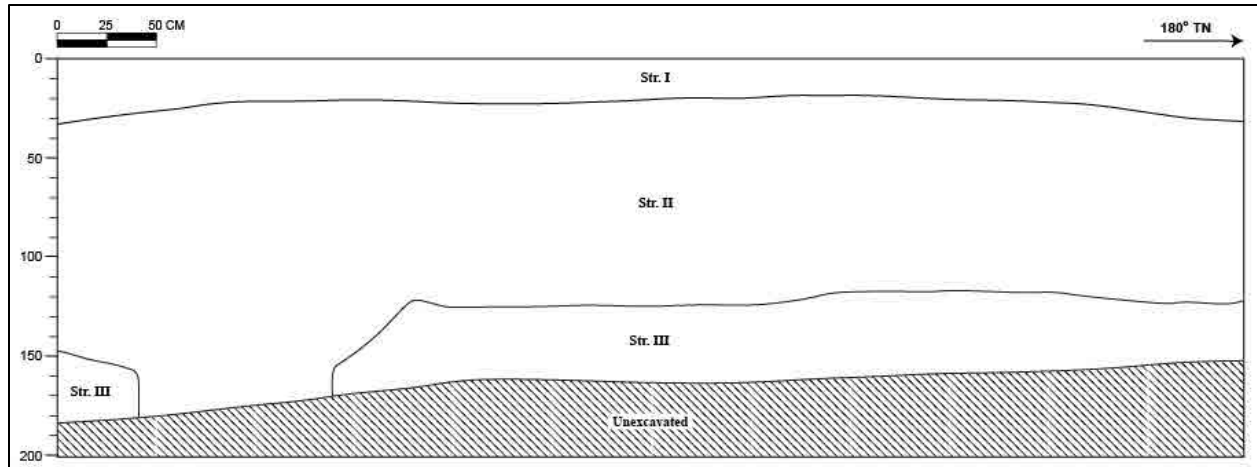


Figure 276. TE-168, stratigraphy of the east wall

Table 68. TE-168 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–32	Ap horizon; 10YR 3/3, dark brown; gravelly sandy loam; moderate, medium blocky structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine to medium roots; clear, smooth lower boundary
II	18–181	Natural; 2.5Y 5/1, gray; very cobbly loamy sand; weak, fine granular structure; dry, loose consistence; no cementation; non-plastic; terrigenous origin; few fine roots; lower boundary not observed; contained many mottles of 7.5YR 3/4, dark brown, silt loam
III	117–181	Natural; 10YR 3/4, dark yellowish brown; gravelly silt loam; moderate, fine blocky structure; moist, friable consistence; no cementation; plastic; terrigenous origin; few fine roots; lower boundary not observed

1.1.69 Test Excavation 169 (TE-169)

TE-169 was in the southwestern portion of the project area (Figure 277). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.53 mbs. The stratigraphy of TE-169 consisted of dark grayish brown, cobbly sandy loam Ap horizon (Stratum I) and dark brown, sandy loam fill (Stratum II) overlying very dark brown, natural very gravelly sandy loam (Stratum III) (Figure 278 through Figure 280 and Table 69). No cultural materials were encountered.



Figure 277. TE-169, overview of the general location, view to south



Figure 278. TE-169, oblique view of the west wall, view to southwest



Figure 279. TE-169, close-up of the west wall, view to west

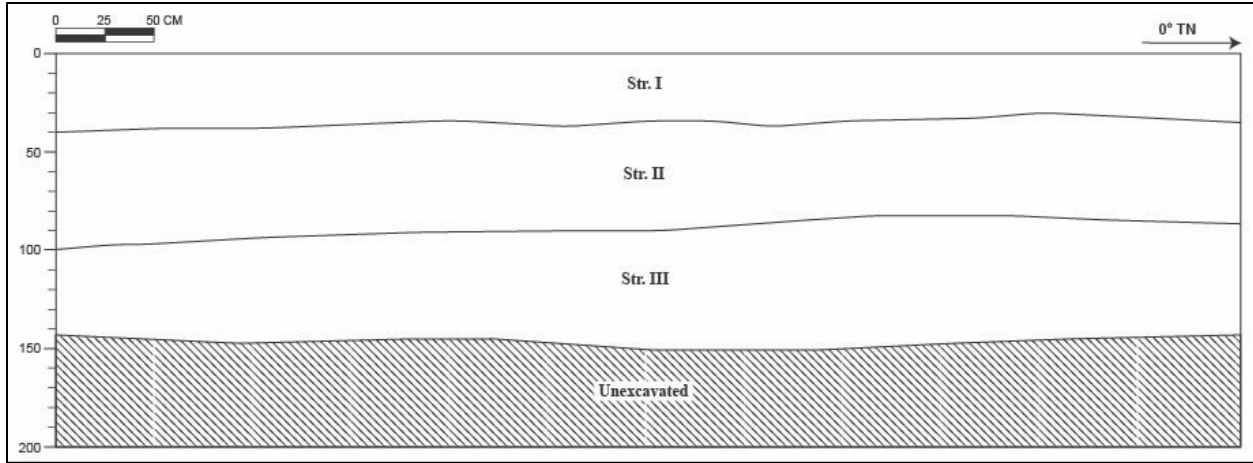


Figure 280. TE-169, stratigraphy of the west wall

Table 69. TE-169 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–40	Ap horizon; 10YR 4/2, dark grayish brown; cobbly sandy loam; moderate, medium blocky; dry, hard consistence; no cementation; non-plastic; mixed origin; many fine roots; clear, smooth lower boundary; contained common mottles of 10YR 3/2, very dark grayish brown, sand
II	34–100	Fill; 10YR 3/3, dark brown; gravelly sandy loam; weak, fine granular structure; dry, weakly coherent consistence; no cementation; non-plastic; mixed origin; few fine roots; abrupt, smooth lower boundary; contained common mottles of 10YR 5/4, yellowish brown, sand
III	84–153	Natural; 7.5YR 2.5/3, very dark brown; very gravelly sandy loam; moderate, fine granular structure; moist, firm consistence; no cementation; slightly plastic; terrigenous origin; lower boundary not observed; contained many mottles of 10YR 5/1, gray, sandy loam

1.1.70 Test Excavation 170 (TE-170)

TE-170 was in the central-southern portion of the project area, west of a natural drainage (Figure 281). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.56 mbs. The stratigraphy of TE-170 consisted of very dark grayish brown, very gravelly silty clay loam Ap horizon (Stratum I) overlying gray, natural extremely stony sand (Stratum II) (Figure 282 through Figure 284 and Table 70). No cultural materials were encountered.



Figure 281. TE-170, overview of the general location, view to south



Figure 282. TE-170, oblique view of the west wall, view to southwest



Figure 283. TE-170, close-up of the west wall, view to west

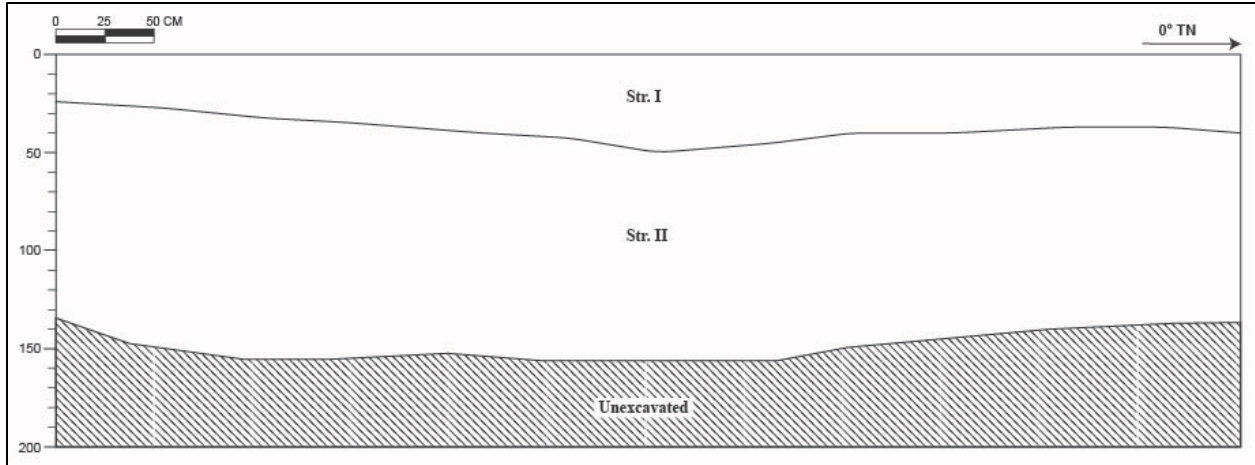


Figure 284. TE-170, stratigraphy of the west wall

Table 70. TE-170 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–48	Ap horizon; 10YR 3/2, very dark grayish brown; very gravelly silty clay loam; moderate, medium blocky structure; dry, hard consistence; no cementation; slightly plastic; many fine roots; clear, smooth lower boundary
II	24–156	Natural; 10YR 6/1, gray; extremely stony sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; terrigenous origin; fine roots common; lower boundary not observed; contained common mottles of 10YR 4/3, brown, sandy clay loam

1.1.71 Test Excavation 171 (TE-171)

TE-171 was in the central-southern portion of the project area, east of a natural drainage (Figure 285). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.60 mbs. The stratigraphy of TE-171 consisted of very dark brown, very gravelly sandy loam Ap horizon (Stratum I) and black, very gravelly loamy sand fill (Stratum II) overlying yellowish brown, gravelly sand fill (Stratum III) and dark grayish brown, very gravelly sand fill (Stratum IV) (Figure 286 through Figure 288 and Table 71).

Stratum I contained a glass bottle base portion (Acc. # 20) and Stratum IV contained a cow cranium and osseous remains of a mouse/vole (Figure 289 and Figure 290). The cultural materials have been designated as a component of a previously identified historic property, SIHP # 50-50-04-08805 Feature D, a buried cultural deposit. SIHP # -08805 is a complex of subsurface cultural deposits associated with the use or improvement of the land for commercial agriculture. The historic property was identified by CSH during the AIS for the AES Kuihelani Solar Plus Storage Project (Yucha et al. 2021) located north of the current project area.



Figure 285. TE-171, overview of the general location, view to southwest



Figure 286. TE-171, oblique view of the west wall, view to northwest



Figure 287. TE-171, close-up of the west wall, view to west

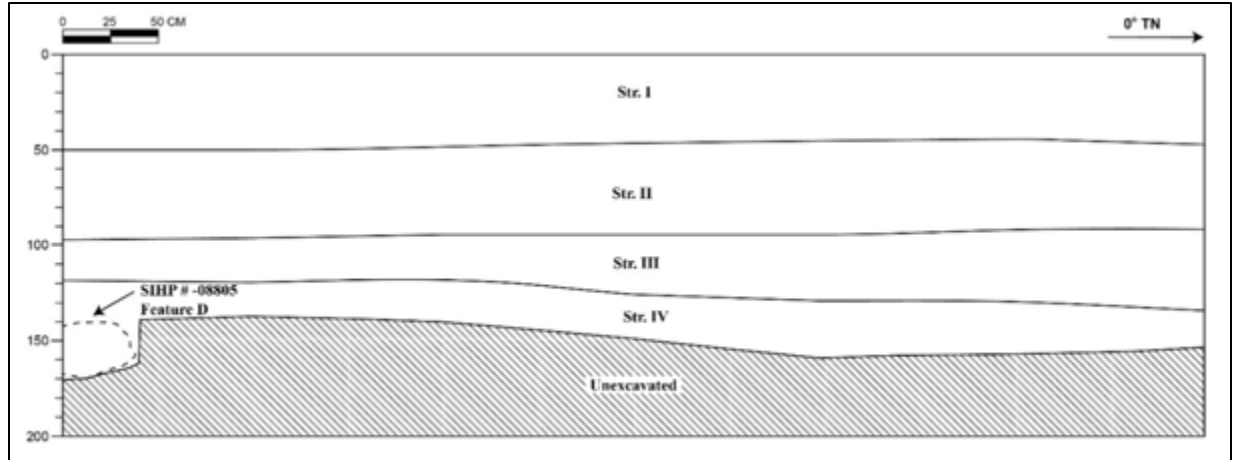


Figure 288. TE-171, stratigraphy of the west wall

Table 71. TE-171 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–50	Ap horizon; 7.5YR 2.5/2, very dark brown; very gravelly sandy loam; moderate, fine granular structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, smooth lower boundary; contained a glass bottle base (Acc. # 20)
II	45–98	Fill; 7.5YR 2.5/1, black; very gravelly loamy sand; weak, medium granular structure; dry, weakly coherent consistence; no cementation; non-plastic; terrigenous origin; fine roots common; clear, smooth, lower boundary; contained many mottles of 10YR 4/3, brown, silt loam
III	92–135	Fill; 10YR 5/4, yellowish brown; gravelly sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; few fine roots; clear, smooth lower boundary; contained common mottles of 10YR 3/2, very dark grayish brown, sandy clay loam
IV	118–160	Fill; 10YR 4/2, dark grayish brown; very gravelly sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; lower boundary not observed; contained SIHP # -08805 Feature D, cow cranium and mouse/vole osseous remains



Figure 289. Plan view of SIHP # -08805 Feature D within TE-171, view to east

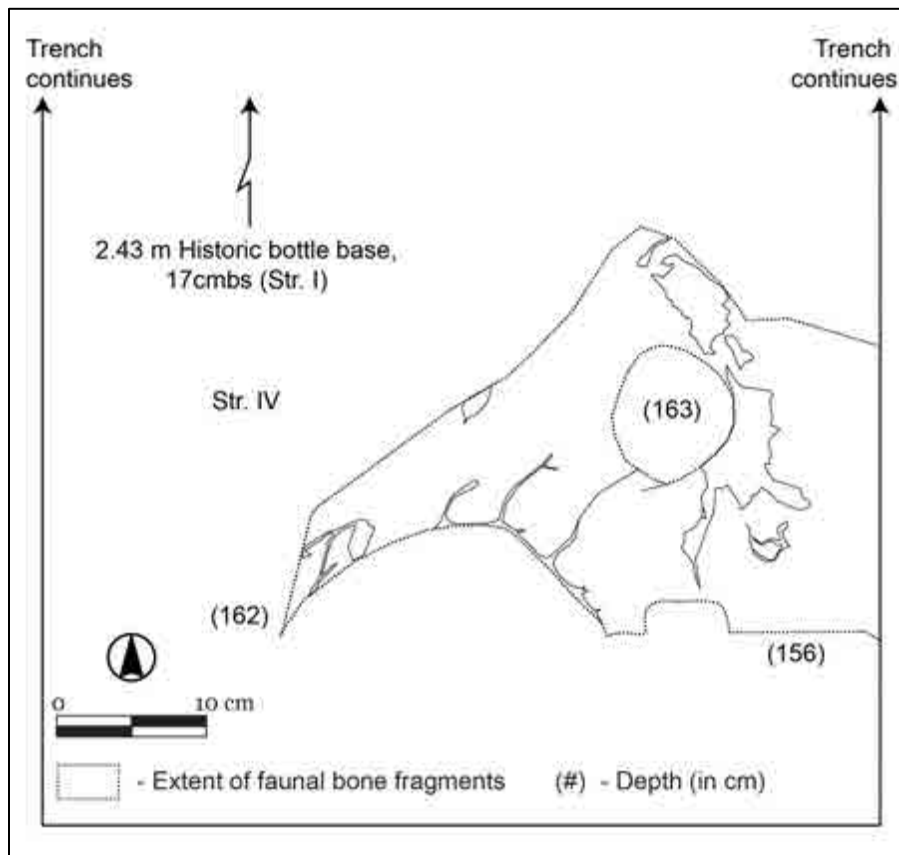


Figure 290. SIHP # -08805 Feature D plan map

1.1.72 Test Excavation 172 (TE-172)

TE-172 was in the southeastern portion of the project area (Figure 291). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.90 mbs. The stratigraphy of TE-172 consisted of dark brown, gravelly sandy loam Ap horizon (Stratum I) overlying yellowish brown, natural gravelly sand (Stratum II); grayish brown, natural silt loam (Stratum III); and brown, natural silt loam (Stratum IV) (Figure 292 through Figure 294 and Table 72). No cultural materials were encountered.



Figure 291. TE-172, overview of the general location, view to southwest



Figure 292. TE-172, oblique view of the east wall, view to northeast



Figure 293. TE-172, close-up of the east wall, view to east

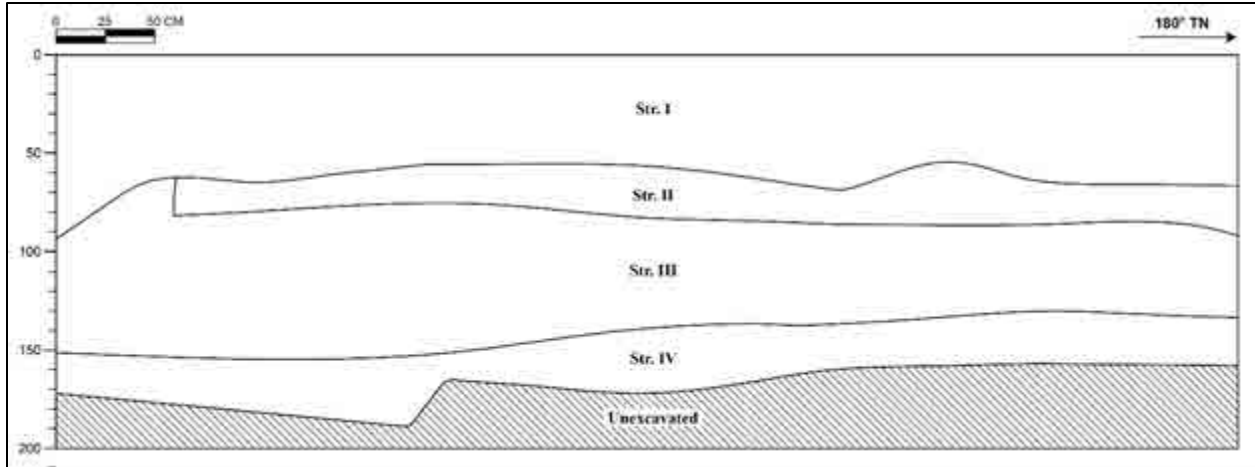


Figure 294. TE-172, stratigraphy of the east wall

Table 72. TE-172 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–94	Ap horizon; 10YR 3/3, dark brown; gravelly sandy loam; moderate, fine granular structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, wavy lower boundary; contained common mottles of 10YR 3/4, dark yellowish brown, sandy loam
II	54–92	Natural; 10YR 5/4, yellowish brown; gravelly sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; many fine roots; abrupt, broken lower boundary
III	63–151	Natural; 10YR 5/2, grayish brown; silt loam; moderate, fine granular structure; moist, friable consistence; no cementation; plastic; terrigenous origin; few fine roots; clear, wavy lower boundary; contained common mottles of 10YR 4/3, brown, silt loam
IV	130–190	Natural; 7.5YR 4/3, brown; silt loam; moderate, fine granular structure; moist, friable consistence; no cementation; plastic; terrigenous origin; lower boundary not observed; contained many mottles of 10YR 5/3, brown, silt loam

1.1.73 Test Excavation 173 (TE-173)

TE-173 was in the southeastern portion of the project area (Figure 295). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.72 mbs. The stratigraphy of TE-173 consisted of dark brown, very gravelly sandy loam Ap horizon (Stratum I) and dark yellowish brown, sandy loam fill (Stratum II) overlying grayish brown, natural gravelly sand (Stratum III); yellowish brown, natural gravelly silt loam (Stratum IV); brown, natural sand (Stratum V); and dark yellowish brown, natural silt loam (Stratum VI) (Figure 296 through Figure 298 and Table 73). No cultural materials were encountered.



Figure 295. TE-173, overview of the general location, view to southwest



Figure 296. TE-173, oblique view of the east wall, view to northeast



Figure 297. TE-173, close-up of the east wall, view to east

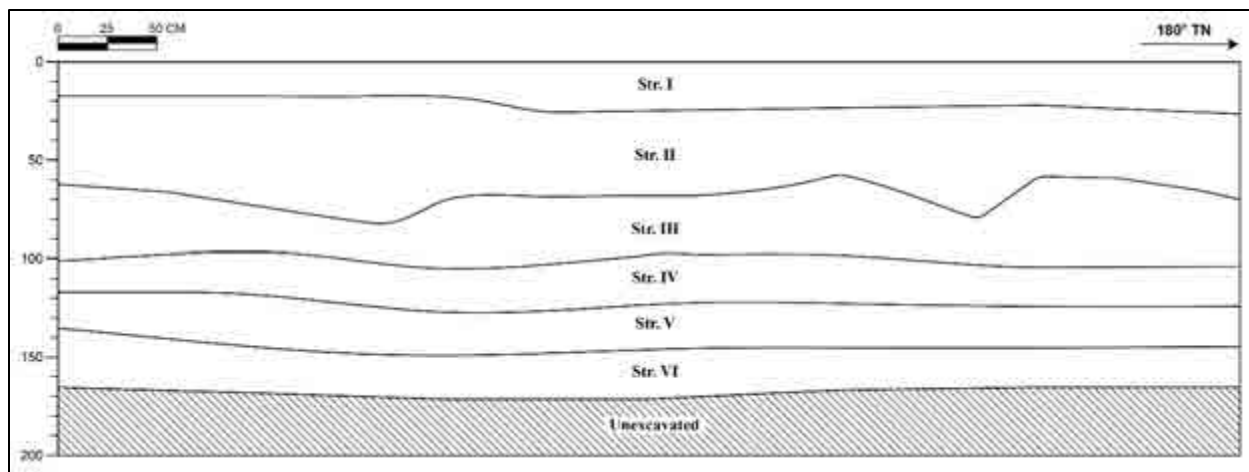


Figure 298. TE-173, stratigraphy of the east wall

Table 73. TE-173 stratigraphic description

Stratum	Depth (cmts)	Description
I	0–25	Ap horizon; 7.5YR 3/3, dark brown; very gravelly sandy loam; moderate, fine granular structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine roots; abrupt, smooth lower boundary
II	17–82	Fill; 10YR 3/4, dark yellowish brown; sandy loam; moderate, fine granular structure; dry, weakly coherent consistence; no cementation; slightly plastic; mixed origin; few fine roots; clear, wavy lower boundary; contained few mottles of 10YR 5/2, grayish brown, sand
III	56–105	Natural; 10YR 5/2, grayish brown; gravelly sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; marine origin; fine roots common; clear, smooth lower boundary
IV	95–127	Natural; 10YR 5/4, yellowish brown; gravelly silt loam; moderate, fine granular structure; moist, friable consistence; no cementation; plastic; terrigenous origin; clear, smooth lower boundary
V	117–150	Natural; 10YR 4/3, brown; sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; marine origin; clear, smooth lower boundary
VI	136–172	Natural; 10YR 4/4, dark yellowish brown; silt loam; moderate, fine granular structure; moist, friable consistence; no cementation; plastic; terrigenous origin; lower boundary not observed

1.1.74 Test Excavation 174 (TE-174)

TE-174 was in the southeastern portion of the project area (Figure 299). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.56 mbs. The stratigraphy of TE-174 consisted of a dark yellowish brown, gravelly sandy loam Ap horizon (Stratum I) and dark yellowish brown, gravelly silty clay loam fill (Stratum II) overlying dark yellowish brown, natural sand (Stratum III); brown, natural gravelly silt loam (Stratum IV); and light brownish gray, natural gravelly sand (Stratum V) (Figure 300 through Figure 302 and Table 74). No cultural materials were encountered.



Figure 299. TE-174, overview of the general location, view to northwest



Figure 300. TE-174, oblique view of the west wall, view to southwest



Figure 301. TE-174, close-up of the west wall, view to west

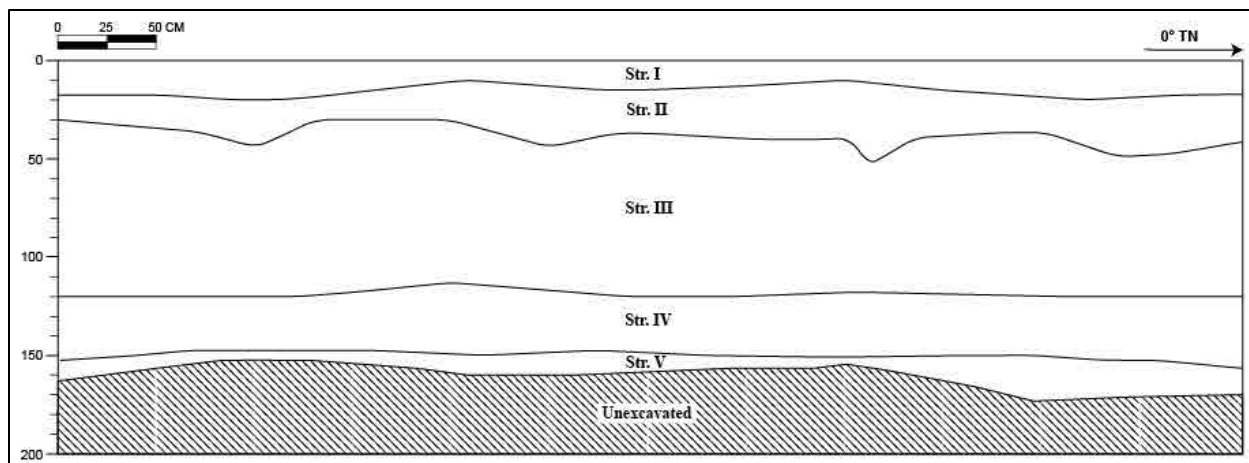


Figure 302. TE-174, stratigraphy of the west wall

Table 74. TE-174 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–20	Ap horizon; 10YR 3/4, dark yellowish brown; gravelly sandy loam; moderate, fine blocky structure; dry, weakly coherent consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, wavy lower boundary
II	12–53	Fill; 10YR 4/4, dark yellowish brown; gravelly silty clay loam; moderate, fine granular structure; dry, weakly coherent consistence; no cementation; slightly plastic; fine roots common; clear, wavy lower boundary
III	30–122	Natural; 10YR 4/4, dark yellowish brown; sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; fine roots common; clear, smooth lower boundary; contained many mottles of 10YR 3/3, dark brown, silty clay loam
IV	115–156	Natural; 10YR 5/3, brown; gravelly silt loam; moderate, fine platy structure; moist, friable consistence; no cementation; plastic; terrigenous origin; few fine roots; abrupt, smooth lower boundary
V	150–156	Natural; 10YR 6/2, light brownish gray; gravelly sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; lower boundary not observed

1.1.75 Test Excavation 175 (TE-175)

TE-175 was near the southeastern corner of the project area (Figure 303). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.76 mbs. The stratigraphy of TE-175 consisted of dark brown, gravelly sandy loam Ap horizon (Stratum I) overlying yellowish brown, natural gravelly silt loam (Stratum II) (Figure 304 through Figure 306 and Table 75). No cultural materials were encountered.



Figure 303. TE-175, overview of the general location, view to southwest



Figure 304. TE-175, oblique view of the east wall, view to southeast



Figure 305. TE-175, close-up of the east wall, view to east

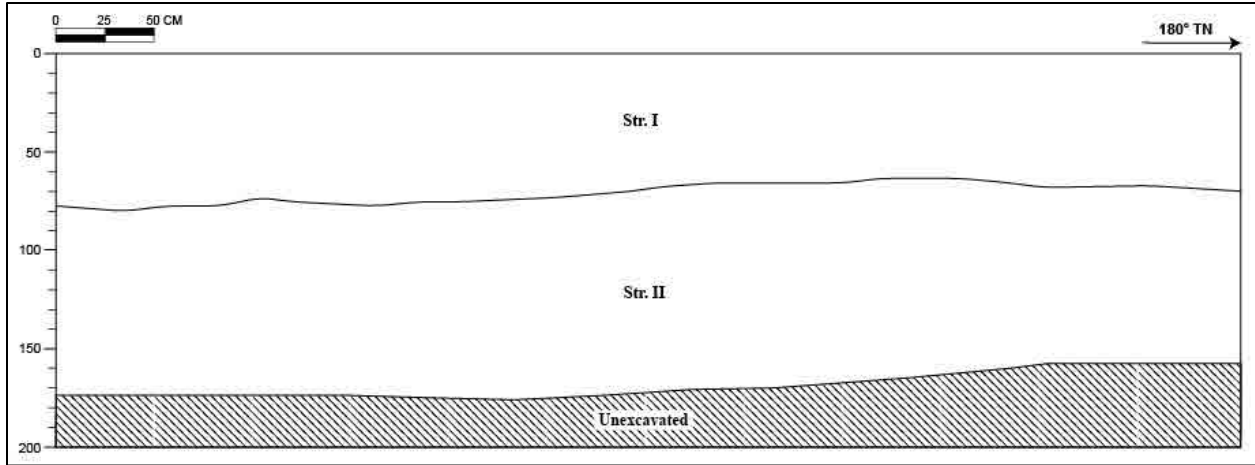


Figure 306. TE-175, stratigraphy of the east wall

Table 75. TE-175 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–78	Ap horizon; 10YR 3/3, dark brown; gravelly sandy loam; weak, fine granular structure; dry, weakly coherent consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, wavy lower boundary; contained many mottles of 10YR 4/3, brown, sandy clay loam
II	65–176	Natural; 10YR 5/4, yellowish brown; gravelly silt loam; moderate, very fine platy structure; moist, friable consistence; no cementation; plastic; terrigenous origin; fine roots common; lower boundary not visible; contained many mottles of 10YR 4/2, dark grayish brown, silt loam

1.1.76 Test Excavation 176 (TE-176)

TE-176 was along the southern boundary near the southeastern corner of the project area (Figure 307). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.85 mbs. The stratigraphy of TE-176 consisted of very dark grayish brown, gravelly sandy loam Ap horizon (Stratum I) overlying light brownish gray, natural sand (Stratum II) and dark yellowish brown, natural gravelly silt loam (Stratum III) (Figure 308 through Figure 310 and Table 76). No cultural materials were encountered.



Figure 307. TE-176, overview of the general location, view to northeast



Figure 308. TE-176, oblique view of the east wall, view to northeast



Figure 309. TE-176, close-up of the east wall, view to east

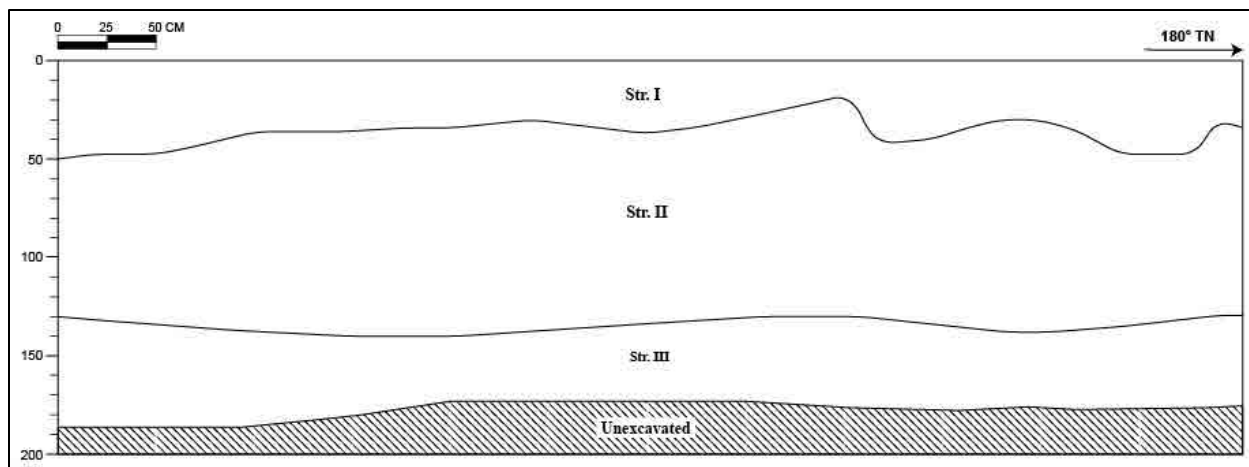


Figure 310. TE-176, stratigraphy of the east wall

Table 76. TE-176 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–17	Ap horizon; 10YR 3/2, very dark grayish brown; gravelly sandy loam; weak, fine blocky structure; moist, friable consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, wavy lower boundary
II	16–139	Natural; 10YR 6/2, light brownish gray; sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; fine roots common; clear, smooth lower boundary
III	128–185	Natural; 10YR 4/4, dark yellowish brown; gravelly silt loam; moderate, fine platy structure; moist, friable consistence; no cementation; plastic; terrigenous origin; few fine roots; lower boundary not observed

1.1.77 Test Excavation 177 (TE-177)

TE-177 was near the western boundary in the southwestern portion of the project area (Figure 311). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.70 mbs. The stratigraphy of TE-177 consisted of a dark brown, gravelly sandy loam Ap horizon (Stratum I) overlying very dark brown, natural very gravelly sandy loam (Stratum II); and dark yellowish brown, natural very gravelly silt loam (Stratum III) (Figure 312 through Figure 314 and Table 77). No cultural materials were encountered.



Figure 311. TE-177, overview of the general location, view to southwest



Figure 312. TE-177, oblique view of the west wall, view to southwest



Figure 313. TE-177, close-up of the west wall, view to west

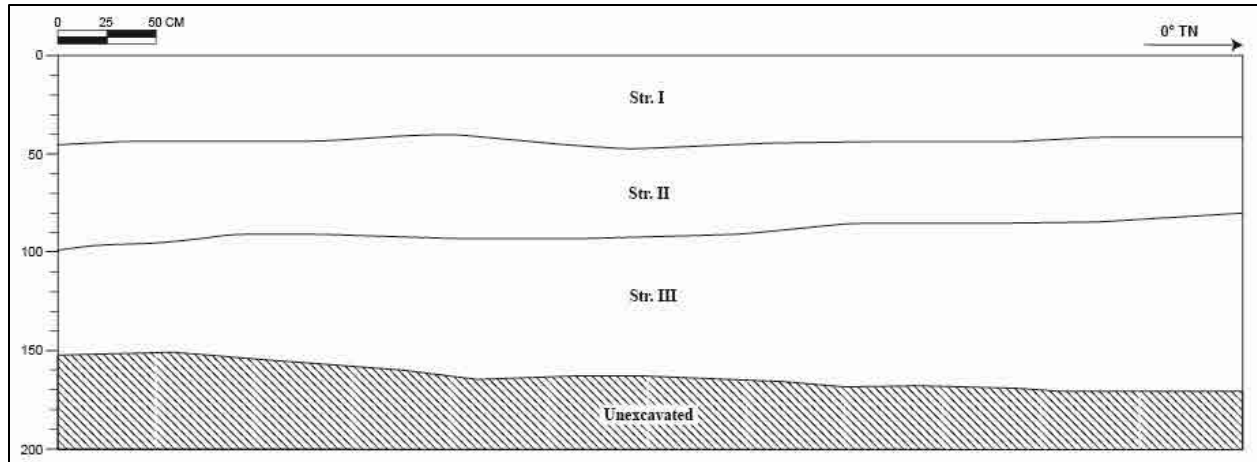


Figure 314. TE-177, stratigraphy of the west wall

Table 77. TE-177 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–45	Ap horizon; 10YR 3/3, dark brown; gravelly sandy loam; moderate, medium blocky structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, smooth lower boundary
II	40–97	Fill; 7.5YR 2.5/3, very dark brown; very gravelly sandy loam; moderate, fine granular structure; moist, firm consistence; no cementation; slightly plastic; terrigenous origin; few fine roots; abrupt, smooth lower boundary; contained common mottles of 7.5YR 4/2, brown, loamy sand
III	78–170	Natural; 10YR 4/4, dark yellowish brown; very gravelly silt loam; weak, fine platy structure; moist, friable consistence; no cementation; plastic; terrigenous origin; lower boundary not observed; contained common mottles of 10YR 5/3, brown, loamy sand

1.1.78 Test Excavation 178 (TE-178)

TE-178 was in the southwestern portion of the project area (Figure 315). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.57 mbs. The stratigraphy of TE-178 consisted of a dark brown, gravelly sandy loam Ap horizon (Stratum I) overlying reddish gray, natural extremely cobbly loamy sand (Stratum II); dark yellowish brown, natural gravelly silt loam (Stratum III); and very dark brown, natural gravelly silt loam (Stratum IV) (Figure 316 through Figure 318 and Table 78). No cultural materials were encountered.



Figure 315. TE-178, overview of the general location, view to south



Figure 316. TE-178, oblique view of the east wall, view to southeast



Figure 317. TE-178, close-up of the east wall, view to east

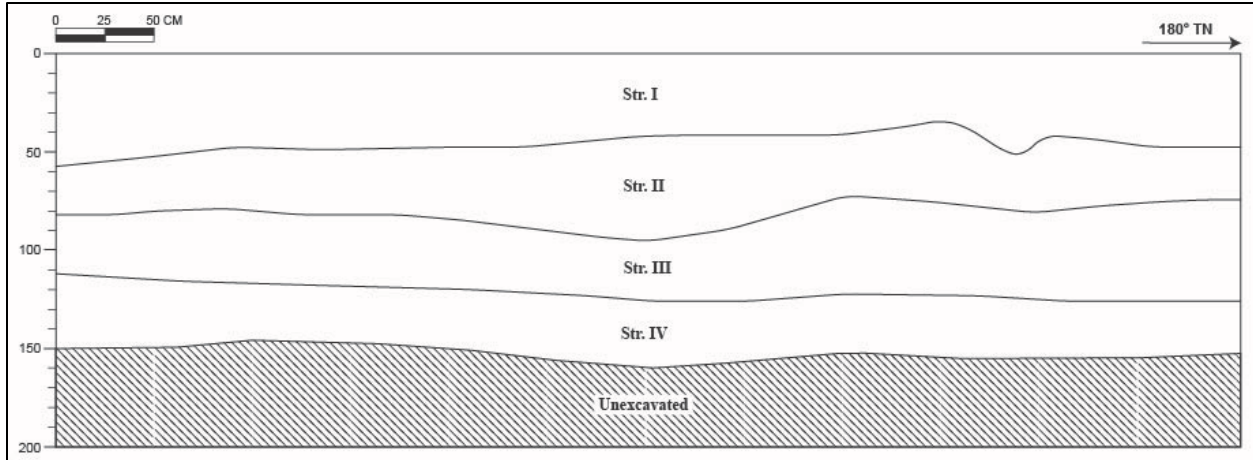


Figure 318. TE-178, stratigraphy of the east wall

Table 78. TE-178 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–55	Ap horizon; 10YR 3/3, dark brown; gravelly sandy loam; moderate, medium blocky structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, wavy lower boundary; contained common mottles of 10YR 5/4, yellowish brown, loamy sand
II	33–94	Natural; 2.5YR 5/1, reddish gray; extremely cobbly loamy sand; weak, coarse granular structure; dry, loose consistence; no cementation; non-plastic; terrigenous origin; fine roots common; abrupt, wavy lower boundary
III	70–124	Natural; 10YR 4/4, dark yellowish brown; gravelly silt loam; moderate, fine platy structure; moist, friable consistence; no cementation; plastic; terrigenous origin; few fine roots; gradual, smooth lower boundary
IV	113–157	Natural; 7.5YR 2.5/3, very dark brown; gravelly silt loam; weak, fine granular structure; moist, loose consistence; no cementation; plastic; terrigenous origin; few fine roots; lower boundary not observed

1.1.79 Test Excavation 179 (TE-179)

TE-179 was in the southwestern portion of the project area (Figure 319). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.67 mbs. The stratigraphy of TE-179 consisted of dark brown, very gravelly sandy loam Ap horizon (Stratum I) overlying dark yellowish brown, natural silt loam (Stratum II); and brown, natural gravelly silt loam (Stratum III) (Figure 320 through Figure 322 and Table 79). No cultural materials were encountered.



Figure 319. TE-179, overview of the general location, view to south



Figure 320. TE-179, oblique view of the west wall, view to southwest



Figure 321. TE-179, close-up of the west wall, view to west

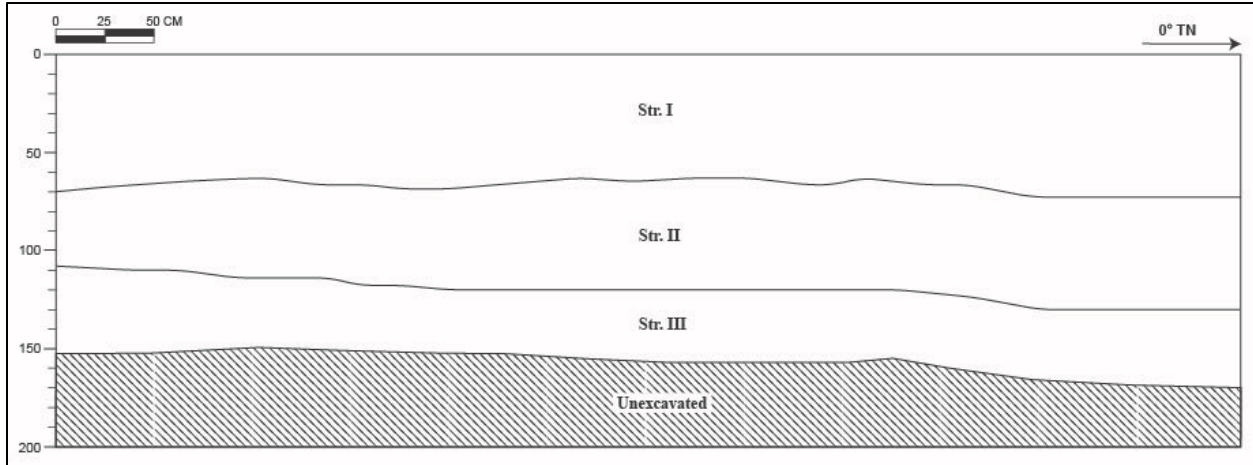


Figure 322. TE-179, stratigraphy of the west wall

Table 79. TE-179 stratigraphic description

I	0–70	Ap horizon; 10YR 3/3, dark brown; very gravelly sandy loam; moderate, medium blocky structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, wavy lower boundary; contained common mottles of 10YR 5/2, grayish brown, sandy loam
II	62–127	Natural; 10YR 4/4, dark yellowish brown; gravelly silt loam; weak, fine platy structure; moist, friable consistence; no cementation; plastic; terrigenous origin; few fine roots; clear, smooth lower boundary; contained common mottles of 10YR 6/1, gray, loamy sand
III	107–167	Natural; 10YR 4/3, brown; gravelly silt loam; moderate, fine platy structure; moist, firm consistence; no cementation; plastic; terrigenous origin; lower boundary not observed; contained common mottles of 10YR 6/1, gray, loamy sand

1.1.80 Test Excavation 180 (TE-180)

TE-180 was in the southwestern portion of the project area (Figure 323). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.77 mbs. The stratigraphy of TE-180 consisted of a brown, gravelly sandy loam Ap horizon (Stratum I) overlying dark brown, natural very gravelly loam (Stratum II); and dark yellowish brown, natural very gravelly loam (Stratum III) (Figure 324 through Figure 326 and Table 80). No cultural materials were encountered.



Figure 323. TE-180, overview of the general location, view to south



Figure 324. TE-180, oblique view of the east wall, view to southeast



Figure 325. TE-180, close-up of the east wall, view to east

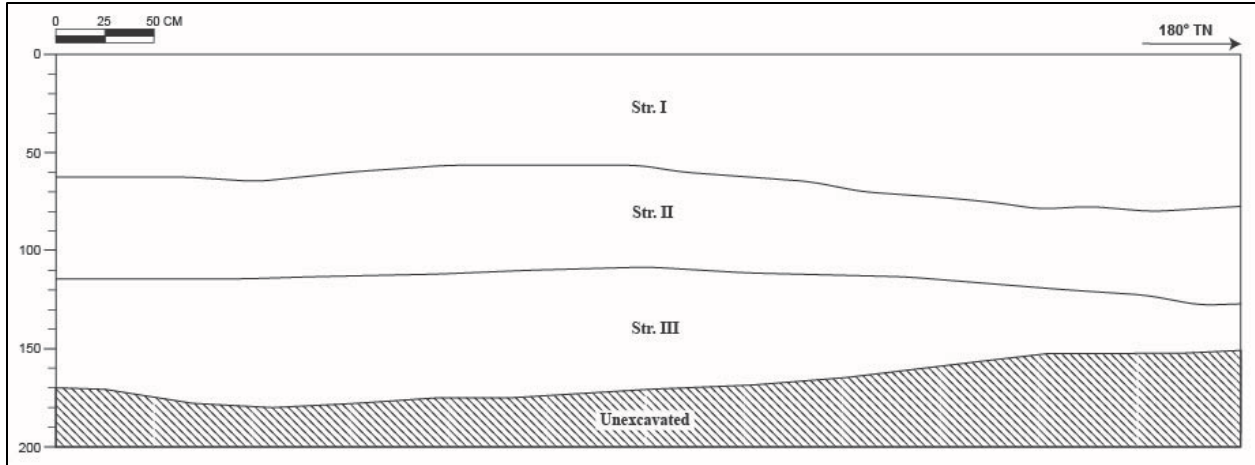


Figure 326. TE-180, stratigraphy of the east wall

Table 80. TE-180 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–76	Ap horizon; 7.5YR 4/3, brown; gravelly sandy loam; moderate, fine blocky structure; dry, weakly coherent consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, smooth lower boundary; contained common mottles of 10YR 5/4, yellowish brown, loamy sand
II	55–125	Natural; 10YR 3/3, dark brown; very gravelly loam; weak, fine granular structure; moist, loose consistence; no cementation; slightly plastic; terrigenous origin; few fine roots; gradual, smooth lower boundary; contained few mottles of 10YR 5/1, gray, loamy sand
III	108–177	Natural; 10YR 4/4, dark yellowish brown; very gravelly loam; weak, fine granular structure; moist, loose consistence; no cementation; slightly plastic; terrigenous origin; few fine roots; lower boundary not observed; contained common mottles of 10YR 4/3, brown, silt loam

1.1.81 Test Excavation 181 (TE-181)

TE-181 was in the central-southern portion of the project area (Figure 327). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.67 mbs. The stratigraphy of TE-181 consisted of a very dark brown, gravelly sandy loam Ap horizon (Stratum I) overlying very dark gray, natural extremely cobbly sand (Stratum II); and dark brown, natural very gravelly silt loam (Stratum III) (Figure 328 through Figure 330 and Table 81). No cultural materials were encountered.



Figure 327. TE-181, overview of the general location, view to northeast



Figure 328. TE-181, oblique view of the east wall, view to southeast



Figure 329. TE-181, close-up of the east wall, view to east

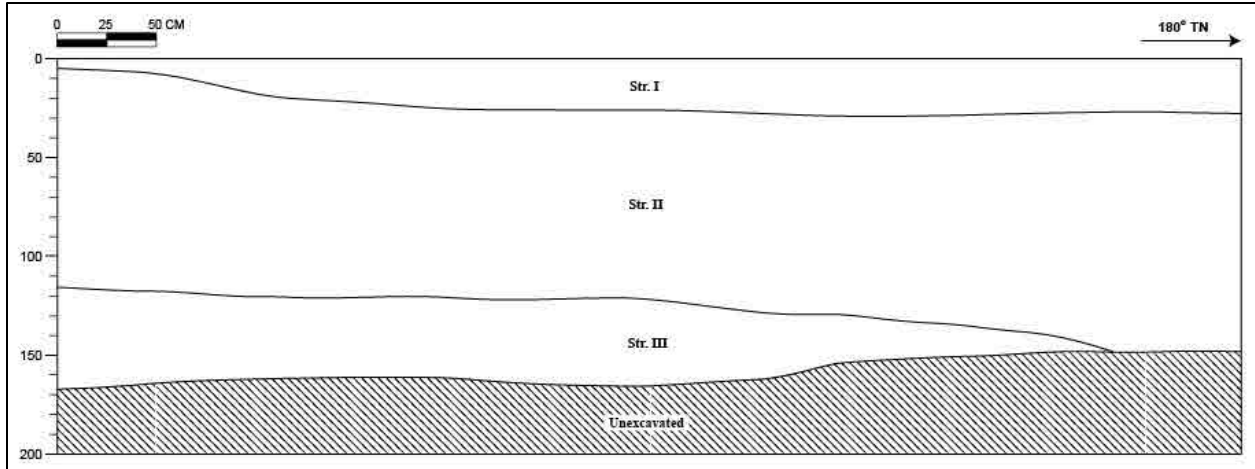


Figure 330. TE-181, stratigraphy of the east wall

Table 81. TE-181 stratigraphic description

I	0–28	Ap horizon; 7.5YR 2.5/2, very dark brown; gravelly sandy loam; moderate, medium granular structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine roots; abrupt, smooth lower boundary
II	5–146	Natural; 10YR 3/1, very dark gray; extremely cobbly sand; structureless (single grain); dry, loose consistence; no cementation; non-plastic; terrigenous origin; many fine roots; abrupt, irregular lower boundary; contained few mottles of 10YR 6/2, light brownish gray, sand
III	116–167	Natural; 7.5YR 3/3, dark brown; very gravelly silt loam; weak, fine platy structure; moist, friable consistence; no cementation; plastic; terrigenous origin; few fine roots; lower boundary not observed

1.1.82 Test Excavation 182 (TE-182)

TE-182 was in the central-southern portion of the project area (Figure 331). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.50 mbs. The stratigraphy of TE-182 consisted of a very dark brown, gravelly sandy loam Ap horizon (Stratum I) overlying brown, very gravelly sand fill (Stratum II) (Figure 332 through Figure 334 and Table 82). No cultural materials were encountered.



Figure 331. TE-182, overview of the general location, view to southeast



Figure 332. TE-182, oblique view of the east wall, view to southeast



Figure 333. TE-182, close-up of the east wall, view to east

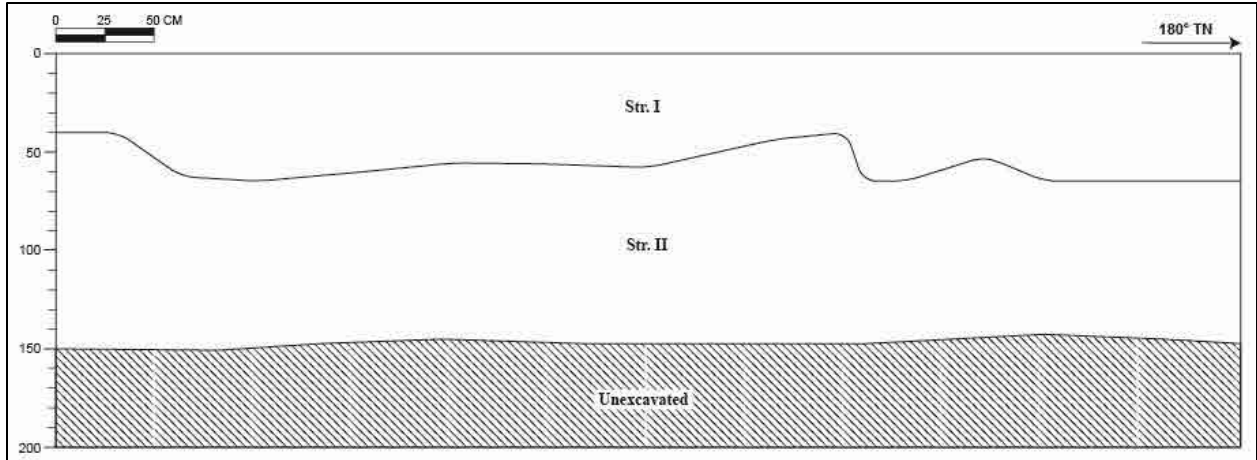


Figure 334. TE-182, stratigraphy of the east wall

Table 82. TE-182 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–65	Ap horizon; 7.5YR 2.5/2, very dark brown; gravelly sandy loam; moderate, fine blocky structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, irregular lower boundary; contained common mottles of 10YR 4/4, dark yellowish brown, loamy sand
II	40–150	Fill; 10YR 4/3, brown; very gravelly sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; fine roots common; lower boundary not observed; contained common mottles of 7.5YR 3/3, dark brown, clay loam

1.1.83 Test Excavation 183 (TE-183)

TE-183 was in the central-southern portion of the project area (Figure 335). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.70 mbs. The stratigraphy of TE-183 consisted of a very dark brown, gravelly sandy loam Ap horizon mottled with very dark grayish brown loamy sand (Stratum I) and very dark grayish brown, silt loam fill mottled with dark brown loamy sand (Stratum II) overlying brown, natural gravelly sandy loam with a band of pale brown sand (Stratum III) and dark yellowish brown, natural gravelly silt loam with concentrations of gray loamy sand (Stratum IV) (Figure 335 through Figure 338 and Table 83). No cultural materials were encountered.



Figure 335. TE-183, overview of the general location, view to southwest



Figure 336. TE-183, oblique view of the east wall, view to southeast



Figure 337. TE-183, close-up of the east wall, view to east

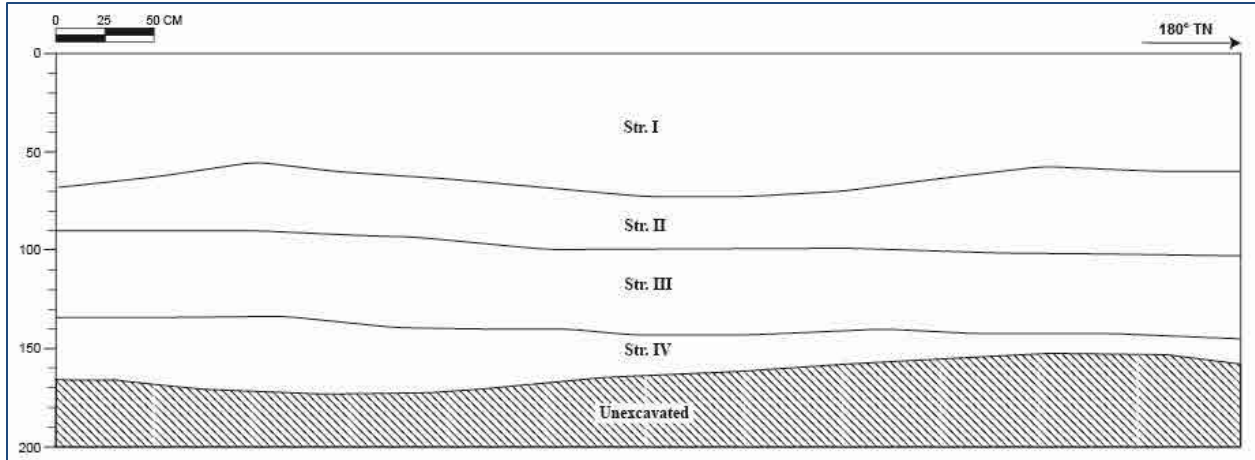


Figure 338. TE-183, stratigraphy of the east wall

Table 83. TE-183 stratigraphic description

Stratum	Depth (cmts)	Description
I	0–70	Ap horizon; 7.5YR 2.5/2, very dark brown; gravelly sandy loam; moderate, medium blocky structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, wavy lower boundary; contained common mottles of 10YR 3/2, very dark grayish brown, gravelly sand containing basalt pebbles
II	50–100	Fill; 10YR 3/2, very dark grayish brown; gravelly loamy sand; weak, very fine granular structure; moist, loose consistence; no cementation; non-plastic; mixed origin; fine roots common; abrupt, smooth lower boundary; contained common mottles of 10YR 3/2, very dark grayish brown, gravelly sand containing basalt pebbles
III	90–140	Natural; 10YR 3/4, brown; gravelly sandy loam; weak, very fine granular structure; moist, loose consistence; no cementation; non-plastic; mixed origin; few fine roots; clear, smooth lower boundary; contained banding of 10YR 6/3, pale brown, sand
IV	132–170	Natural; 10YR 4/3, brown; gravelly sandy loam; weak, very fine granular structure; moist, loose consistence; no cementation; slightly plastic; terrigenous origin; few fine roots; lower boundary not observed; contained common concentrations of 2.5Y 6/1, gray, loamy sand

1.1.84 Test Excavation 184 (TE-184)

TE-184 was in the central-southern portion of the project area (Figure 339). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.63 mbs. The stratigraphy of TE-184 consisted of a very dark brown, gravelly sandy loam Ap horizon (Stratum I) and very dark grayish brown, sandy clay loam fill (Stratum II) overlying brown, natural gravelly silty clay loam (Stratum III) (Figure 340 through Figure 342 and Table 84). No cultural materials were encountered.



Figure 339. TE-184, overview of the general location, view to southwest



Figure 340. TE-184, oblique view of the east wall, view to southeast



Figure 341. TE-184, close-up of the east wall, view to east

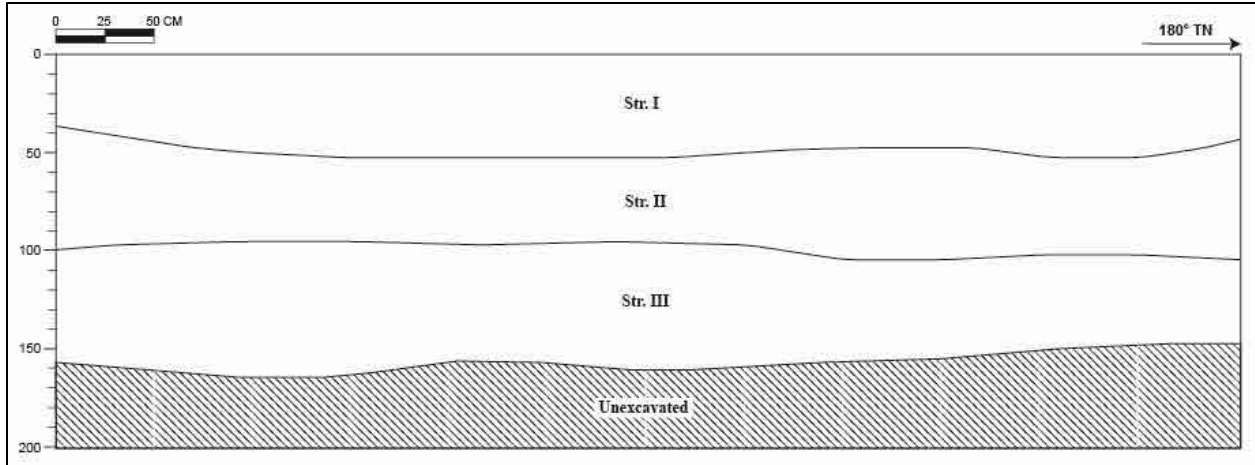


Figure 342. TE-184, stratigraphy of the east wall

Table 84. TE-184 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–50	Ap horizon; 10YR 2/2, very dark brown; gravelly sandy loam; moderate, medium blocky structure; dry, hard consistence; no cementation; slightly plastic; terrigenous origin; many fine roots; clear, smooth lower boundary
II	37–100	Fill; 10YR 3/2, very dark grayish brown; sandy clay loam; moderate, fine platy structure; moist, friable consistence; plastic; mixed origin; few fine roots; abrupt, smooth lower boundary
III	90–163	Natural; 10YR 4/3, brown; gravelly silty clay loam; moderate, fine platy structure; moist, friable consistence; no cementation, plastic; terrigenous origin; no roots; lower boundary not observed

1.1.85 Test Excavation 185 (TE-185)

TE-185 was in the southern portion of the project area, adjacent to the eastern side of a natural drainage (Figure 343). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.80 mbs. The stratigraphy of TE-185 consisted of a very dark brown, gravelly sandy loam Ap horizon (Stratum I); brown, gravelly sand fill (Stratum II); and dark grayish brown, very gravelly sand fill with bands of grayish brown silt (Stratum III) overlying dark yellowish brown, natural gravelly silt loam with bands of very dark grayish brown sand (Stratum IV) (Figure 344 through Figure 346 and Table 85).



Figure 343. TE-185, overview of the general location, view to southwest



Figure 344. TE-185, oblique view of the west wall, view to southwest



Figure 345. TE-185, close-up of the west wall, view to west

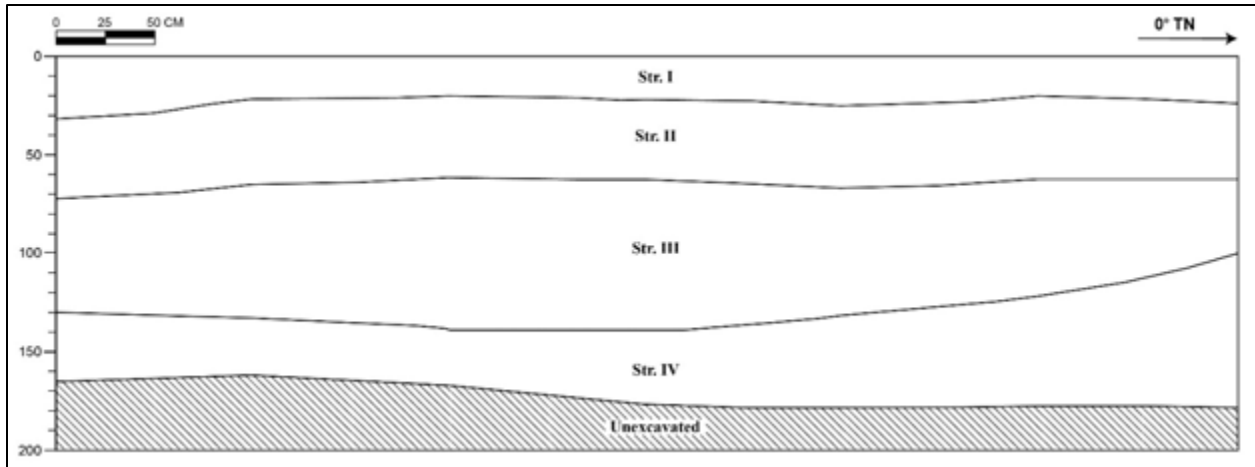


Figure 346. TE-185, stratigraphy of the west wall

Table 85. TE-185 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–32	Ap horizon; 7.5YR 2.5/2, very dark brown; gravelly sandy loam; moderate, fine blocky structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, smooth lower boundary
II	20–72	Fill; 10YR 4/3, brown; gravelly sandy loam; moderate, fine granular structure; moist, firm consistence; no cementation; slightly plastic; mixed origin; fine roots common; clear, smooth lower boundary
III	55–140	Fill; 10YR 3/2, dark grayish brown; very gravelly sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; fine roots common; clear, smooth lower boundary; contained bands of 10YR 5/2, grayish brown, silt loam
IV	102–180	Natural; 10YR 4/4, dark yellowish brown; gravelly silt loam; moderate, fine platy structure; moist, friable consistence; no cementation; plastic; terrigenous origin; no roots; lower boundary not observed; contained bands of 10YR 3/2, very dark grayish brown, sand

1.1.86 Test Excavation 186 (TE-186)

TE-186 was in the southeastern portion of the project area and approximately 35 m north of the Lower Maalaea Road. The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.74 mbs. The stratigraphy of TE- 186 consisted of a dark brown, gravelly loam sand Ap horizon (Stratum I), contained concentrations of brown loamy sand; overlying a fill brown, sand (Stratum II); mottled with two variations, a yellowish-brown silt loam and a very dark brown sand; a natural dark yellowish brown, gravelly silt loam (Stratum III), contained concentrations of dark yellowish brown loamy sand; and a natural grayish brown, gravelly loamy sand (Stratum IV) (Figure 347 through Figure 350, and Table 86).



Figure 347. TE-186, overview of the general location, view to southwest



Figure 348. TE-186, oblique view of the east wall, view to northeast



Figure 349. TE-186, close-up of the east wall, view to east

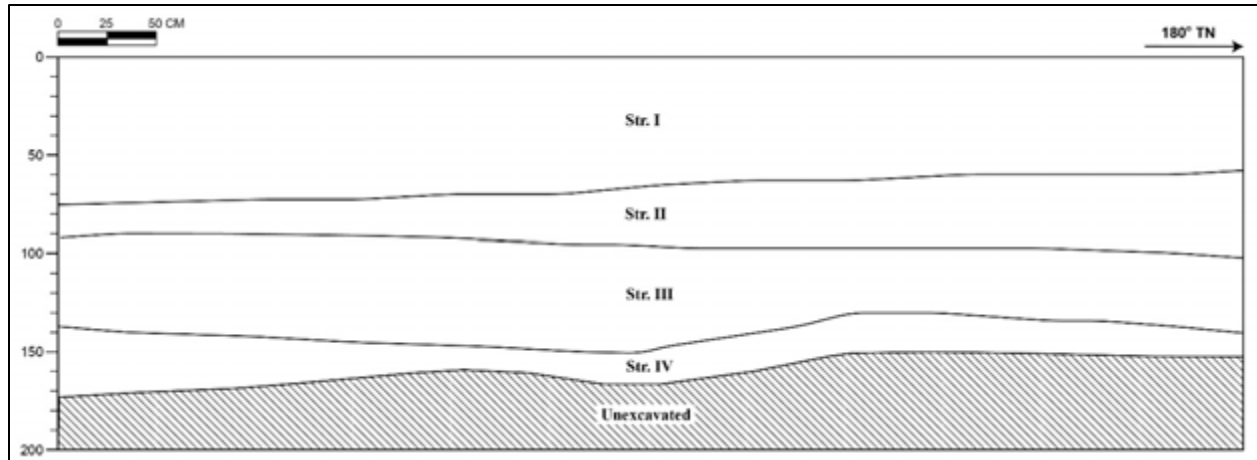


Figure 350. TE-186, stratigraphy of the east wall

Table 86. TE-186 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–75	Ap horizon; 7.5YR 3/3, dark brown; gravelly loamy sand; moderate, fine granular structure; dry, hard consistence; no cementation; non-plastic; mixed origin; many fine roots; clear, smooth lower boundary; contained concentration of 10YR 5/3, brown, loamy sand
II	58–101	Fill; 10YR 4/3, brown; sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; fine roots common; clear, smooth lower boundary; contained common mottles of 10YR 5/4, yellowish brown, silt loam and a lens of 10YR 3/1, very dark brown, loamy sand
III	92–150	Natural; 10YR 4/4, dark yellowish brown; gravelly silt loam; moderate, fine platy structure; moist, friable consistence; no cementation; plastic; terrigenous origin; no roots; clear, smooth lower boundary; contained common concentrations of 10YR 4/4, dark yellowish brown, loamy sand
IV	130–174	Natural; 10YR 5/2, grayish brown; gravelly loamy sand; weak, fine granular structure; moist, loose consistence; no cementation; non-plastic; mixed origin; few fine roots; lower boundary not observed

1.1.87 Test Excavation 187 (TE-187)

TE-187 was near the southern boundary in the southeastern portion of the project area (Figure 351). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.70 mbs. The stratigraphy of TE-187 consisted of a dark brown, gravelly sandy loam, Ap horizon (Stratum I) and grayish brown, sand fill with mottles of silt loam (Stratum II) overlying brown, natural sand (Stratum III) (Figure 352 through Figure 354 and Table 87).



Figure 351. TE-187, overview of the general location, view to southwest



Figure 352. TE-187, oblique view of the east wall, view to northeast



Figure 353. TE-187, close-up of the east wall, view to east

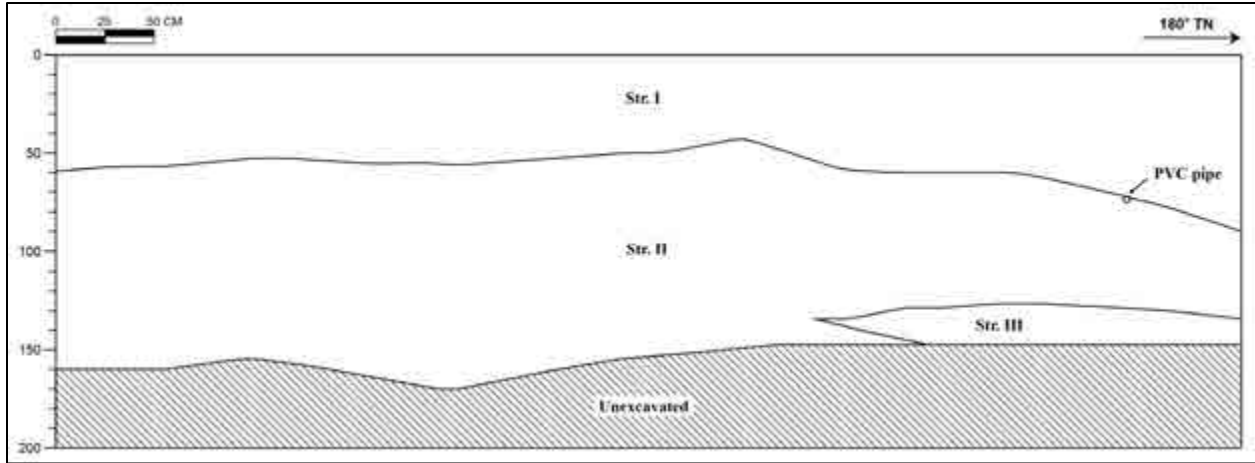


Figure 354. TE-187, stratigraphy of the east wall

Table 87. TE-187 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–90	Ap horizon; 10YR 3/3, dark brown; gravelly sandy loam; moderate, fine blocky structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, smooth lower boundary
II	45–170	Fill; 10YR 5/2, grayish brown; sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; many fine roots; lower boundary not observed; contained mottles of 10YR 5/4, brown, silt loam and 10YR 5/4, yellowish brown, silt loam; contained a PVC pipe
III	125–148	Natural; 10YR 5/3, brown; sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; no roots; lower boundary not observed

1.1.88 Test Excavation 188 (TE-188)

TE-188 was near the southern boundary in the southeastern portion of the project area (Figure 355). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.73 mbs. The stratigraphy of TE-188 consisted of a dark brown, gravelly sandy loam Ap horizon mottled with grayish brown sand (Stratum I) and previously disturbed grayish brown, sand (Stratum II) overlying brown, natural silt loam (Stratum III) and brown, natural loamy sand (Stratum IV) (Figure 356 through Figure 358 and Table 88). Stratum II contained a lens of very dark gray sand containing a charcoal stain that is attributed to historic or modern agricultural burning and brush fires.



Figure 355. TE-188, overview of the general location, view to southwest



Figure 356. TE-188, oblique view of the east wall, view to northeast



Figure 357. TE-188, close-up of the east wall, view to east

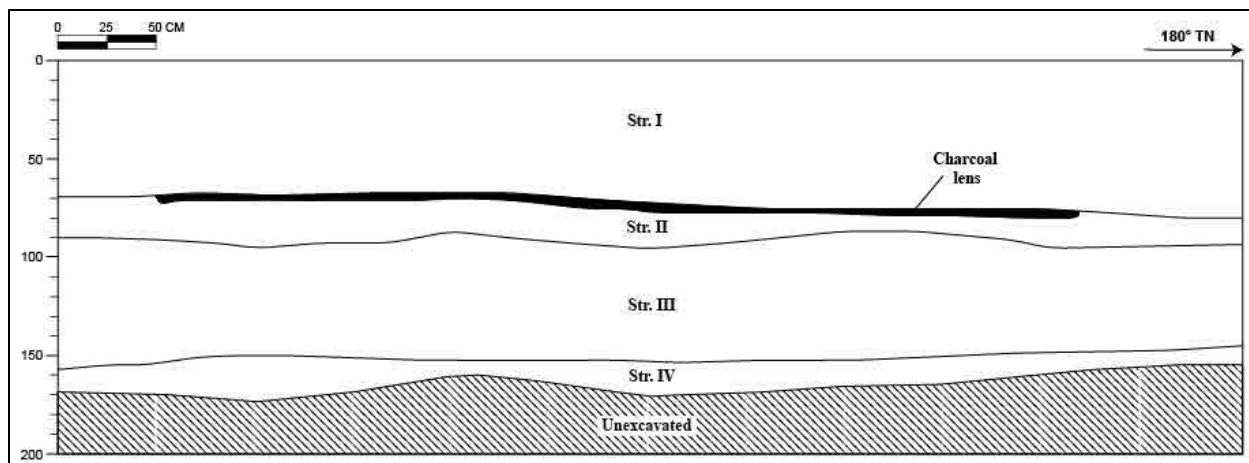


Figure 358. TE-188, stratigraphy of the east wall

Table 88. TE-188 stratigraphic description

Stratum	Depth (cmts)	Description
I	0–80	Ap horizon; 10YR 3/3, dark brown; gravelly sandy loam; moderate, fine blocky structure; dry, hard consistence; no cementation; non-plastic; mixed origin; many fine roots; clear, wavy lower boundary; contained mottles of 10YR 5/2, grayish brown, sand
II	67–95	Previously disturbed natural; 10YR 5/2, grayish brown; gravelly sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; fine roots common; clear, smooth lower boundary; contained a band of 10YR 3/1, very dark gray, sand with a charcoal stain
III	88–157	Natural; 10YR 5/3, brown; gravelly silt loam; moderate, fine platy structure; moist, friable consistence; no cementation; plastic; terrigenous origin; few fine roots; gradual, smooth lower boundary
IV	145–173	Natural; 7.5YR 5/2, brown; loamy sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; no roots; lower boundary not observed

1.1.89 Test Excavation 189 (TE-189)

TE-189 was near the western boundary in the southwestern portion of the project area (Figure 359). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.62 mbs. The stratigraphy of TE-189 consisted of a very dark brown, very gravelly sandy loam Ap horizon (Stratum I) and dark brown, silty clay loam fill mottled with dark brown loamy sand (Stratum II) overlying brown, natural silt loam (Stratum III) (Figure 360 through Figure 362 and Table 89).



Figure 359. TE-189, overview of the general location, view to south



Figure 360. TE-189, oblique view of the east wall, view to southeast



Figure 361. TE-189, close-up of the east wall, view to east

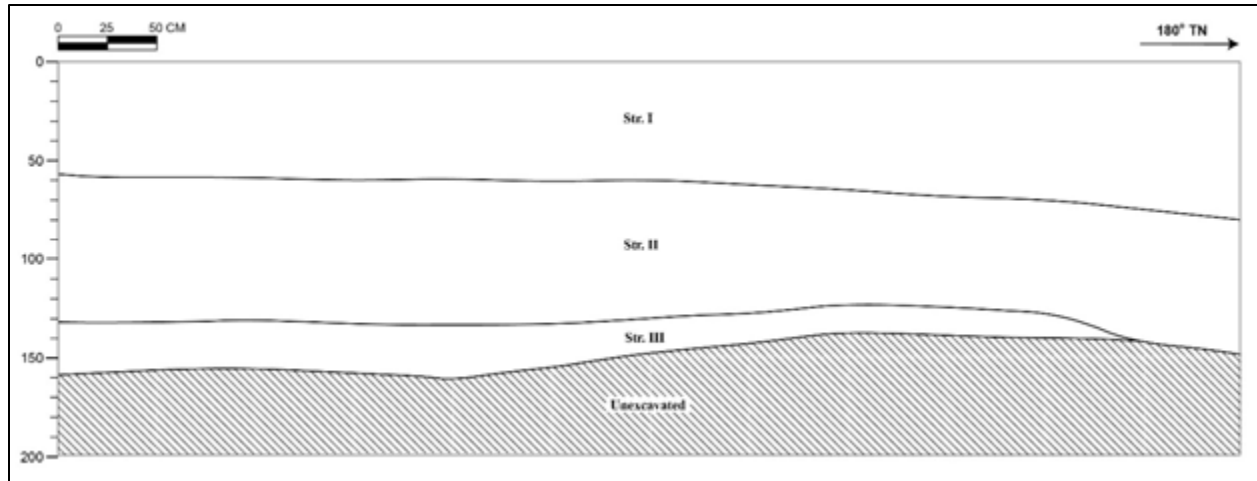


Figure 362. TE-189, stratigraphy of the east wall

Table 89. TE-189 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–80	Ap horizon; 7.5YR 2.5/2, very dark brown; very gravelly sandy loam; moderate, medium blocky structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, smooth lower boundary
II	57–148	Fill; 7.5YR 3/2, dark brown; gravelly silty clay loam; moderate, fine platy structure; moist, friable consistence; no cementation; plastic; terrigenous origin; few fine roots; abrupt, irregular lower boundary; contained concentrations of 7.5YR 3/2, dark brown, loamy sand
III	123–162	Natural; 7.5YR 5/3, brown; silt loam; moderate, very fine platy structure; moist, friable consistence; no cementation; plastic; terrigenous origin; no roots; lower boundary not observed; contained a band of 5YR 2.5/1, black, silt loam with charcoal staining

1.1.90 Test Excavation 190 (TE-190)

TE-190 was in the southwestern portion of the project area (Figure 363). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.99 mbs. The stratigraphy of TE-190 consisted of a dark grayish brown, very gravelly silt loam Ap horizon mottled with very dark gray and brown sand (Stratum I) and dark yellowish brown, silty clay loam fill mottled with dark yellowish brown loamy sand (Stratum II) overlying dark grayish brown, natural silt loam (Stratum III) (Figure 364 through Figure 366 and Table 90). Stratum III contained mottles of very dark gray, gravelly sand and brown silt loam and a lens of charcoal staining.



Figure 363. TE-190, overview of the general location, view to southwest



Figure 364. TE-190, oblique view of the east wall, view to southeast



Figure 365. TE-190, close-up of the east wall, view to east

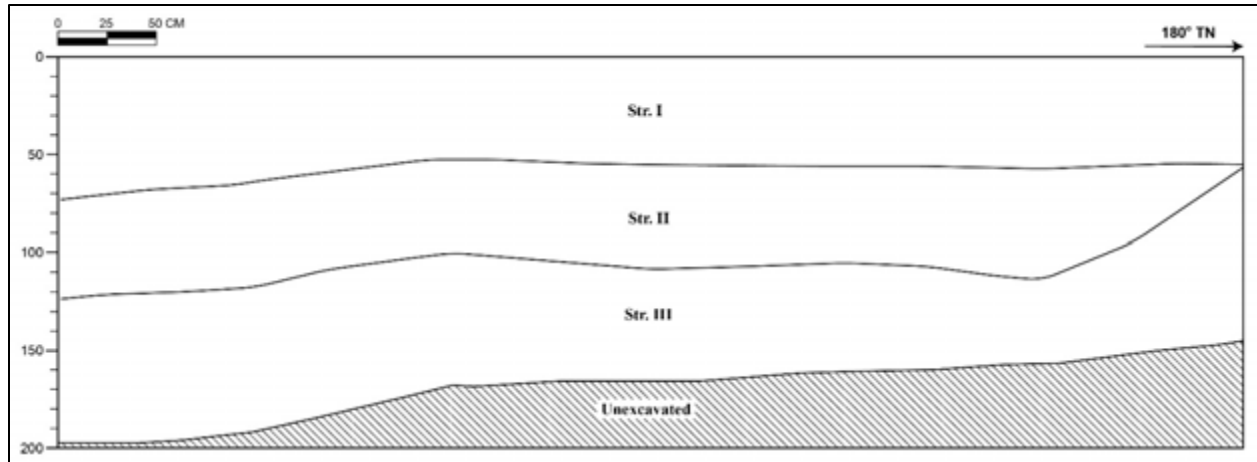


Figure 366. TE-190, stratigraphy of the east wall

Table 90. TE-190 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–72	Ap horizon; 10YR 3/3, dark brown; very gravelly sandy loam; moderate, medium blocky structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine to coarse roots; abrupt, smooth lower boundary; contained concentrations of 10YR 4/3, brown, loamy sand
II	50–122	Fill; 10YR 3/4, dark yellowish brown; gravelly silty clay loam; moderate, fine platy structure; moist, friable consistence; no cementation; plastic; terrigenous origin; few fine roots; clear, wavy lower boundary; contained mottles of 10YR 4/4, dark yellowish brown, silty clay loam
III	60–199	Natural; 10YR 4/2, dark grayish brown; very gravelly silt loam; weak, fine platy structure; moist, friable consistence; no cementation; plastic; terrigenous origin; no roots; lower boundary not observed; contained two soil variations: concentrations of 10YR 3/1, very dark gray, gravelly sand and bands of 10YR 5/3, brown silt loam

1.1.91 Test Excavation 191 (TE-191)

TE-191 was in the southwestern portion of the project area (Figure 367). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.78 mbs. The stratigraphy of TE-191 consisted of a very dark brown, gravelly sandy loam Ap horizon with concentrations of brown sandy loam (Stratum I); an intrusion of a very dark grayish brown, natural extremely cobbly sand alluvial deposit in the southern end (Stratum II), which truncates through brown, gravelly silt loam (Stratum III); very dark brown, natural loamy sand (Stratum IV); and yellowish brown, natural gravelly silt loam (Stratum V); overlying dark brown, natural gravelly silt loam (Stratum VI) (Figure 368 through Figure 370 and Table 91). Stratum V contained dark reddish brown banding.



Figure 367. TE-191, overview of the general location, view to south



Figure 368. TE-191, oblique view of the east wall, view to southeast



Figure 369. TE-191, close-up of the east wall, view to east

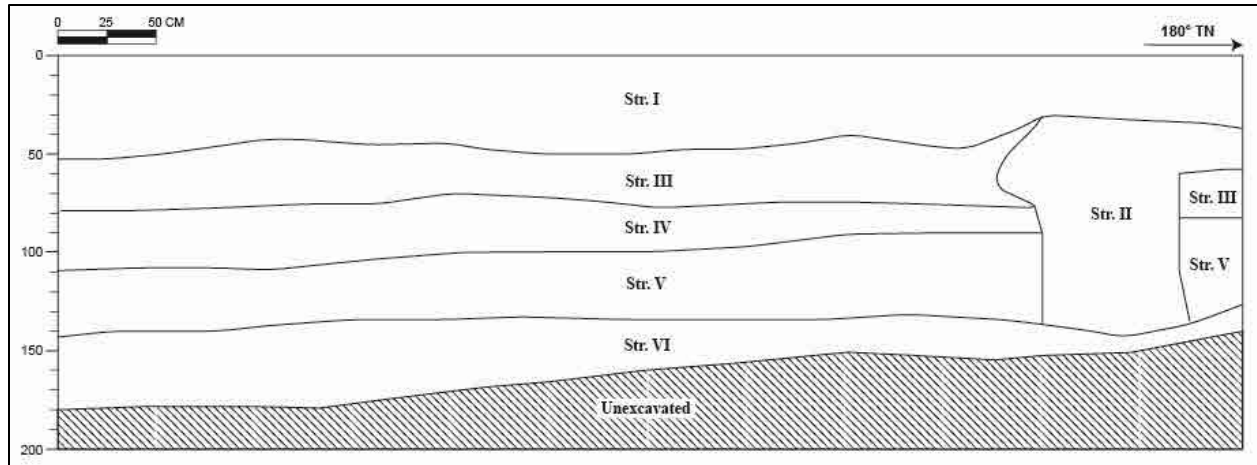


Figure 370. TE-191, stratigraphy of the east wall

Table 91. TE-191 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–52	Ap horizon; 7.5YR 2.5/2, very dark brown; gravelly sandy loam; moderate, medium blocky structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine to coarse roots; clear, wavy lower boundary; contained concentrations of 7.5YR 4/2, brown, sand alluvial deposit
II	30–142	Natural; 10YR 3/2, very dark grayish brown; sand; structureless (single grain); dry, loose consistence; no cementation; non-plastic; mixed origin; clear, smooth lower boundary
III	30–77	Previously disturbed natural; 7.5YR 4/4, brown; gravelly silt loam; moderate, fine platy structure; moist, loose consistence; no cementation; plastic; terrigenous origin; few fine roots; clear, broken lower boundary
IV	70–108	Natural; 7.5YR 4/1, dark gray; very gravelly loamy sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; few fine roots; clear, irregular lower boundary
V	90–142	Natural; 10YR 5/4, yellowish brown; gravelly silt loam; moderate, fine platy structure; moist, friable consistence; no cementation; plastic; terrigenous origin; no roots; clear, broken lower boundary; contained banding of 5YR 2.5/2, dark reddish brown, silt loam
VI	126–178	Natural; 7.5YR 3/4, dark brown; gravelly silt loam; moderate, fine platy structure; moist, friable consistence; no cementation; plastic; terrigenous origin; few fine roots; lower boundary not observed

1.1.92 Test Excavation 192 (TE-192)

TE-192 was in the southwestern portion of the project area (Figure 371). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.69 mbs. The stratigraphy of TE-192 consisted of a very dark brown, gravelly sandy loam Ap horizon (Stratum I); pale brown, gravelly sand fill (Stratum II), contained a very dark brown sand; dark brown, very gravelly sandy loam (Stratum III), contained a reddish brown sandy loam and a yellowish red burnt clay; a natural brown, loamy sand, alluvial deposit (Stratum IV), mottled with a gray loamy sand, alluvial deposit (Figure 372 through Figure 374 and Table 92). Stratum II contained lenses of very dark brown sand. Stratum III contained lenses of yellowish red, fire-altered clay, likely the result of historic or modern agricultural burning and brush fires.



Figure 371. TE-192, overview of the general location, view to south



Figure 372. TE-192, oblique view of the east wall, view to south



Figure 373. TE-192, close-up of the east wall, view to east

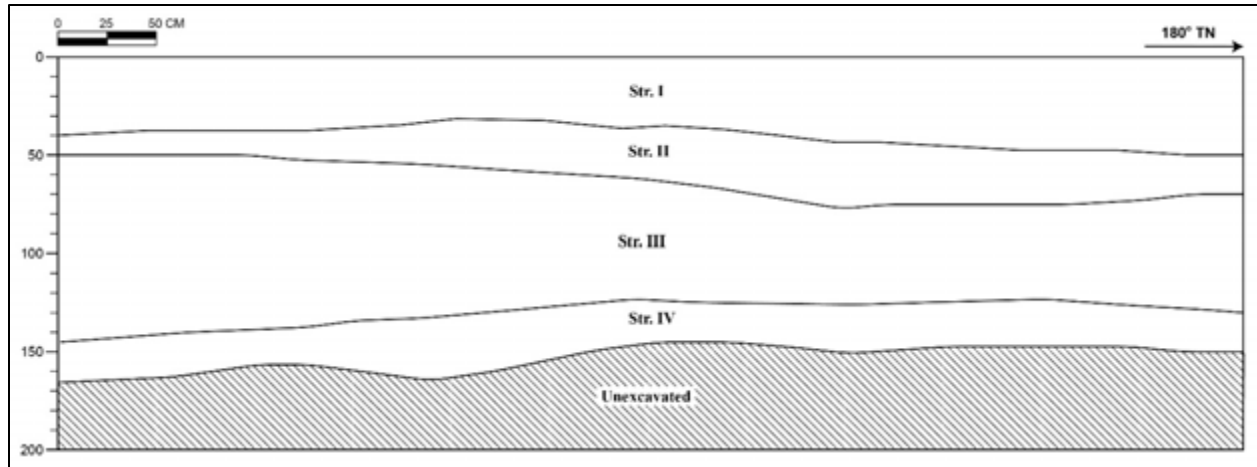


Figure 374. TE-192, stratigraphy of the east wall

Table 92. TE-192 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–47	Ap horizon; 7.5YR 2.5/2, very dark brown; gravelly sandy loam; moderate, fine blocky structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, smooth lower boundary
II	30–73	Fill; 10YR 6/3, pale brown; gravelly sand; structureless (single grain); moist, loose; no cementation; non-plastic; mixed origin; few fine roots; clear, smooth lower boundary; contained lenses of 10YR 2/2, very dark brown, sand
III	46–141	Fill; 7.5YR 3/3, dark brown; very gravelly sandy loam; weak, fine granular structure; dry, weakly coherent; no cementation; slightly plastic; mixed origin; few fine roots; clear, smooth lower boundary; contained lenses of 5YR 5/6, yellowish red, fire-altered clay
IV	120–163	Natural; 7.5YR 5/4, brown; very gravelly loamy sand; weak, very fine granular structure; moist, loose consistence; strong cementation; non-plastic; mixed origin; lower boundary not observed; contained concentrations of 7.5YR 5/1, gray, loamy sand alluvial deposit

1.1.93 Test Excavation 193 (TE-193)

TE-193 was in the southwestern portion of the project area (Figure 375). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.65 mbs. The stratigraphy of TE-193 consisted of a very dark brown, gravelly sandy loam Ap horizon (Stratum I) and yellowish brown, sand fill with a thin band of dark brown hardened clay (Stratum II) overlying pale brown, natural sand with bands of dark yellowish brown clay and dark grayish brown sand (Stratum III) and dark brown, natural gravelly silt loam (Stratum IV) (Figure 376 through Figure 378 and Table 93). No cultural materials were observed.



Figure 375. TE-193, overview of the general location, view to south



Figure 376. TE-193, oblique view of the east wall, view to southeast



Figure 377. TE-193, close-up of the east wall, view to east

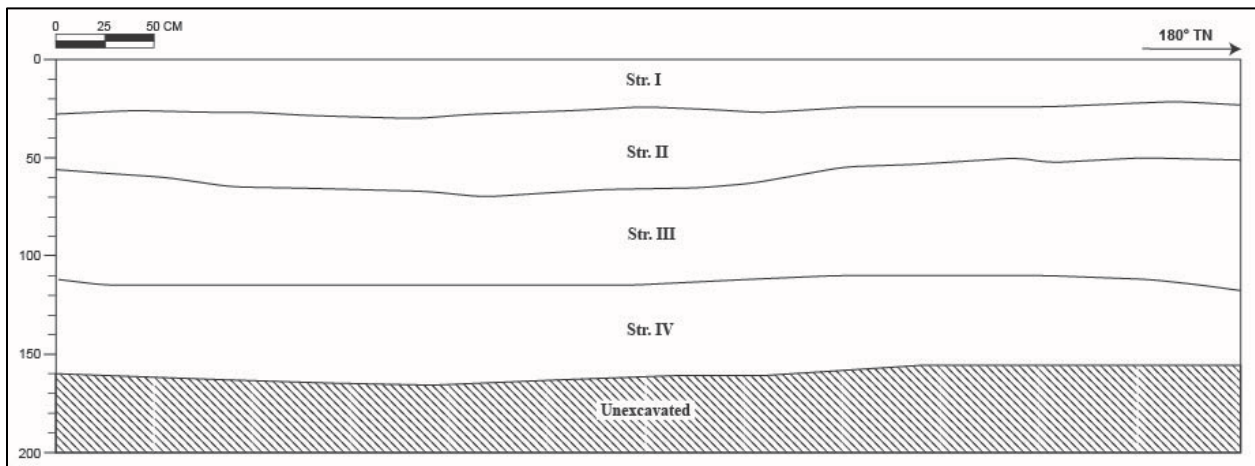


Figure 378. TE-193, stratigraphy of the east wall

Table 93. TE-193 stratigraphic description

Stratum	Depth (cmts)	Description
I	0–30	Ap horizon; 7.5YR 2.5/2, very dark brown; gravelly sandy loam; moderate, fine blocky structure; dry, weakly coherent consistence; no cementation; slightly plastic; mixed origin; many fine roots; abrupt, smooth lower boundary
II	24–70	Fill; 10YR 5/4, yellowish brown; sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; few fine roots; contained a thin band of 7.5YR 3/3, dark brown, hardened clay
III	52–117	Natural; 10YR 6/3, pale brown; sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; few fine roots; abrupt, smooth lower boundary; contained numerous, small to medium bands of 10YR 3/6, dark yellowish brown, clay deposits and a band of 10YR 4/2, dark grayish brown, sand
IV	110–165	Natural; 10YR 3/3, dark brown; gravelly silt loam; weak, fine platy structure; moist, friable consistence; no cementation; plastic; terrigenous origin; few fine to medium roots; lower boundary not observed

1.1.94 Test Excavation 194 (TE-194)

TE-194 was in the southwestern portion of the project area (Figure 379). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.57 mbs. The stratigraphy of TE-194 consisted of a very dark brown, gravelly sandy loam Ap horizon with concentrations of brown sand (Stratum I) overlying dark brown, natural gravelly sandy clay loam with bands of brown loamy sand (Stratum II); and dark brown, natural gravelly silty clay loam with bands of pale brown sand and dark brown silty clay loam (Stratum III) (Figure 380 through Figure 382 and Table 94). No cultural materials were encountered.



Figure 379. TE-194, overview of the general location, view to southwest



Figure 380. TE-194, oblique view of the west wall, view to southwest



Figure 381. TE-194, close-up of the west wall, view to west

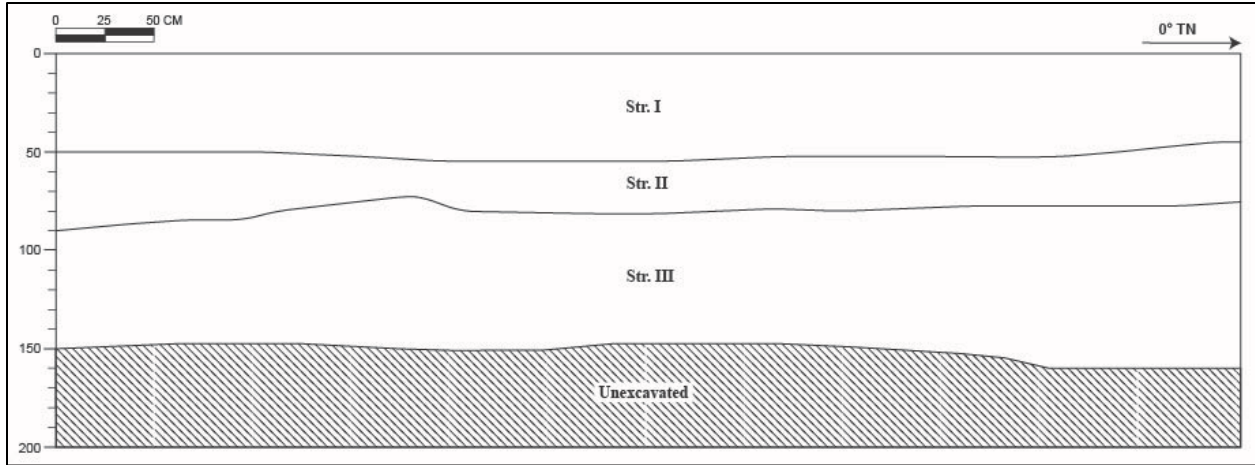


Figure 382. TE-194, stratigraphy of the west wall

Table 94. TE-194 stratigraphic description

Stratum	Depth (cmts)	Description
I	0–53	Ap horizon; 7.5YR 2.5/2, very dark brown; gravelly, sandy loam; moderate, fine blocky structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, smooth lower boundary; contained concentrations of 7.5YR 5/3, brown, sand
II	44–85	Natural; 7.5YR 3/4, dark brown; gravelly sandy clay loam; moderate, medium blocky structure; moist, firm consistence; no cementation; plastic; mixed origin; abrupt, wavy lower boundary; contained bands of 7.5YR 4/3, brown, loamy sand
III	70–157	Natural; 7.5YR 3/4, dark brown; gravelly silty clay loam; moderate, fine platy structure; moist, friable consistence; no cementation; plastic; terrigenous origin; lower boundary not observed; contained bands of 10YR 6/3, pale brown, sand and 7/5YR 3/4, dark brown, silty clay loam

1.1.95 Test Excavation 195 (TE-195)

TE-195 was in the central-southern portion of the project area (Figure 383). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.60 mbs. The stratigraphy of TE-195 consisted of a very dark brown, gravelly sandy loam Ap horizon (Stratum I) and light yellowish brown, gravelly sand fill with a band of dark brown sandy clay loam and dark yellowish brown sand (Stratum II) overlying weak red, natural gravelly sand with a band of dark brown clay (Stratum III); and natural, dark yellowish brown gravelly sand with bands of brown sand, medium dark yellowish brown silt loam, and dark brown silt loam (Stratum IV) (Figure 384 through Figure 386 and Table 95). No cultural materials were encountered.



Figure 383. TE-195, overview of the general area, view to west



Figure 384. TE-195, oblique view of the west wall, view to southwest



Figure 385. TE-195, close-up of the west wall, view to west

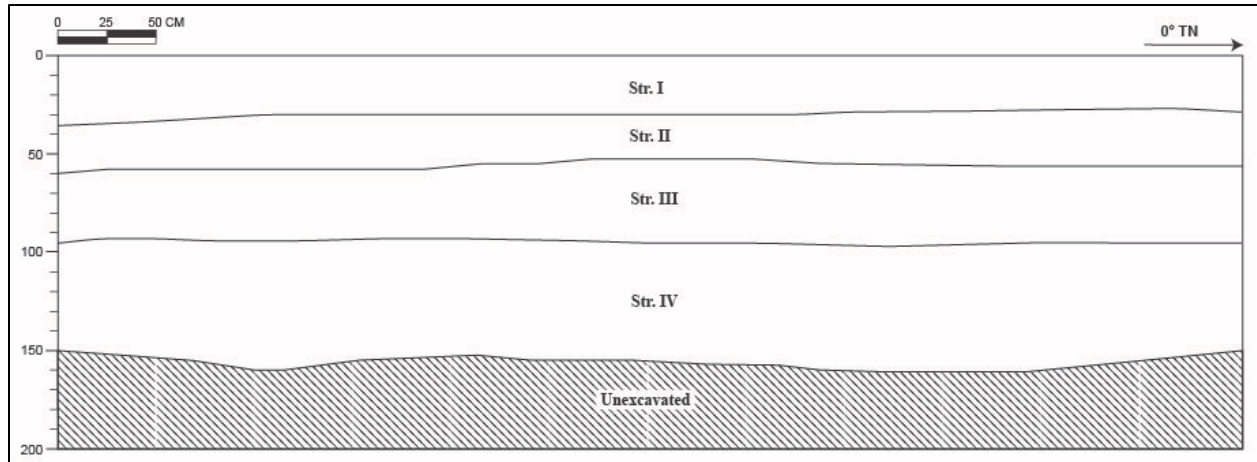


Figure 386. TE-195, stratigraphy of the west wall

Table 95. TE-195 stratigraphic description

I	0–34	Ap horizon; 10YR 2/2, very dark brown; gravelly sandy loam; moderate, medium blocky structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine roots; abrupt, smooth lower boundary
II	28–58	Fill; 10YR 6/4, light yellowish brown; gravelly sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; fine roots common; abrupt, smooth lower boundary; contained a large band of 10YR 3/3, dark brown, sandy clay loam and 10YR 3/6, dark yellowish brown, sand
III	53–96	Natural; 10R 5/2, weak red; gravelly sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; fine roots common; clear, smooth lower boundary; contained a band of 7.5YR 3/3, dark brown, clay
IV	92–160	Natural; 10YR 4/4, dark yellowish brown; gravelly sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; contained a band of 10YR 5/3, brown, sand, multiple bands of thin to medium 10YR 3/4, dark yellowish brown, silt loam; and a band of 7.5YR 3/4, dark brown, silt loam

1.1.96 Test Excavation 196 (TE-196)

TE-196 was in the southeastern portion of the project area (Figure 387). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.68 mbs. The stratigraphy of TE-196 consisted of a dark brown, gravelly sandy loam Ap horizon (Stratum I) and dark grayish brown, gravelly silty clay loam fill with bands of grayish brown aeolian sand (Stratum II) overlying light brownish gray, natural aeolian sand (Stratum III) and pale brown, natural gravelly sand (Stratum IV) (Figure 388 through Figure 390 and Table 96). Stratum IV contained a thin lens of very dark gray sand.



Figure 387. TE-196, overview of the general area, view to northwest



Figure 388. TE-196, oblique view of the west wall, view to southwest



Figure 389. TE-196, close-up of the west wall, view to west

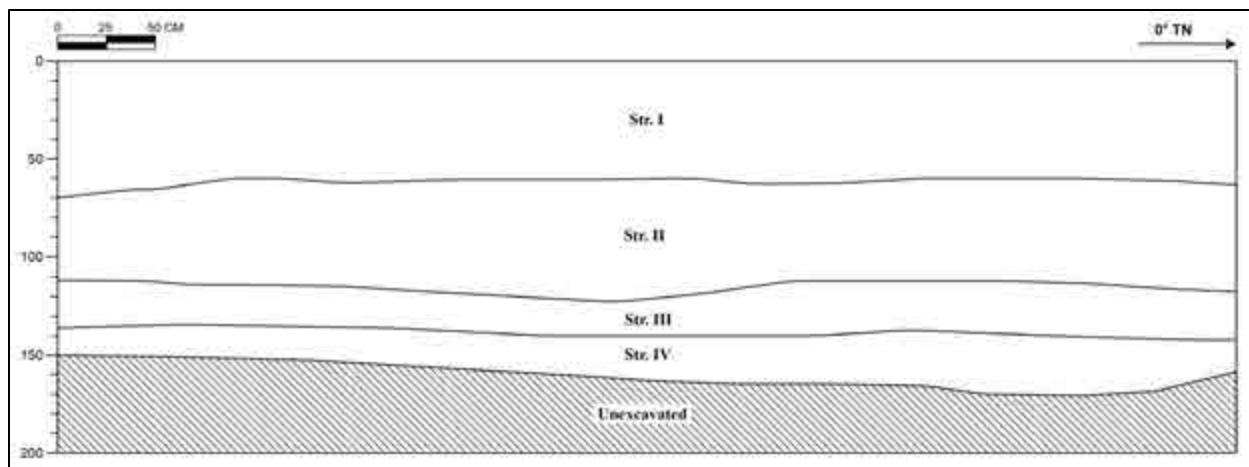


Figure 390. TE-196, stratigraphy of the west wall

Table 96. TE-196 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–70	Ap horizon; 10YR 3/3, dark brown; gravelly sandy loam; moderate, medium granular structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine to medium roots; clear, smooth lower boundary
II	60–122	Fill; 10YR 4/2, dark grayish brown; gravelly silty clay loam; moderate, medium platy structure; moist, friable consistence; no cementation; very plastic; terrigenous origin; few fine roots; clear, wavy lower boundary; contained bands of 10YR 5/2, grayish brown, aeolian sand
III	112–142	Natural; 10YR 6/2, light brownish gray; sand; structureless (single grain); moist, loose consistence; no cementation; mixed origin; abrupt, smooth lower boundary; aeolian sand
IV	137–168	Natural; 10YR 6/3, pale brown; gravelly sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; lower boundary not observed; contained a thin lens of 7.5YR 3/1, very dark gray, sand

1.1.97 Test Excavation 197 (TE-197)

TE-197 was in the southeastern portion of the project area (Figure 391). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.64 mbs. The stratigraphy of TE-197 consisted of a dark brown, gravelly sandy loam Ap horizon (Stratum I) and yellowish brown, sand fill with concentrations of yellowish brown sand and a large lens of dark yellowish brown, sandy clay loam (Stratum II) overlying light yellowish brown, natural sand (Stratum III) (Figure 392 through Figure 394 and Table 97). Stratum III was mottled with dark grayish brown loamy sand with charcoal staining.



Figure 391. TE-197, overview of the general area, view to southeast



Figure 392. TE-197, oblique view of the east wall, view to south



Figure 393. TE-197, close-up of the east wall, view to east

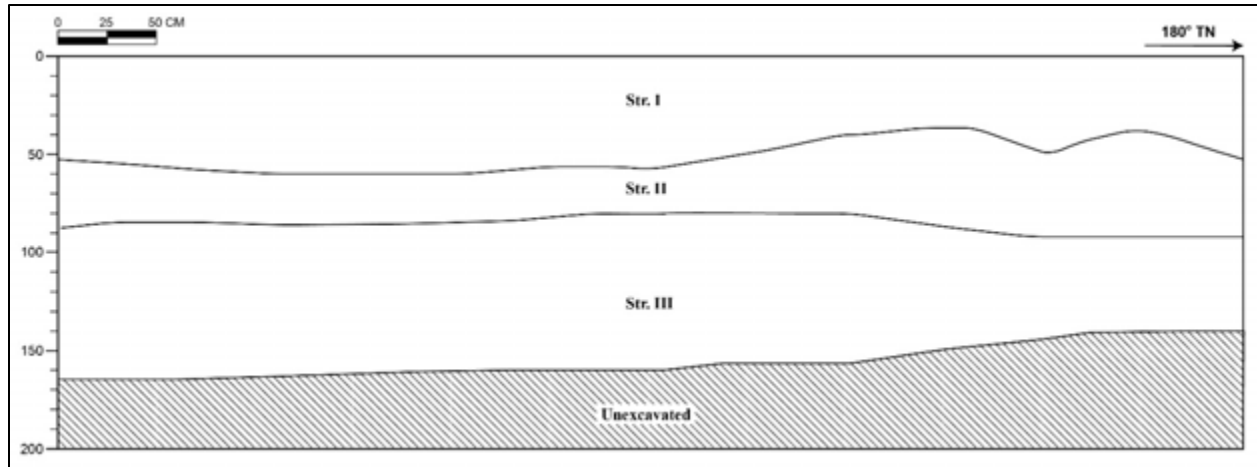


Figure 394. TE-197, stratigraphy of the east wall

Table 97. TE-197 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–60	Ap horizon; 10YR 3/3, dark brown; gravelly sandy loam; moderate, medium granular structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, wavy lower boundary
II	36–92	Fill; 10YR 5/4, yellowish brown; sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; clear, smooth lower boundary; contained concentrations of 10YR 5/4, yellowish brown, sand and a large lens of 10YR 3/4, dark yellowish brown, sandy clay loam
III	80–164	Previously disturbed natural; 10YR 6/4, light yellowish brown; sand; structureless (single grain); moist, loose consistence; no cementation; mixed origin; lower boundary not observed; contained lenses of 10YR 3/2, dark grayish brown, loamy sand

1.1.98 Test Excavation 198 (TE-198)

TE-198 was in the southeastern portion of the project area (Figure 395). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.57 mbs. The stratigraphy of TE-198 consisted of a very dark brown, gravelly sandy loam Ap horizon (Stratum I) and brown, gravelly sand fill mottled with very dark grayish brown, sand with a band of grayish brown, silt loam (Stratum II) overlying brown, natural gravelly silt loam mottled with light brownish gray, sand (Stratum III) (Figure 396 through Figure 398 and Table 98).



Figure 395. TE-198, overview of the general area, view to south



Figure 396. TE-198, oblique view of the east wall, view to south



Figure 397. TE-198, close-up of the east wall, view to east

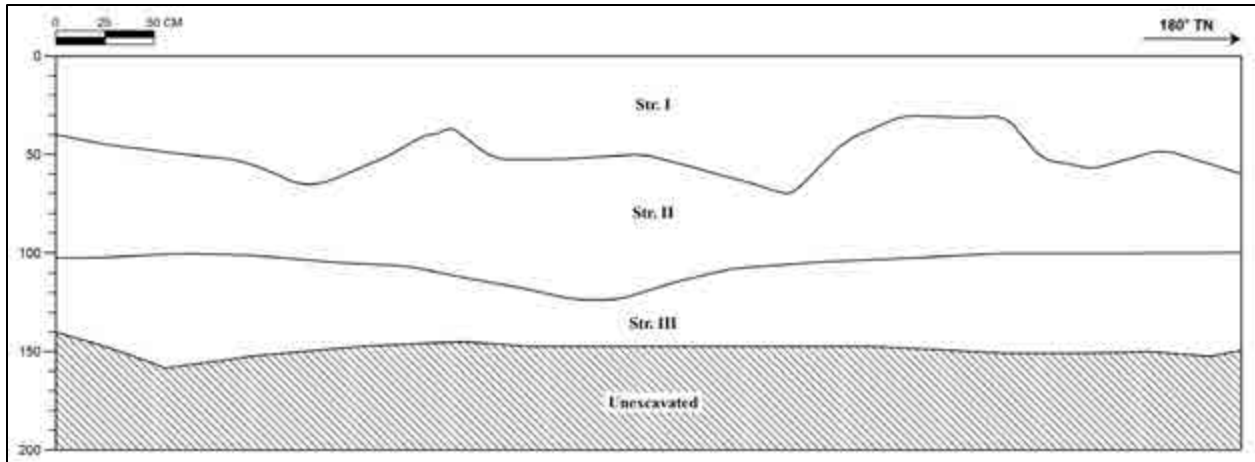


Figure 398. TE-198, stratigraphy of the east wall

Table 98. TE-198 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–70	Ap horizon; 7.5YR 2.5/2, very dark brown; gravelly sandy loam; moderate, fine blocky structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, wavy lower boundary
II	30–122	Fill; 10YR 5/3, brown; gravelly sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; fine roots common; clear, wavy lower boundary; contained two bands of 10YR 3/2, very dark grayish brown, charcoal-stained sand near lower interface and a band of 10YR 5/2, grayish brown, silt loam
III	100–157	Previously disturbed natural; 10YR 5/3, brown; gravelly silt loam; moderate, fine platy structure; moist, friable consistence; no cementation; plastic; terrigenous origin; lower boundary not observed; contained a large band of 10YR 6/2, light brownish gray, sand

1.1.99 Test Excavation 199 (TE-199)

TE-199 was in the southeastern portion of the project area (Figure 399). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.75 mbs. The stratigraphy of TE-199 consisted of a dark brown, gravelly sandy loam Ap horizon (Stratum I) overlying brown, previously disturbed natural sand with banding of dark grayish brown, very fine loamy sand (Stratum II) and brown, natural gravelly silt loam mottled with very dark gray, alluvial sand and dark yellowish brown, coarse gravelly sand (Stratum III) (Figure 400 through Figure 402 and Table 99). No cultural materials were encountered.



Figure 399. TE-199, overview of the general area, view to southwest



Figure 400. TE-199, oblique view of the east wall, view to northeast



Figure 401. TE-199, close-up of the east wall, view to east

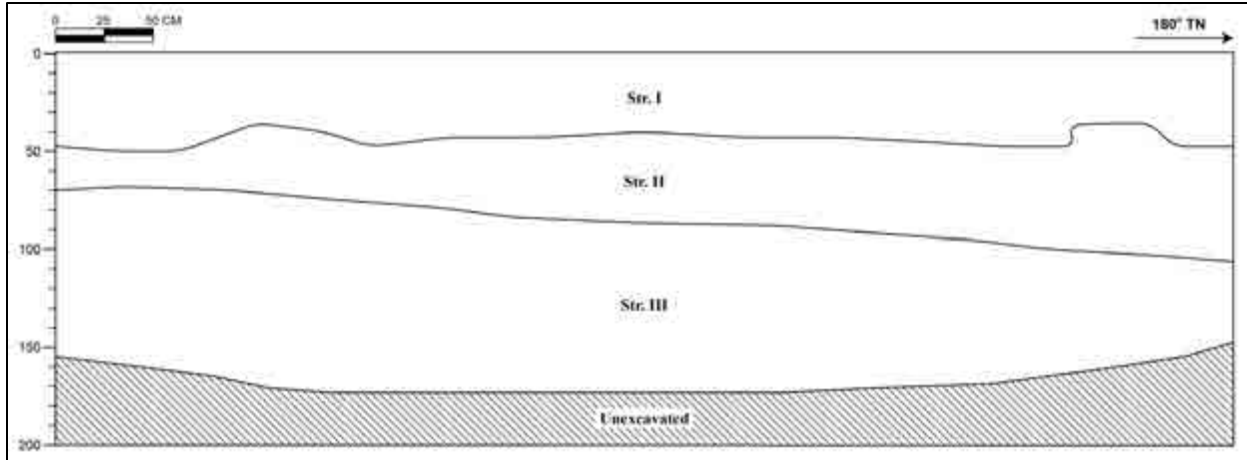


Figure 402. TE-199, stratigraphy of the east wall

Table 99. TE-199 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–48	Ap horizon; 10YR 3/3, dark brown; gravelly sandy loam; moderate, fine blocky structure; moist, firm consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, irregular lower boundary
II	34–107	Previously disturbed natural; 10YR 5/3, brown; sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; fine roots common; clear, smooth lower boundary; contained banding of 10YR 4/2, dark grayish brown, loamy sand
III	68–175	Natural; 10YR 4/3, brown; gravelly silt loam; moderate, fine platy structure; moist, friable consistence; no cementation; plastic; terrigenous origin; few fine roots; lower boundary not observed; contained mottles of 10YR 3/1, very dark gray, alluvial sand, and concentrations of 10YR 4/6, dark yellowish brown, coarse gravelly sand

1.1.100 Test Excavation 200 (TE-200)

TE-200 was in the southwestern portion of the project area (Figure 403). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.93 mbs. The stratigraphy of TE-200 consisted of a very dark brown, gravelly sandy loam Ap horizon with a large band of dark yellowish brown silt loam (Stratum I) overlying dark yellowish brown, sandy loam with a band of very dark brown silt loam (Stratum II); and dark brown silt loam with bands of dark brown, very gravelly sand and a very dark brown silt loam (Figure 404 through Figure 406 and Table 100).



Figure 403. TE-200, overview of the general area, view to south



Figure 404. TE-200, oblique view of the east wall, view to south



Figure 405. TE-200, close-up of the east wall, view to east

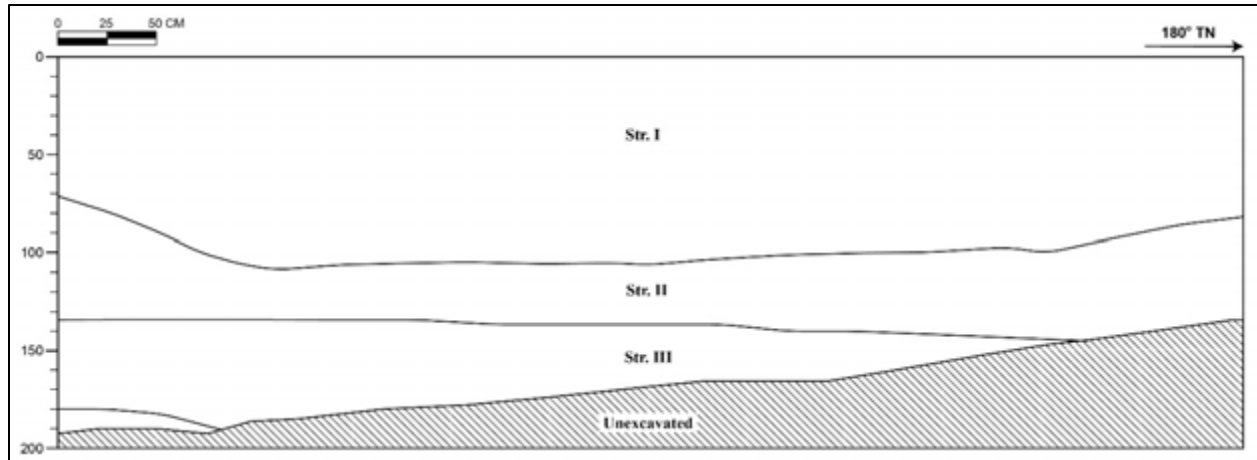


Figure 406. TE-200, stratigraphy of the east wall

Table 100. TE-200 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–108	Ap horizon; 7.5YR 2.5/2, very dark brown; gravelly sandy loam; moderate, medium blocky structure; moist, friable consistence; slightly plastic; terrigenous origin; many fine roots; gradual, smooth lower boundary; contained large band of 10YR 3/6, dark yellowish brown, silt loam near lower interface
II	72–143	Previously disturbed natural; 10YR 3/4, dark yellowish brown; sandy loam; moderate, fine platy structure; moist, friable consistence; non-plastic; terrigenous origin; few fine roots; clear, smooth lower boundary; contained a band of silt loam
III	120–193	Previously disturbed natural; 7.5YR 3/4, dark brown; silt loam; moderate, fine platy structure; moist, friable consistence; non-plastic; terrigenous origin; lower boundary not observed; contained two bands of 10YR 3/3, dark brown, very gravelly sand and a band of 7.5YR 2.5/2, very dark brown, silt loam

1.1.101 Test Excavation 201 (TE-201)

TE-201 was in the southwestern portion of the project area (Figure 407). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.73 mbs. The stratigraphy of TE-201 consisted of a very dark brown, gravelly sandy loam Ap horizon with a lens of dark brown, very gravelly sandy loam (Stratum I) and a dark yellowish brown sandy clay loam Ap horizon with a lens of dark yellowish brown, loamy sand (Stratum II) overlying dark yellowish brown, natural silty clay loam with concentrations of a brown, extremely gravelly sand alluvial deposit (Stratum III) and brown, natural gravelly silt loam (Stratum IV) (Figure 408 through Figure 410 and Table 101). No cultural materials were encountered.



Figure 407. TE-201, overview of the general area, view to south



Figure 408. TE-201, oblique view of the east wall, view to south



Figure 409. TE-201, close-up of the east wall, view to east

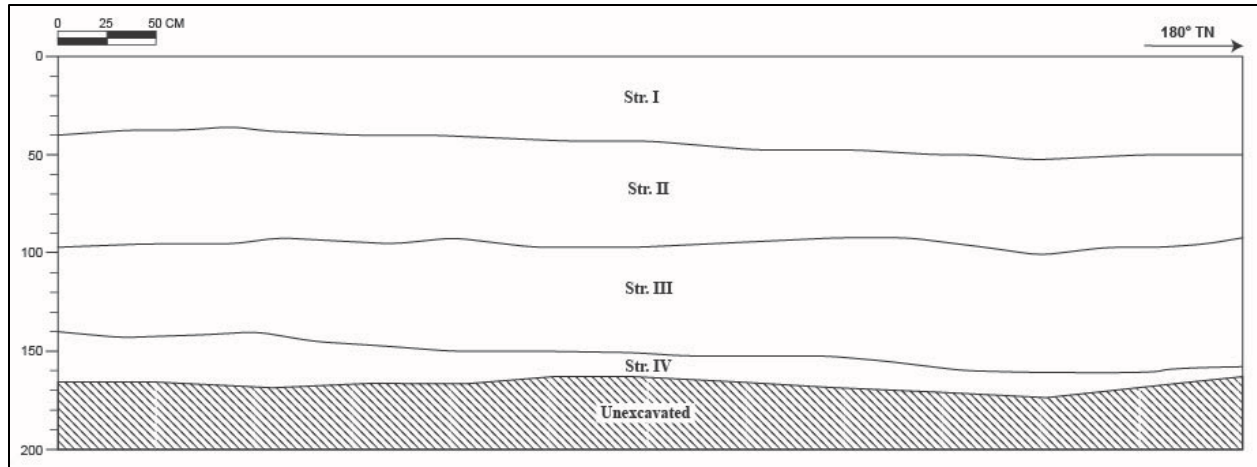


Figure 410. TE-201, stratigraphy of the east wall

Table 101. TE-201 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–53	A horizon; 10YR 2/2, very dark brown; gravelly sandy loam; moderate, very fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; many fine roots; abrupt, smooth lower boundary; contained a lens of 10YR 3/3, dark brown, very gravelly, sandy loam
II	35–100	A horizon; 10YR 3/4, dark yellowish brown; sandy clay loam; moderate, very fine blocky structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; few fine to coarse roots; abrupt, smooth lower boundary; contained a lens of 10YR 3/6, dark yellowish brown, loamy sand
III	90–162	Natural; 10YR 3/4, dark yellowish brown; silty clay loam; moderate, very fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; few coarse roots; very abrupt, smooth lower boundary; contained concentrations of 10YR 4/3, brown, extremely gravelly water deposit with rounded cobbles near the lower interface
IV	140–173	Natural; 10YR 4/3, brown; gravelly silt loam; strong, very fine granular structure; moist, very friable consistence; no cementation; slightly plastic; terrigenous origin; lower boundary not observed

1.1.102 Test Excavation 202 (TE-202)

TE-202 was in the southwestern portion of the project area (Figure 411). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.63 mbs. The stratigraphy of TE-202 consisted of a very dark grayish brown, gravelly sandy loam Ap horizon (Stratum I) and a dark yellowish brown, silty clay loam Ap horizon with a lens of dark yellowish brown, gravelly sandy clay loam (Stratum II) overlying dark brown, natural silty clay loam with mottles of dark brown sand (Stratum III) and dark grayish brown, natural extremely gravelly sand (Stratum IV) (Figure 412 through Figure 414 and Table 102). No cultural materials were encountered.



Figure 411. TE-202, overview of the general location, view to south



Figure 412. TE-202, oblique view of the east wall, view to south



Figure 413. TE-202, close-up of the east wall, view to east

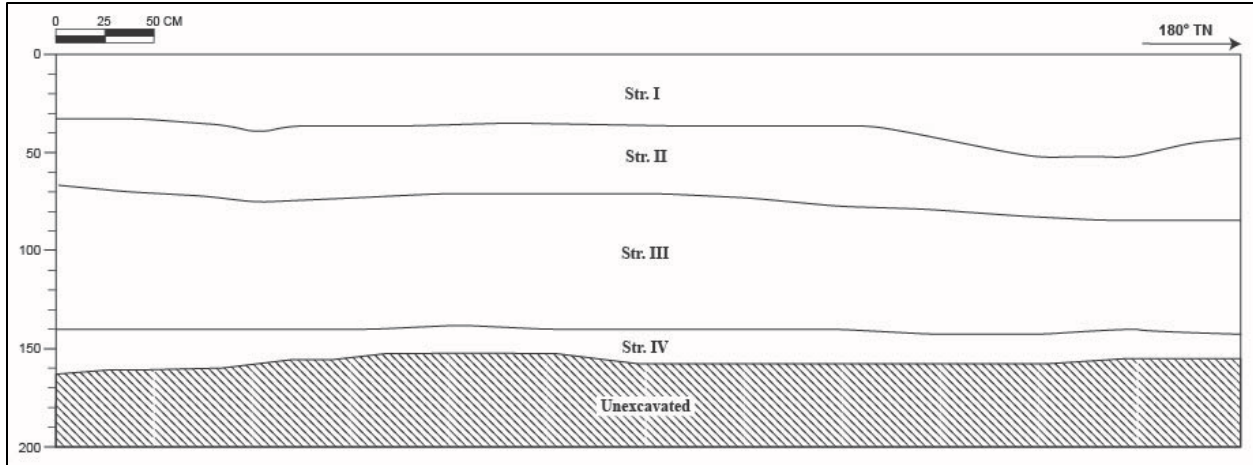


Figure 414. TE-202, stratigraphy of the east wall

Table 102. TE-202 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–50	Ap horizon; 10YR 3/2, very dark grayish brown; gravelly sandy loam; moderate, fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; fine roots common; abrupt, smooth lower boundary
II	33–84	Ap horizon; 10YR 4/4, dark yellowish brown; silty clay loam; moderate, very fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; few fine roots; abrupt, smooth lower boundary; contained a lens of 10YR 3/4, dark yellowish brown, gravelly sandy clay loam
III	67–140	Natural; 10YR 3/3, dark brown; silty clay loam; moderate, very fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; abrupt, smooth lower boundary; contained common mottling of 10YR 3/3, dark brown, sand alluvial deposit
IV	138–163	Natural; 10YR 4/2, dark grayish brown; extremely gravelly sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; terrigenous origin; lower boundary not observed; alluvial deposit

1.1.103 Test Excavation 203 (TE-203)

TE-203 was in the southwestern portion of the project area (Figure 415). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.64 mbs. The stratigraphy of TE-203 consisted of a very dark grayish brown Ap horizon mottled with a dark brown sandy clay loam (Stratum I) overlying brown, natural extremely gravelly sand with inclusions of dark brown, very gravelly sandy clay loam (Stratum II) and dark yellowish brown, natural silty clay loam (Stratum II) (Figure 416 through Figure 418 and Table 103). No cultural materials were encountered.



Figure 415. TE-203, overview of the general area, view to south



Figure 416. TE-203, oblique view of the east wall, view to south



Figure 417. TE-203, close-up of the east wall, view to east

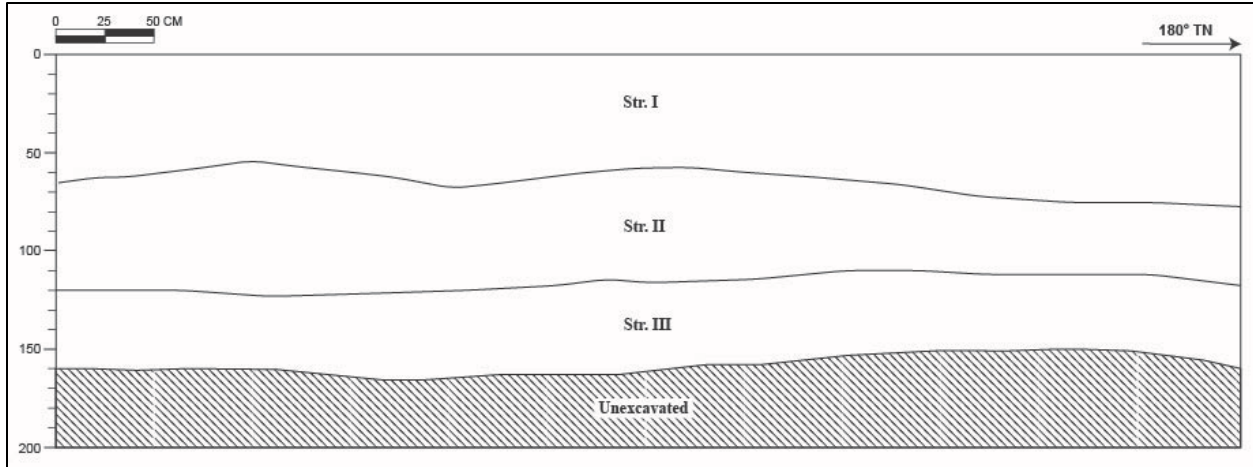


Figure 418. TE-203, stratigraphy of the east wall

Table 103. TE-203 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–78	Ap horizon; 10YR 3/2, very dark grayish brown; gravelly sandy loam; moderate, fine granular; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; fine roots common; abrupt, wavy lower boundary; contained mottles of 10YR 3/3, dark brown, sandy clay loam
II	55–122	Natural; 10YR 4/3, brown; extremely gravelly sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; terrigenous origin; very abrupt, smooth lower boundary; contained inclusions of 10YR 3/3, dark brown, very gravelly sandy clay loam
III	110–164	Natural; 10YR 3/4, dark yellowish brown; silty clay loam; moderate, very fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; lower boundary not observed

1.1.104 Test Excavation 204 (TE-204)

TE-204 was in the southwestern portion of the project area (Figure 419). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.68 mbs. The stratigraphy of TE-204 consisted of a dark brown, very gravelly sandy loam Ap horizon (Stratum I) and very pale brown, sand fill (Stratum II) overlying a brown, sandy loam fill with dark grayish brown sand lenses and charcoal staining (Stratum III); very pale brown, cobbly sand fill (Stratum IV); dark brown, silty clay loam fill (Stratum IV); and very dark grayish brown, natural gravelly sandy loam (Stratum V) (Figure 420 through Figure 422 and Table 104).



Figure 419. TE-204, overview of the general location, view to southeast



Figure 420. TE-204, oblique view of the east wall, view to south



Figure 421. TE-204, close-up of the east wall, view to east

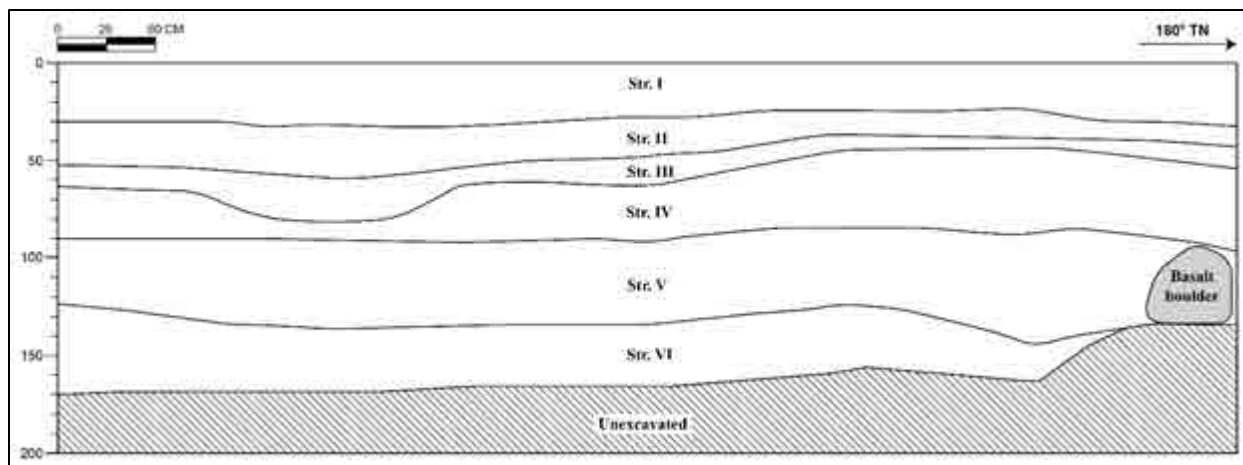


Figure 422. TE-204, stratigraphy of the east wall

Table 104. TE-204 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–35	Ap horizon; 10YR 3/3, dark brown; very gravelly sandy loam; moderate, fine blocky structure; moist, firm consistence; no cementation; slightly plastic; terrigenous origin; fine roots common; abrupt, smooth lower boundary
II	24–60	Fill; 10YR 7/3, very pale brown; sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; few fine roots; clear, smooth lower boundary
III	38–81	Fill; 10YR 4/3, brown, sandy loam; weak, fine granular structure; moist, loose consistence; no cementation; non-plastic; mixed origin; fine roots common; diffuse, smooth lower boundary; contained common lenses of 10YR 4/2, dark grayish brown, sand and charcoal staining; related to commercial agriculture use
IV	44–97	Fill; 10YR 7/4, very pale brown; cobbly sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; marine origin; very abrupt, smooth lower boundary
V	84–143	Fill; 10YR 3/3, dark brown; silty clay loam; moderate, fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; clear, broken lower boundary
VI	123–168	Natural; 10YR 3/2, very dark grayish brown; gravelly sandy loam; moderate, fine granular structure; moist, friable consistence; no cementation; slightly plastic; mixed origin; lower boundary not observed; alluvial deposit

1.1.105 Test Excavation 205 (TE-205)

TE-205 was in the central-southern portion of the project area (Figure 423). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.66 mbs. The stratigraphy of TE-205 consisted of a very dark grayish brown, gravelly sandy loam Ap horizon (Stratum I) overlying dark brown, gravelly sandy clay loam fill mottled with brown loamy sand and bands of yellowish brown sand (Stratum II); light yellowish brown sand fill (Stratum III); and dark brown natural silty clay loam (Stratum IV) (Figure 424 through Figure 426 and Table 105).



Figure 423. TE-205, overview of the general location, view to south



Figure 424. TE-205, oblique view of the west wall, view to southwest



Figure 425. TE-205, close-up of the west wall, view to west

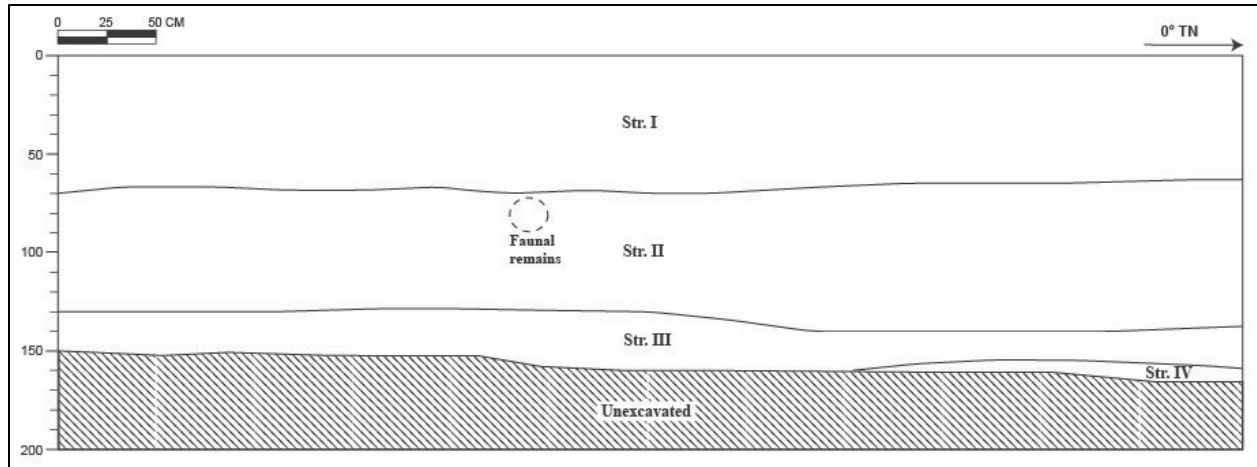


Figure 426. TE-205, stratigraphy of the west wall

Table 105. TE-205 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–70	Ap horizon; 10YR 3/2, very dark grayish brown; gravelly sandy loam; moderate, fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; many fine roots; abrupt, smooth lower boundary
II	60–140	Fill; 10YR 3/3, dark brown; gravelly sandy clay loam; moderate, fine blocky structure; moist, firm consistence; no cementation; slightly plastic; mixed origin; few fine roots; very abrupt, smooth lower boundary; mottled with 10YR 4/3, brown, loamy sand and 10YR 5/4, yellowish brown, sand
III	127–160	Fill; 10YR 3/4, dark yellowish brown; sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; marine origin; no roots; abrupt, smooth lower boundary
IV	153–165	Natural; 10YR 3/3, dark brown; silty clay loam; moderate, fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; no roots; lower boundary not observed; alluvial deposit

1.1.106 Test Excavation 206 (TE-206)

TE-206 was in the central-southern portion of the project area (Figure 427). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.76 mbs. The stratigraphy of TE-206 consisted of a dark brown, gravelly sandy clay loam Ap horizon (Stratum I) and very dark grayish brown, gravelly clay loam fill with bands of dark yellowish brown sand and dark brown silty clay (Stratum II) overlying brown, natural sand mottled with a brown loamy sand (Stratum III) (Figure 428 through Figure 430 and Table 106).



Figure 427. TE-206, overview of the general location, view to southwest



Figure 428. TE-206, oblique view of the east wall, view to southeast



Figure 429. TE-206, close-up of the east wall, view to east

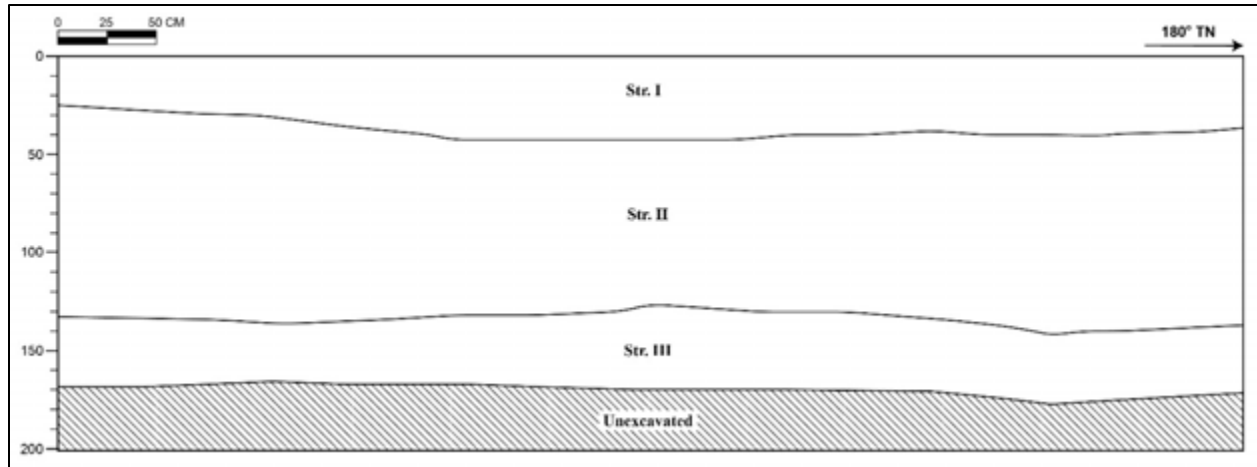


Figure 430. TE-206, stratigraphy of the east wall

Table 106. TE-206 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–42	Ap horizon; 10YR 3/3, dark brown; gravelly sandy clay loam; moderate, fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; many fine roots; abrupt, smooth lower boundary
II	25–141	Fill; 10YR 3/2, very dark grayish brown; gravelly clay loam; strong, fine blocky structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; few fine to medium roots; abrupt, smooth lower boundary; contained bands of 10YR 4/3, dark yellowish brown, sand and 7.5YR 3/3, dark brown, silty clay
III	127–176	Previously disturbed natural; 10YR 5/3, brown; sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; marine origin; no roots; lower boundary not observed; contained mottles of 10YR 4/3, brown, loamy sand

1.1.107 Test Excavation 207 (TE-207)

TE-207 was in the central portion of the southern boundary of the project area (Figure 431). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.60 mbs. The stratigraphy of TE-207 consisted of a very dark grayish brown, gravelly sandy loam A horizon (Stratum I) and a yellowish brown, gravelly loamy sand Ap horizon with bands of brown silt loam and yellowish brown sand (Stratum II) overlying pale brown, natural sand (Stratum III) (Figure 432 through Figure 434 and Table 107). No cultural materials were encountered.



Figure 431. TE-207, overview of the general location, view to southeast



Figure 432. TE-207, oblique view of the east wall, view to southeast



Figure 433. TE-207, close-up of the east wall, view to east

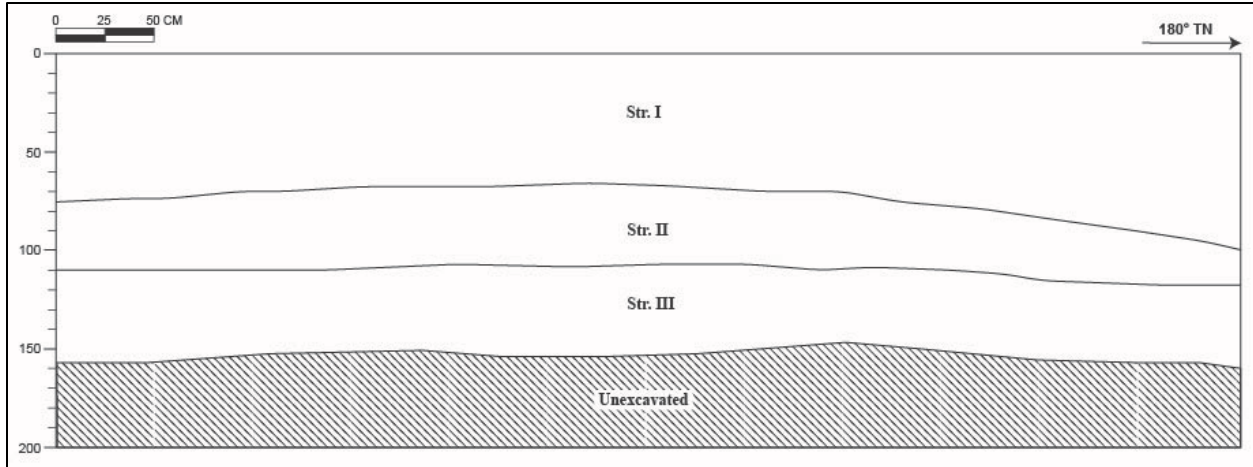


Figure 434. TE-207, stratigraphy of the east wall

Table 107. TE-207 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–97	Ap horizon; 10YR 3/2, very dark grayish brown; gravelly sandy loam; moderate, fine granular structure; moist, friable consistence; no cementation; slightly plastic; mixed origin; many fine to medium roots; abrupt, smooth lower boundary
II	66–117	Ap horizon; 10YR 5/4, yellowish brown; gravelly loamy sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; no roots; very abrupt, smooth lower boundary; contained bands of 10YR 4/3, brown, silt loam and 10YR 5/4, yellowish brown sand
III	107–160	Natural; 10YR 6/3, pale brown; sand; structureless (single grain), moist, loose consistence; no cementation; non-plastic; marine origin; no roots; lower boundary not observed; mottled with 10YR 6/3, pale brown, coarse-grained sand

1.1.108 Test Excavation 208 (TE-208)

TE-208 was near the southwestern boundary of the project area (Figure 435). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 2.10 mbs. The stratigraphy of TE-208 consisted of a very dark grayish brown, gravelly loam A horizon (Stratum I) and a dark brown, gravelly sandy clay loam Ap horizon (Stratum II) overlying dark yellowish brown, natural gravelly silty clay loam (Stratum III) and brown, natural silty clay loam (Stratum IV) (Figure 436 through Figure 438 and Table 1). No cultural materials were encountered.



Figure 435. TE-208, overview of the general location, view to southeast



Figure 436. TE-208, oblique view of the east wall, view to southeast



Figure 437. TE-208, close-up of the east wall, view to east

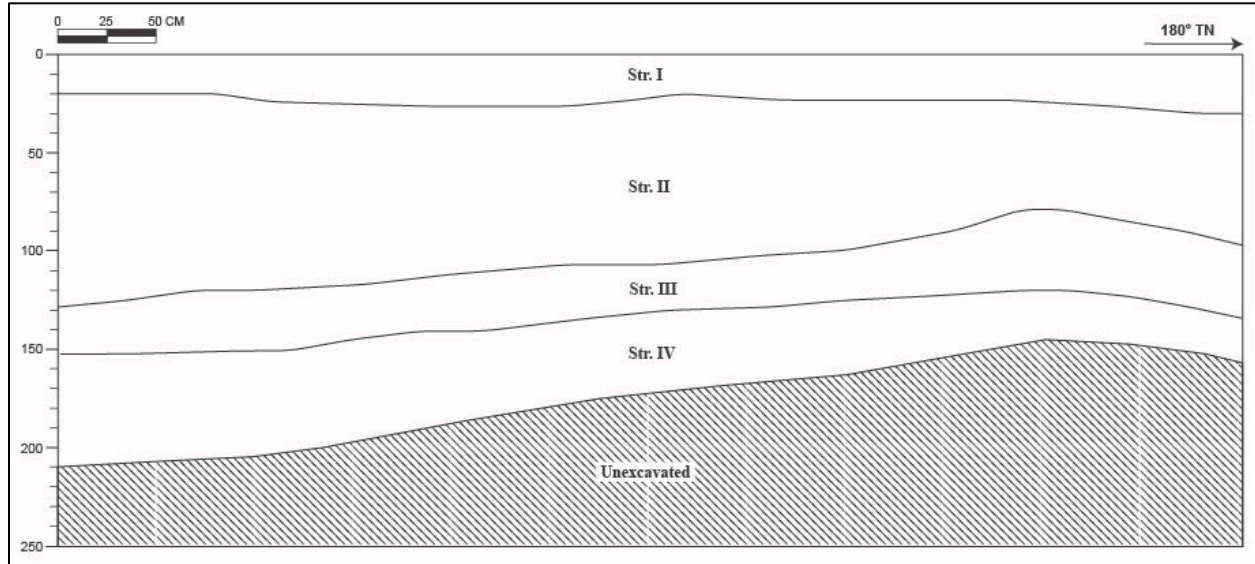


Figure 438. TE-208, stratigraphy of the east wall

Table 108. TE-208 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–32	Ap horizon; 10YR 3/2, very dark grayish brown; gravelly loam; moderate, fine blocky structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; many fine roots; abrupt, smooth lower boundary
II	20–126	Ap horizon; 10YR 3/3, dark brown; gravelly sandy clay loam; moderate, fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; medium roots common; abrupt, wavy lower boundary
III	80–152	Natural; 10YR 3/4, dark yellowish brown; gravelly silty clay loam; moderate, very fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; abrupt, smooth lower boundary
IV	120–210	Natural; 10YR 4/3, brown; silty clay loam; moderate, fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; lower boundary not observed

1.1.109 Test Excavation 209 (TE-209)

TE-209 was in the southwestern portion of the project area (Figure 439). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.67 mbs. The stratigraphy of TE-209 consisted of a very dark brown, gravelly sandy loam Ap horizon (Stratum I) overlying dark yellowish brown, natural very gravelly sandy loam with bands of very dark yellowish brown silt loam (Stratum II); dark yellowish brown, natural gravelly silt loam (Stratum III); and light brown, natural sand with mottles of brown sand (Stratum IV) (Figure 440 through Figure 442 and Table 109). No cultural materials were encountered.



Figure 439. TE-209, overview of the general location, view to south



Figure 440. TE-209, oblique view of the west wall, view to southwest



Figure 441. TE-209, close-up of the west wall, view to west

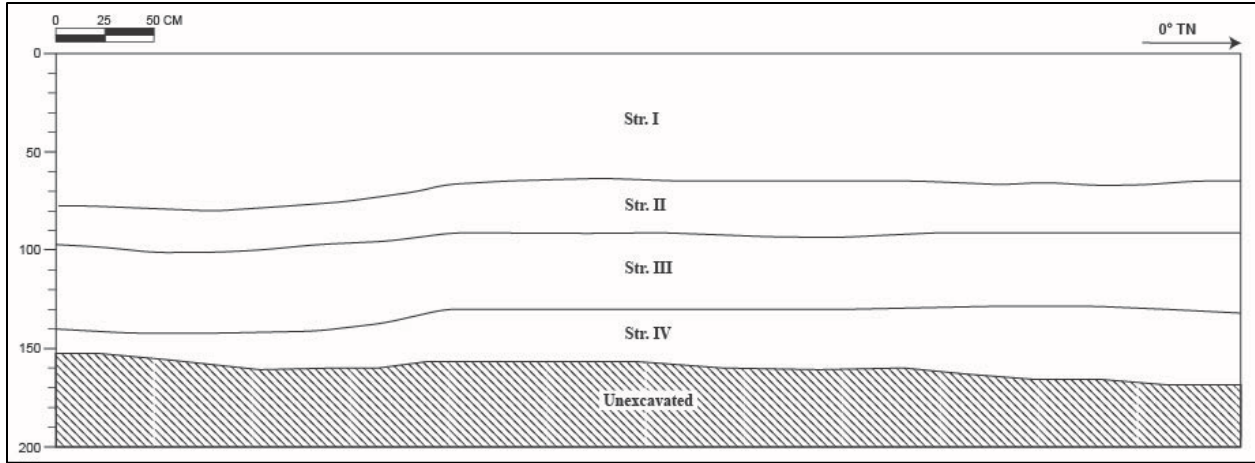


Figure 442. TE-209, stratigraphy of the west wall

Table 109. TE-209 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–80	Ap horizon; 10YR 3/3, dark brown; gravelly sandy loam; moderate, medium blocky structure; moist, friable consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, smooth lower boundary
II	65–102	Natural; 10YR 4/4, dark yellowish brown; very gravelly sandy loam; moderate, fine granular structure; moist, friable consistence; no cementation; slightly plastic; mixed origin; few fine roots; abrupt, smooth lower boundary; contained banding of 10YR 4/4, dark yellowish brown, silt loam
III	91–143	Natural; 10YR 3/6, dark yellowish brown; silt loam; moderate, very fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; few fine roots; clear, smooth lower boundary
IV	127–167	Natural; 7.5YR 6/3, light brown; sand; structureless (single grain) moist, loose consistence; no cementation; non-plastic; marine origin; no roots; lower boundary not observed

1.1.110 Test Excavation 210 (TE-210)

TE-210 was near the southwestern boundary of the project area (Figure 443). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.73 mbs. The stratigraphy of TE-210 consisted of a dark brown, gravelly sandy loam Ap horizon (Stratum I) and a dark yellowish brown, silty clay loam Ap horizon (Stratum II) overlying dark yellowish brown, natural gravelly silt loam with bands of brown sand and brown silt (Stratum III) (Figure 444 through Figure 446 and Table 110). No cultural materials were encountered.



Figure 443. TE-210, overview of the general location, view to south



Figure 444. TE-210, oblique view of the west wall, view to southwest



Figure 445. TE-210, close-up of the west wall, view to west

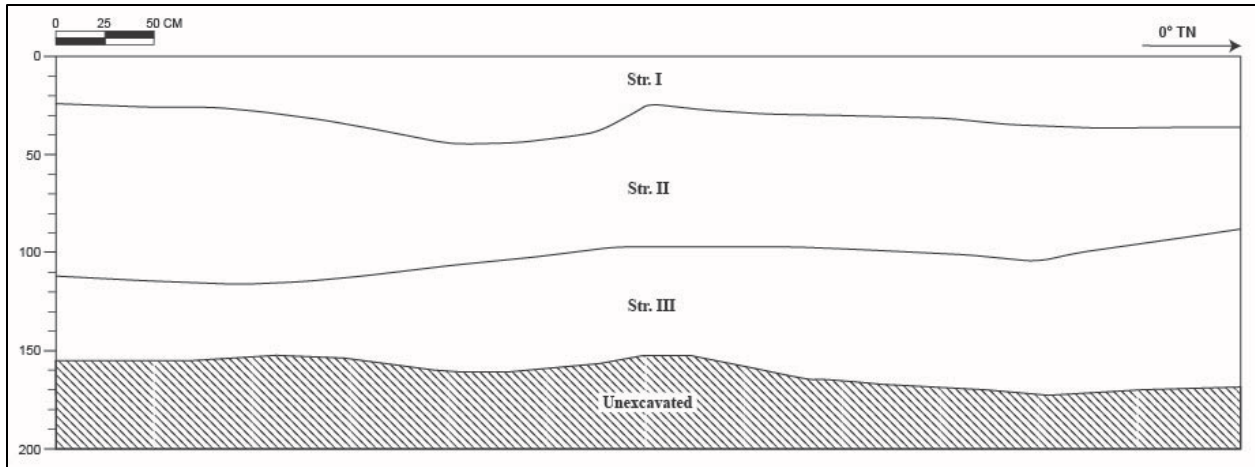


Figure 446. TE-210, stratigraphy of the west wall

Table 110. TE-210 stratigraphic description

Stratum	Depth (cmts)	Description
I	0–45	Ap horizon; 10YR 3/3, dark brown; gravelly sandy loam; moderate, fine blocky structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; many fine to medium roots; abrupt, wavy lower boundary
II	24–116	Ap horizon; 10YR 3/4, dark yellowish brown; silty clay loam; moderate, fine granular structure; moist, friable consistence; no cementation; plastic; few fine roots; abrupt, smooth lower boundary; contained lens of 10YR 4/3, brown, very gravelly sand alluvial deposit
III	85–173	Natural; 10YR 3/4, dark yellowish brown; gravelly silt loam; moderate, fine granular structure; moist, loose consistence; no cementation; slightly plastic; terrigenous origin; lower boundary not observed; contained bands of 10YR 5/3, brown, sand and 10YR 4/3, brown, silt loam

1.1.111 Test Excavation 211 (TE-211)

TE-211 was in the southwestern portion of the project area (Figure 447). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.63 mbs. The stratigraphy of TE-211 consisted of a very dark grayish brown, gravelly sandy loam Ap horizon (Stratum I); dark yellowish brown, gravelly sandy clay loam fill with lenses of dark yellowish brown loamy sand (Stratum II); and dusky red, gravelly silty clay loam with a lens of brown sand (Stratum III); overlying dark brown, natural silt loam with a lens of dark brown sandy loam and charcoal staining (Figure 448 through Figure 450 and Table 111).



Figure 447. TE-211, overview of the general location, view to south



Figure 448. TE-211, oblique view of the west wall, view to southwest



Figure 449. TE-211, close-up of the west wall, view to west

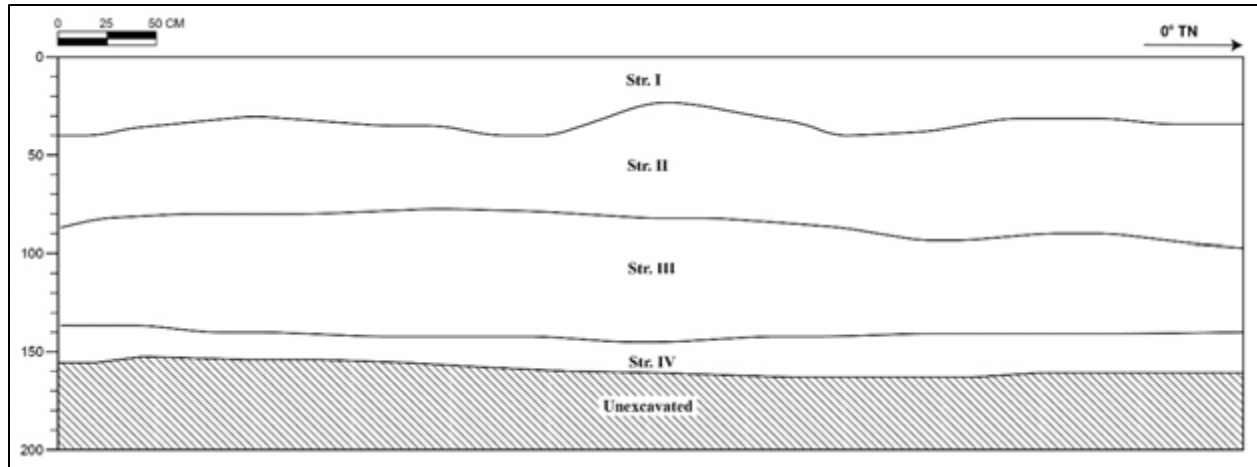


Figure 450. TE-211, stratigraphy of the west wall

Table 111. TE-211 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–40	Ap horizon; 10YR 3/2, very dark grayish brown; gravelly sandy loam; moderate, fine blocky structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; fine roots common; abrupt, wavy lower boundary
II	23–95	Fill; 10YR 3/4, dark yellowish brown; gravelly sandy clay loam; moderate, fine blocky structure; moist, firm consistence; no cementation; slightly plastic; terrigenous origin; few fine roots; abrupt, smooth lower boundary; contained lenses of 10YR 4/4, dark yellowish brown, loamy sand near the lower interface
III	77–145	Previously disturbed natural; 10R 3/3, dusky red; gravelly silty clay loam; moderate, very fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; abrupt, smooth lower boundary; contained a lens of 10YR 4/3, brown, sand
IV	136–163	Natural; 7.5YR 3/3, dark brown; silt loam; moderate, very fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; lower boundary not observed; contained a lens of 10YR 3/3, dark brown, sandy loam

1.1.112 Test Excavation 212 (TE-212)

TE-212 was in the southwestern portion of the project area (Figure 451). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.65 mbs. The stratigraphy of TE-212 consisted of a very dark grayish brown, gravelly sandy loam Ap horizon with a lens of brown loamy sand (Stratum I) overlying dark brown, natural gravelly sandy clay loam mottled with dark yellowish brown, sandy clay loam (Stratum II) and brown, natural silty clay loam with mottles of dark brown silty clay loam (Stratum III) (Figure 452 through Figure 454 and Table 112). No cultural materials were encountered.



Figure 451. TE-212, overview of the general location, view to south



Figure 452. TE-212, oblique view of the east wall, view to south



Figure 453. TE-212, close-up of the east wall, view to east

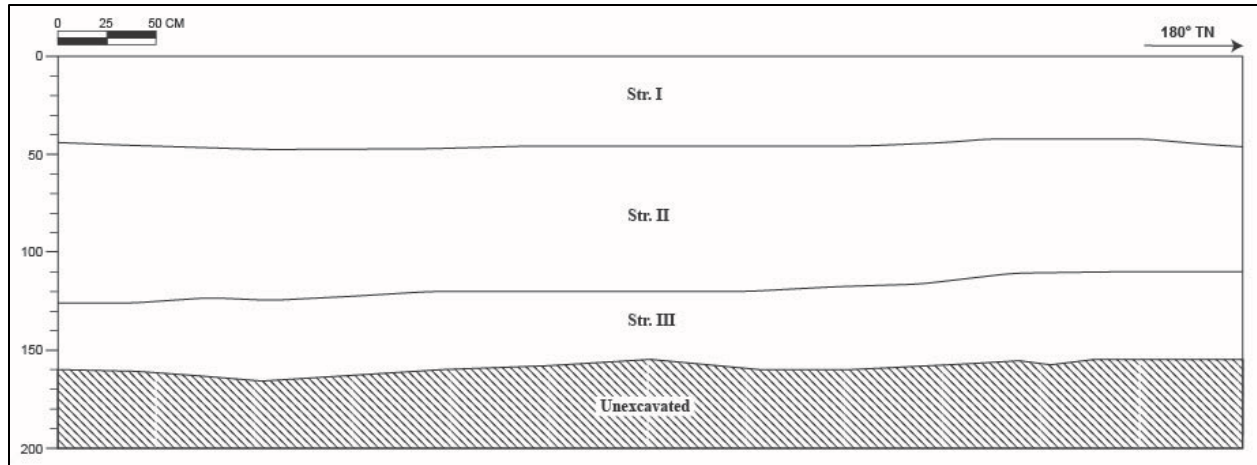


Figure 454. TE-212, stratigraphy of the east wall

Table 112. TE-212 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–48	Ap horizon; 10YR 3/2, very dark grayish brown; gravelly sandy loam; moderate, fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; fine roots common; abrupt, smooth lower boundary; contained a lens of 10YR 4/3, brown, loamy sand
II	43–126	Natural; 10YR 3/3, dark brown; gravelly sandy clay loam; moderate, fine blocky structure; moist, friable; no cementation; slightly plastic; terrigenous origin; few fine roots; abrupt, smooth lower boundary; contained mottles of 10YR 3/4, dark yellowish brown, sandy clay loam
III	110–165	Natural; 10YR 4/3, brown; silty clay loam; moderate, fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; lower boundary not observed; contained mottles of 10YR 3/3, dark brown, silty clay loam

1.1.113 Test Excavation 213 (TE-213)

TE-213 was in the southwestern portion of the project area (Figure 455). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.59 mbs. The stratigraphy of TE-213 consisted of a very dark grayish brown, gravelly sandy loam Ap horizon with a lens of yellowish red, gravelly loamy sand (Stratum I); yellowish brown, sand fill with a concentration of dark yellowish brown loamy sand (Stratum II); and very dark brown, clay loam fill with a lens of dark brown silty clay loam (Stratum III) overlying yellowish brown, previously disturbed natural sand with lenses of brown and dark yellowish brown loamy sand (Stratum IV) (Figure 456 through Figure 458 and Table 113). No cultural materials were encountered.



Figure 455. TE-213, overview of the general location, view to south



Figure 456. TE-213, oblique view of the west wall, view to south



Figure 457. TE-213, close-up of the west wall, view to west

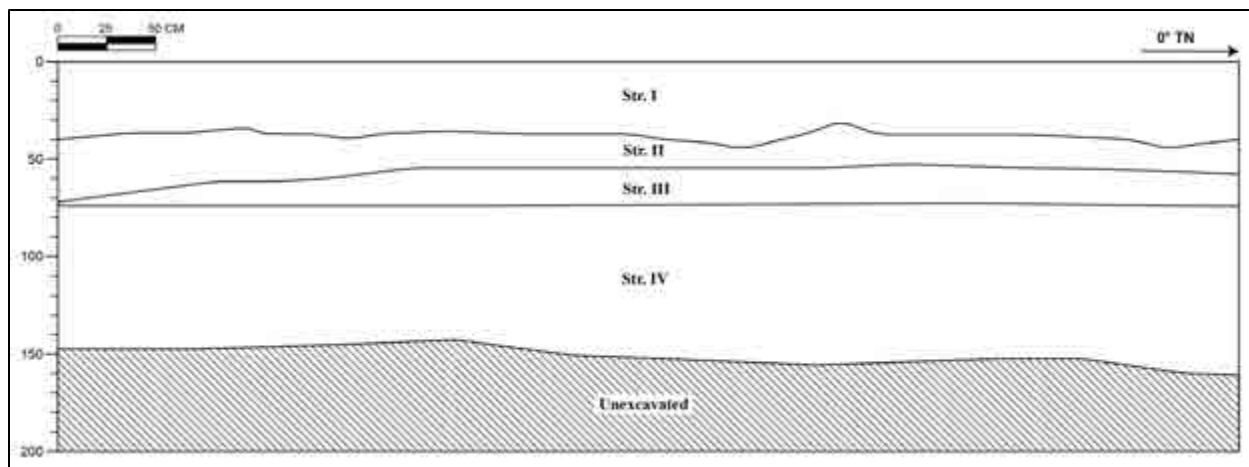


Figure 458. TE-213, stratigraphy of the west wall

Table 113. TE-213 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–44	Ap horizon; 10YR 3/2, very dark grayish brown; gravelly sandy loam; moderate, fine granular structure; moist, firm consistence; no cementation; slightly plastic; terrigenous origin; many fine roots; very abrupt, wavy lower boundary; contained a lens of 5YR 5/6, yellowish red, gravelly loamy sand
II	30–70	Fill; 10YR 5/4, yellowish brown; sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; marine origin; few fine roots; very abrupt, smooth lower boundary; contained a concentration of 10YR 4/4, dark yellowish brown, loamy sand
III	52–75	Fill; 7.5YR 2.5/2, very dark brown; clay loam; strong, very fine blocky structure; moist, firm consistence; no cementation; plastic; terrigenous origin; abrupt, smooth lower boundary; contained a lens of 10YR 4/4, dark brown, silty clay loam
IV	73–159	Previously disturbed natural; 10YR 5/4, yellowish brown; sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; lower boundary not observed; contained lenses of 10YR 3/4, dark yellowish brown, and 10YR 4/3, brown, loamy sand

1.1.114 Test Excavation 214 (TE-214)

TE-214 was in the southern-central portion of the project area (Figure 459). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.80 mbs. The stratigraphy of TE-214 consisted of a very dark grayish brown, gravelly sandy loam Ap horizon (Stratum I); yellowish brown, sand fill (Stratum II); and very dark brown, clay loam fill (Stratum III) overlying yellowish brown, previously disturbed natural sand with lenses of very dark brown clay loam and dark yellowish brown loamy sand (Stratum II) and brown, natural sand with a concentration of brown silt loam (Stratum III) (Figure 460 through Figure 462 and Table 114).



Figure 459. TE-214, overview of the general location, view to south



Figure 460. TE-214, oblique view of the east wall, view to south



Figure 461. TE-214, close-up of the east wall, view to east

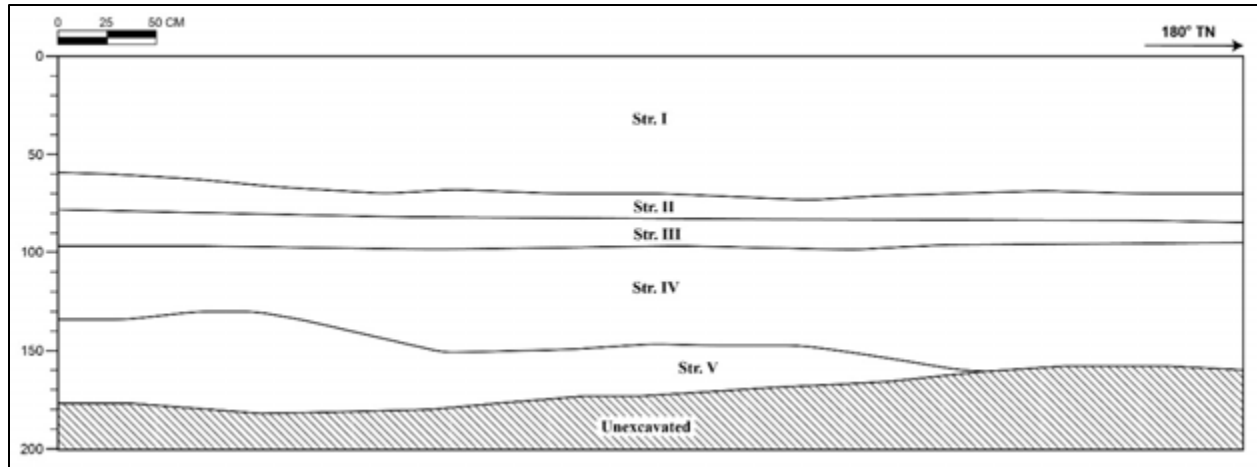


Figure 462. TE-214, stratigraphy of the east wall

Table 114. TE-214 stratigraphic description

I	0–72	Ap horizon; 10YR 3/2, very dark grayish brown; gravelly sandy loam; moderate, fine granular structure; moist, friable consistence; no cementation; non-plastic; terrigenous origin; fine roots common; abrupt, smooth lower boundary
II	58–85	Fill; 10YR 5/4, yellowish brown; sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; marine origin; few fine roots; very abrupt, smooth lower boundary
III	77–100	Fill; 7.5YR 2.5/2, very dark brown; clay loam; strong, fine blocky structure; moist, firm consistence; no cementation; plastic; terrigenous origin; very abrupt, smooth lower boundary
IV	95–160	Previously disturbed natural; 10YR 5/4, yellowish brown; sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; abrupt, irregular lower boundary; contained lenses of 10YR 4/4, dark yellowish brown, loamy sand
V	130–180	Natural; 10YR 4/3, brown; sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; marine origin; lower boundary not observed; contained a concentration of 10YR 4/3, brown, silt loam

1.1.115 Test Excavation 215 (TE-215)

TE-215 was southern boundary of the project area (Figure 463). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.76 mbs. The stratigraphy of TE-215 consisted of a dark brown, gravelly clay loam Ap horizon (Stratum I) and dark brown silty clay loam fill mottled with brown sand and dark reddish brown loamy sand (Stratum II) overlying pale brown, natural gravelly sand with a band of yellowish brown gravelly sand with rounded cobbles (Stratum III); and brown, natural gravelly loamy sand (Stratum IV) (Figure 464 through Figure 466 and Table 115).



Figure 463. TE-215, overview of the general location, view to southeast



Figure 464. TE-215, oblique view of the west wall, view to southwest



Figure 465. TE-215, close-up of the west wall, view to west

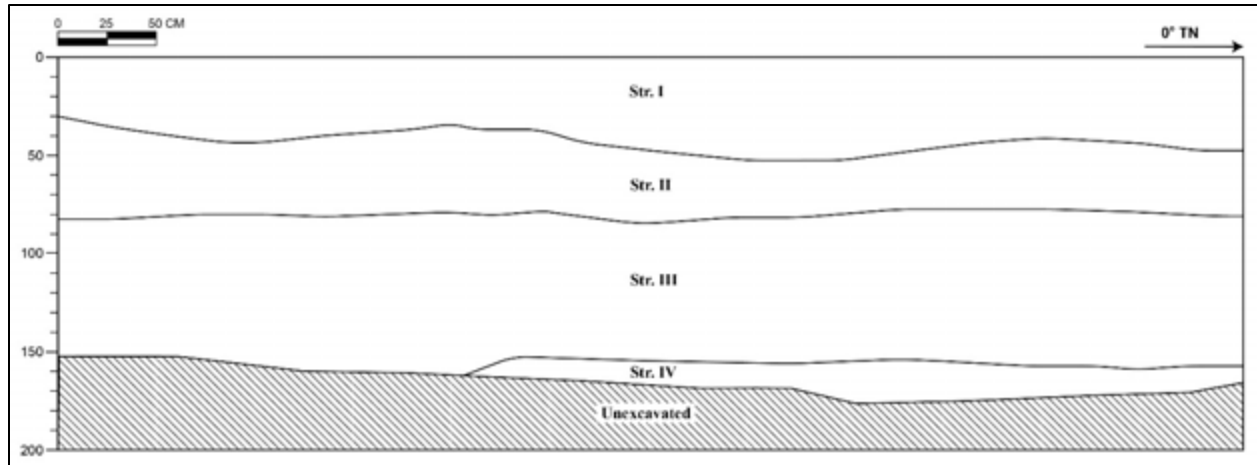


Figure 466. TE-215, stratigraphy of the west wall

Table 115. TE-215 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–53	Ap horizon; 10YR 3/3, dark brown; gravelly clay loam; moderate, medium blocky structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; many fine roots; abrupt, wavy lower boundary
II	33–84	Fill; 10YR 3/3, dark brown; silty clay loam; moderate, very fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; few fine to medium roots; abrupt, smooth lower boundary; contained mottles of 10YR 5/3, brown, sand and 5YR 3/4, dark reddish brown, loamy sand
III	76–162	Natural; 10YR 6/3, pale brown; gravelly sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; marine origin; abrupt, irregular lower boundary; contained a band of 10YR 5/4, yellowish brown, gravelly sand with rounded cobbles
IV	153–176	Natural; 10YR 4/3, brown; gravelly loamy sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; lower boundary not observed

1.1.116 Test Excavation 216 (TE-216)

TE-216 was in the southwestern portion of the project area (Figure 467). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.90 mbs. The stratigraphy of TE-216 consisted of a dark brown, gravelly sandy loam Ap horizon (Stratum I) and a dark brown, natural cobbly silty clay loam Ap horizon with concentrations of dark yellowish brown, gravelly silt loam and brown loamy sand (Stratum II) overlying brown, natural gravelly silt loam (Stratum III) (Figure 468 through Figure 470 and Table 116). No cultural materials were encountered.



Figure 467. TE-216, overview of the general location, view to west



Figure 468. TE-216, oblique view of the east wall, view to south



Figure 469. TE-216, close-up of the east wall, view to east

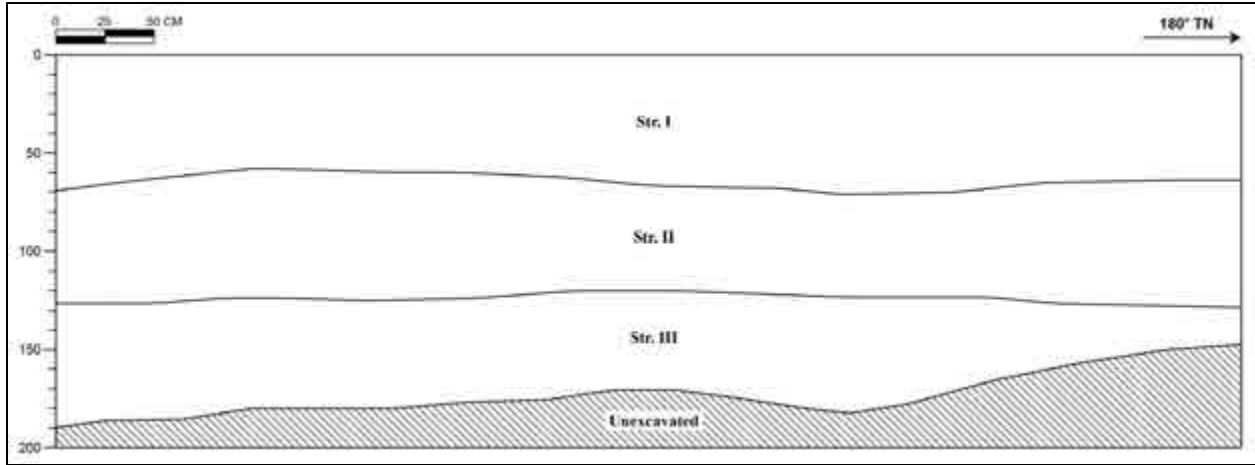


Figure 470. TE-216, stratigraphy of the east wall

Table 116. TE-216 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–70	Ap horizon; 7.5YR 3/2, dark brown; gravelly sandy loam; moderate, fine blocky structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; many fine roots; diffuse, smooth lower boundary
II	57–126	Ap horizon; 7.5YR 3/4, dark brown; cobbly silty clay loam; moderate, fine granular structure; moist, friable consistence; no cementation; plastic; terrigenous origin; fine roots common; clear, smooth lower boundary; contained concentrations of 10YR 4/4, dark yellowish brown, gravelly silt loam and 10YR 4/3, brown, loamy sand
III	120–190	Natural; 10YR 5/3, brown; gravelly silt loam; moderate, fine blocky structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; lower boundary not observed

1.1.117 Test Excavation 217 (TE-217)

TE-217 was in the southwestern portion of the project area (Figure 471). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.77 mbs. The stratigraphy of TE-217 consisted of a dark brown, gravelly sandy loam Ap horizon (Stratum I) overlying brown, natural sandy loam with very dark brown, extremely cobbly loamy sand intrusions (Stratum II); dark yellowish brown, natural silt loam (Stratum III); and dark yellowish brown, natural gravelly silt loam (Figure 472 through Figure 474 and Table 117). No cultural materials were encountered.



Figure 471. TE-217, overview of the general location, view to southeast



Figure 472. TE-217, oblique view of the east wall, view to south



Figure 473. TE-217, close-up of the east wall, view to east

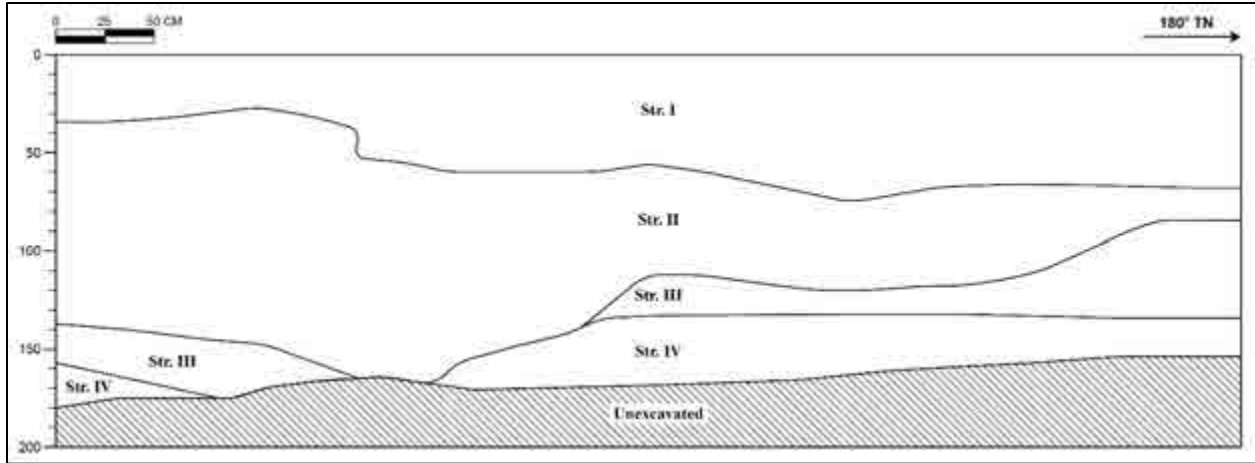


Figure 474. TE-217, stratigraphy of the east wall

Table 117. TE-217 stratigraphic description

Stratum	Depth	Description
I	0–74	Ap horizon; 10YR 3/3, dark brown; gravelly sandy loam; moderate, fine blocky structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine roots; clear, irregular lower boundary; developing A horizon atop disturbed plow zone fill
II	26–170	Natural; 10YR 4/3, brown; sandy loam; weak, fine granular structure; moist, loose consistence; no cementation; non-plastic; mixed origin; fine roots common; clear, irregular lower boundary; contained intrusions of 7.5YR 2.5/2, very dark brown; extremely cobbly loamy sand alluvial deposits
III	84–175	Natural; 10YR 3/4, dark yellowish brown; silt loam; moderate, fine granular structure; moist, friable consistence; no cementation; very plastic; mixed origin; few fine roots; clear, smooth boundary
IV	132–177	Natural; 10YR 3/6, dark yellowish brown; gravelly silt loam; moderate, very fine blocky structure; moist, friable consistence; no cementation; plastic; terrigenous origin; lower boundary not observed

1.1.118 Test Excavation 218 (TE-218)

TE-218 was in the southwestern portion of the project area (Figure 475). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.66 mbs. The stratigraphy of TE-218 consisted of a dark brown, gravelly sandy loam Ap horizon (Stratum I) overlying dark gray, natural extremely cobbly sand with bands of dark yellowish brown silt loam and dark reddish brown loamy sand (Stratum II) (Figure 476 through Figure 478 and Table 118). No cultural materials were encountered.



Figure 475. TE-218, overview of the general location, view to southeast



Figure 476. TE-218, oblique view of the west wall, view to southwest



Figure 477. TE-218, close-up of the west wall, view to west

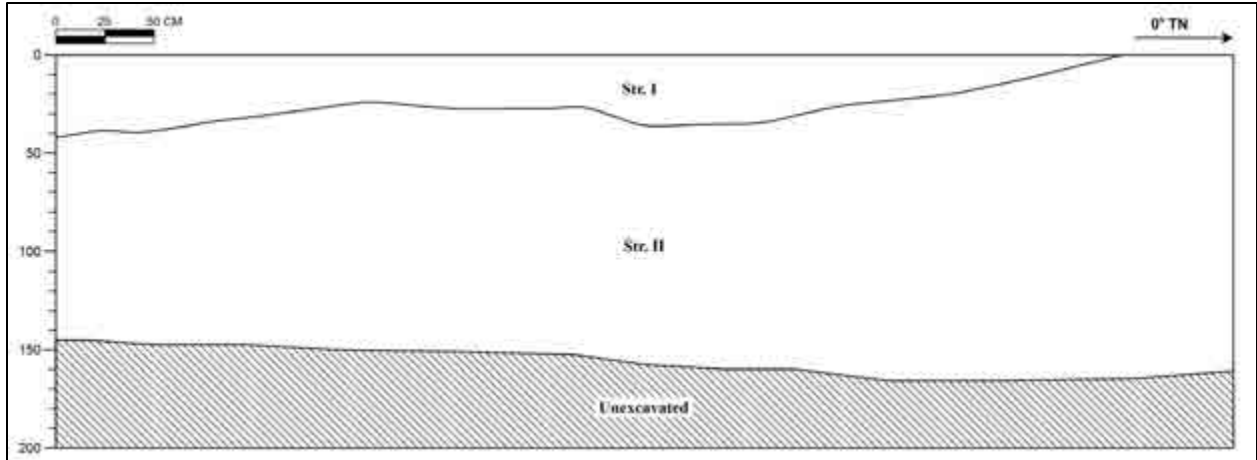


Figure 478. TE-218, stratigraphy of the west wall

Table 118. TE-218 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–43	Ap horizon; 10YR 3/3, dark brown; gravelly sandy loam; moderate, fine blocky structure; dry, hard consistence; no cementation; non-plastic; mixed origin; many fine roots; clear, irregular lower boundary
II	0–166	Natural; 10YR 4/1, dark gray; extremely cobbly sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; terrigenous origin; many fine to medium roots; lower boundary not observed; contained bands of 10YR 3/4, dark yellowish brown, silt loam and 5YR 3/2, dark reddish brown, loamy sand; top of stratum is disturbed by the plow zone

1.1.119 Test Excavation 219 (TE-219)

TE-219 was in the southwestern portion of the project area (Figure 479). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.70 mbs. The stratigraphy of TE-219 consisted of a dark brown, gravelly sandy loam Ap horizon (Stratum I) overlying dark yellowish brown, natural gravelly silty clay loam with a band of yellowish brown silty clay loam (Stratum II) and brown, natural, gravelly sandy clay loam (Stratum III) (Figure 480 through Figure 482 and Table 119). No cultural materials were encountered.



Figure 479. TE-219, overview of the general location, view to south



Figure 480. TE-219, oblique view of the west wall, view to southwest



Figure 481. TE-219, close-up of the west wall, view to west

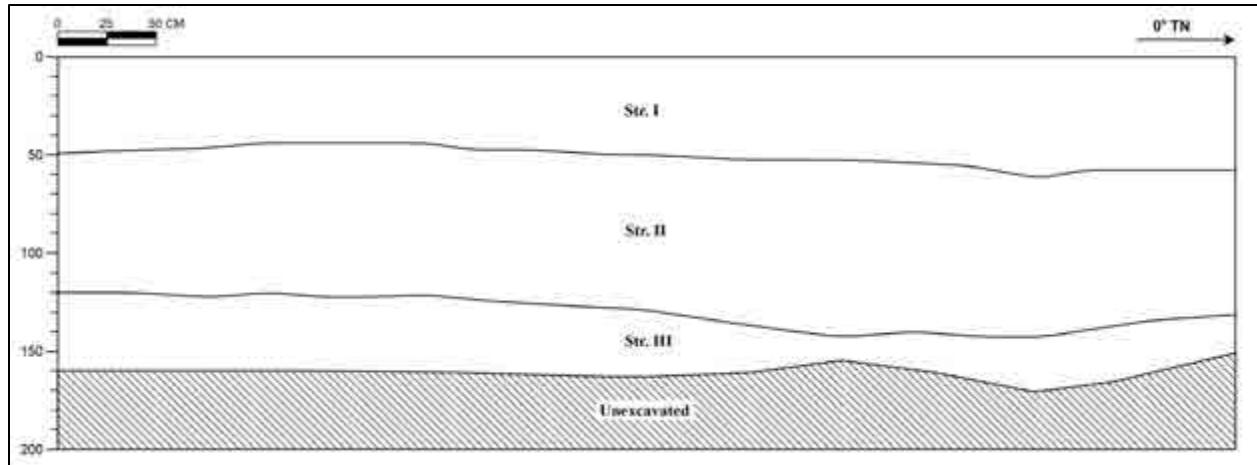


Figure 482. TE-219, stratigraphy of the west wall

Table 119. TE-219 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–60	Ap horizon; 10YR 3/3, dark brown; gravelly sandy loam; moderate, fine blocky structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine to medium roots; clear, smooth lower boundary; contained 10YR 3/3, dark brown, coarse loamy sand at lower interface
II	44–142	Natural; 10YR 3/4, dark yellowish brown; gravelly silty clay loam; moderate, fine granular structure; moist, friable consistence; no cementation; very plastic; terrigenous origin; few fine roots; clear, smooth lower boundary; contained 10YR 5/4, yellowish brown, silty clay loam at upper interface
III	118–170	Natural; 10YR 4/3, brown; gravelly sandy clay loam; weak, fine granular structure; moist, friable consistence; no cementation; slightly plastic; mixed origin; few fine roots; lower boundary not observed

1.1.120 Test Excavation 220 (TE-220)

TE-220 was in the southwestern portion of the project area (Figure 483). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.93 mbs. The stratigraphy of TE-220 consisted of a very dark grayish brown, gravelly sandy loam Ap horizon with mottles of dark brown sandy clay loam (Stratum I) overlying dark yellowish brown, natural gravelly sand with mottles of dark brown sandy clay loam (Stratum II); very dark brown, natural sandy clay loam (Stratum III); and dark brown, natural silty clay loam (Stratum IV) (Figure 484 through Figure 486 and Table 120). No cultural materials were encountered.



Figure 483. TE-220, overview of the general location, view to west



Figure 484. TE-220, oblique view of the west wall, view to southwest



Figure 485. TE-220, close-up of the west wall, view to west

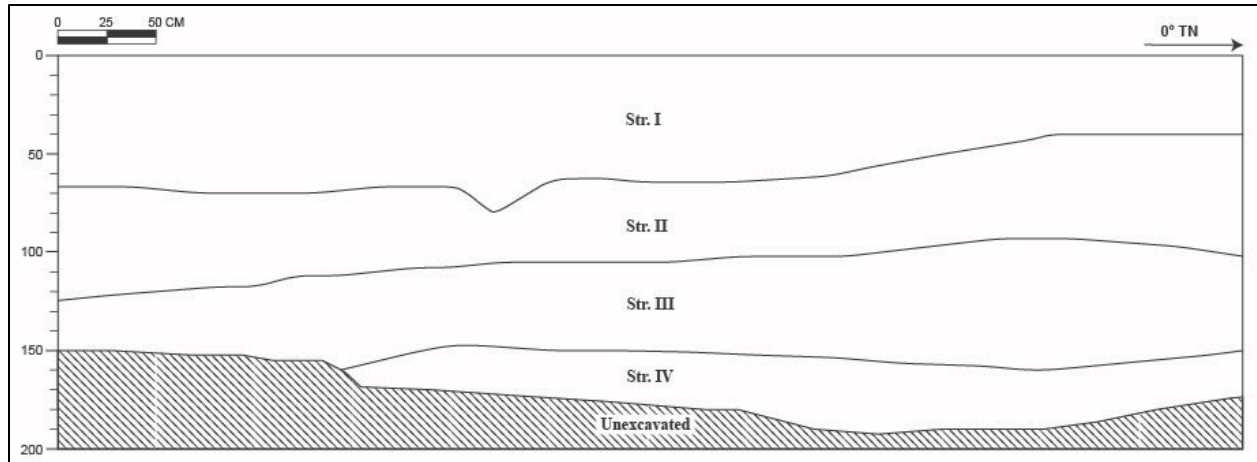


Figure 486. TE-220, stratigraphy of the west wall

Table 120. TE-220 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–80	Ap horizon; 10YR 3/2, very dark grayish brown; gravelly sandy loam; moderate, fine blocky structure; moist, friable; no cementation; slightly plastic; mixed origin; many fine roots; abrupt, wavy lower boundary; contained mottles of 7.5YR 3/3, dark brown sandy clay loam near lower interface
II	40–125	Natural; 10YR 4/4, dark yellowish brown; gravelly sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; marine origin; very abrupt, smooth lower boundary; contained mottles of 10YR 3/3, dark brown, sandy clay loam
III	93–158	Natural; 7.5YR 2.5/2, very dark brown; sandy clay loam; moderate, fine blocky structure; moist, friable consistence; no cementation; plastic; terrigenous origin; clear, smooth lower boundary
IV	148–193	Natural; 10YR 3/3, dark brown; silty clay loam; moderate, fine blocky structure; moist, friable consistence; no cementation; plastic; terrigenous origin; lower boundary not observed

1.1.121 Test Excavation 221 (TE-221)

TE-221 was in the southwestern portion of the project area (Figure 487). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.76 mbs. The stratigraphy of TE-221 consisted of a very dark brown, gravelly sandy loam Ap horizon (Stratum I) and a brown, gravelly sandy loam Ap horizon (Stratum II) overlying brown, natural loamy sand with a band of brown sandy loam (Stratum III); brown, natural gravelly sand mottled with brown, gravelly loamy sand (Stratum IV); and brown, natural silt loam (Stratum V) (Figure 488 through Figure 490 and Table 121). No cultural materials were encountered.



Figure 487. TE-221, overview of the general location, view to northeast



Figure 488. TE-221, oblique view of the west wall, view to southwest



Figure 489. TE-221, close-up of the west wall, view to west

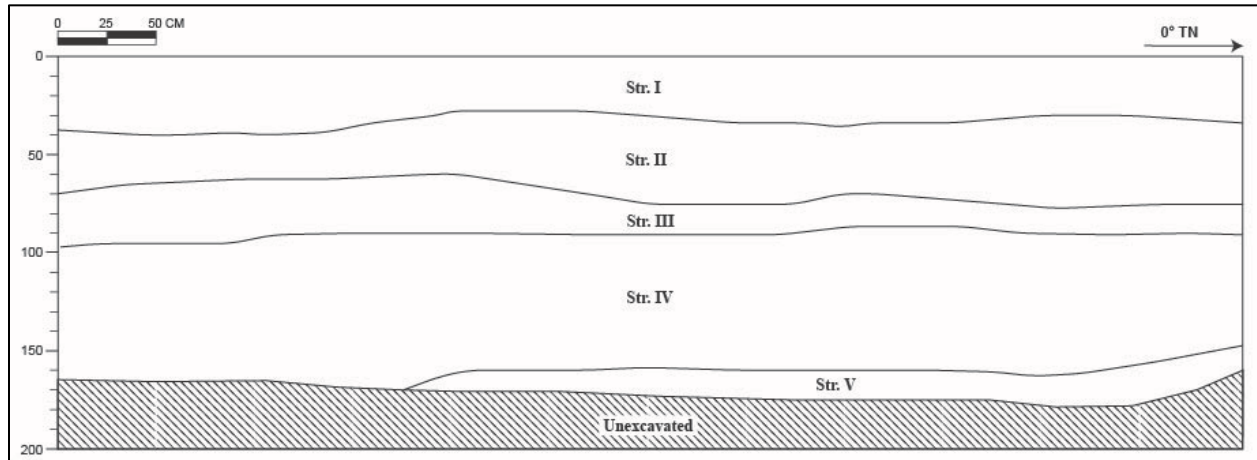


Figure 490. TE-221, stratigraphy of the west wall

Table 121. TE-221 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–40	Ap horizon; 7.5YR 2.5/2, very dark brown; gravelly sandy loam; moderate, fine blocky structure; moist, friable; no cementation; slightly plastic; terrigenous origin; fine to medium roots common; abrupt, wavy lower boundary
II	27–76	Ap horizon; 10YR 4/3, brown; gravelly sandy loam; moderate, very fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; fine roots common; abrupt, smooth lower boundary
III	60–96	Natural; 10YR 4/3, brown; loamy sand; weak, fine granular structure; moist, loose consistence; no cementation; non-plastic; mixed origin; abrupt, smooth lower boundary; contained a band of 10YR 4/3, brown, sandy loam at the upper interface
IV	86–170	Natural; 10YR 5/3, brown; gravelly sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; abrupt, irregular lower boundary; aeolian sand; contained fine to coarse mottles of 10YR 5/3, brown, loamy sand with small, water-rounded pebbles near lower interface
V	147–176	Natural; 10YR 5/3, brown; silt loam; moderate, fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; lower boundary not observed; alluvial deposit

1.1.122 Test Excavation 222 (TE-222)

TE-222 was near the southwestern corner of the project area (Figure 491). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.93 mbs. The stratigraphy of TE-222 consisted of a dark yellowish brown, gravelly sandy loam Ap horizon (Stratum I) overlying a dark brown, natural gravelly silt loam mottled with brown sand (Stratum II); dark yellowish brown, natural silt loam (Stratum III); and brown, natural sand mottled with yellowish brown cemented sand (Stratum IV) (Figure 492 through Figure 494 and Table 122). No cultural materials were encountered.



Figure 491. TE-222, overview of the general location, view to northwest



Figure 492. TE-222, oblique view of the west wall, view to southwest



Figure 493. TE-222, close-up of the west wall, view to west

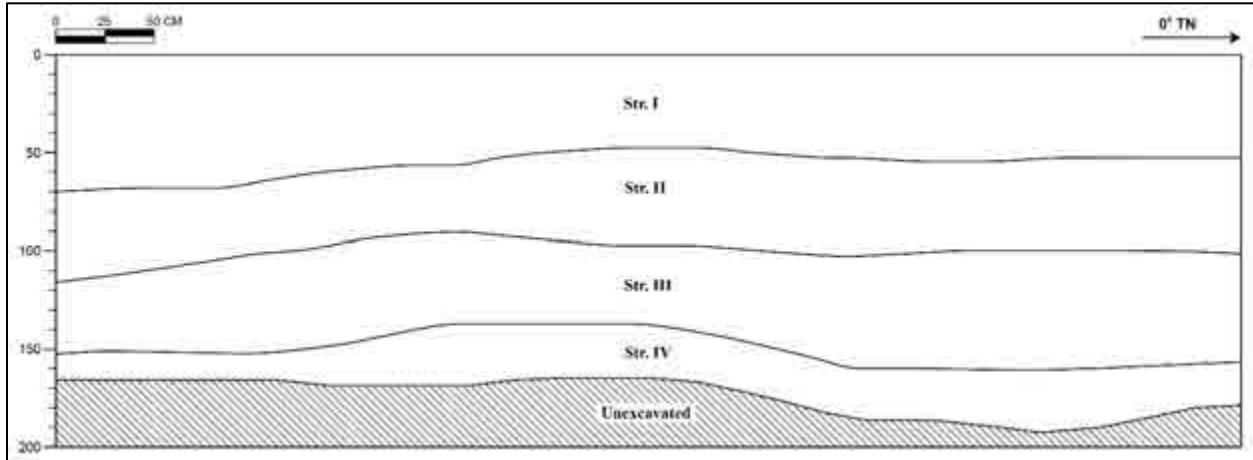


Figure 494. TE-222, stratigraphy of the west wall

Table 122. TE-222 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–68	Ap horizon; 10YR 3/4, dark yellowish brown; gravelly sandy loam; moderate, fine blocky structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; medium to coarse roots common; clear, smooth lower boundary
II	46–115	Natural; 10YR 3/3, dark brown; gravelly silt loam; moderate, very fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; few medium roots; abrupt, smooth lower boundary; contained mottles of 7.5YR 4/3, brown, sand alluvial deposit
III	90–160	Natural; 10YR 3/4, dark yellowish brown; silt loam; moderate, very fine blocky structure; moist, friable; no cementation; slightly plastic; terrigenous origin; few medium roots; abrupt, wavy lower boundary
IV	146–193	Natural; 10YR 5/3, brown; sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; marine origin; lower boundary not observed; contained coarse mottles of 10YR 5/4, yellowish brown, cemented sand

1.1.123 Test Excavation 223 (TE-223)

TE-223 was in the southwestern portion of the project area (Figure 495). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.76 mbs. The stratigraphy of TE-223 consisted of a very dark brown gravelly sandy loam Ap horizon (Stratum I) overlying very dark grayish brown, natural gravelly silty clay loam mottled with brown sand (Stratum II); dark brown, natural gravelly sandy clay loam (Stratum III); dark yellowish brown, natural gravelly silty clay loam with inclusions of brown sand (Stratum IV); and brown, natural silty clay loam (Stratum V) (Figure 496 through Figure 498 and Table 123). No cultural materials were encountered.



Figure 495. TE-223, overview of the general location, view to northeast



Figure 496. TE-223, oblique view of the east wall, view to south



Figure 497. TE-223, close-up of the east wall, view to east

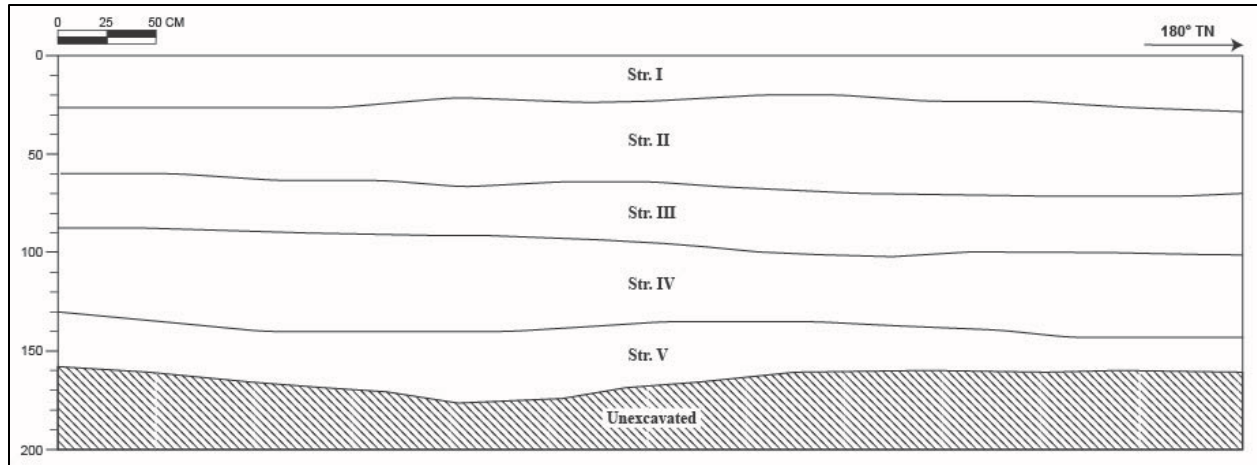


Figure 498. TE-223, stratigraphy of the east wall

Table 123. TE-223 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–26	Ap horizon; 10YR 2/2, very dark brown; gravelly sandy loam; moderate, fine blocky structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; fine to medium roots common; abrupt, smooth lower boundary
II	20–70	Ap horizon; 10YR 3/2, very dark grayish brown; gravelly silty clay loam; moderate, very fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; few fine to medium roots; abrupt, smooth lower boundary; contained mottles of 10YR 4/3, brown, sand
III	60–100	Natural; 10YR 3/3, dark brown; gravelly sandy clay loam; moderate, fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; few medium roots; abrupt, smooth lower boundary
IV	88–142	Natural; 10YR 3/4, dark yellowish brown; gravelly silty clay loam; moderate, very fine granular structure; moist, friable consistence; no cementation; plastic; terrigenous origin; abrupt, smooth lower boundary; contained inclusions of 7.5YR 4/3, brown, sand
V	130–176	Natural; 7.5YR 4/3, brown; silty clay loam; moderate, very fine granular structure; moist, friable consistence; no cementation; plastic; terrigenous origin; lower boundary not observed

1.1.124 Test Excavation 224 (TE-224)

TE-224 was near the southwestern corner of the project area (Figure 499). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.67 mbs. The stratigraphy of TE-224 consisted of a very dark grayish brown gravelly sandy loam Ap horizon with inclusions of brown sand (Stratum I) and brown, gravelly sandy clay loam fill with an inclusion of dark brown, volcanic sand (Stratum II); and dark yellowish brown, natural silt loam with inclusions of brown aeolian sand (Stratum III) (Figure 500 through Figure 502 and Table 124). No cultural materials were encountered.



Figure 499. TE-224, overview of the general location, view to northwest



Figure 500. TE-224, oblique view of the east wall, view to south



Figure 501. TE-224, close-up of the east wall, view to east

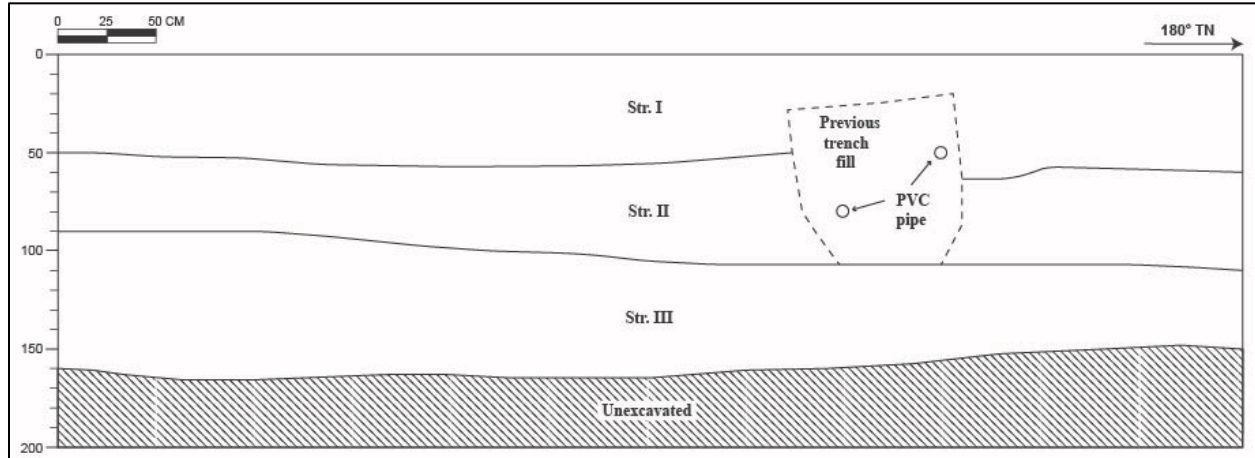


Figure 502. TE-224, stratigraphy of the east wall

Table 124. TE-224 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–63	Ap horizon; 10YR 3/2, very dark grayish brown; gravelly sandy loam; moderate, fine blocky structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; many fine roots; abrupt, smooth lower boundary; contained common mottles of 10YR 4/3, brown, sand near lower interface; 1 m wide section in south end of trench has a utility pit containing two PVC pipes intruding through Strata I and II and backfilled with the mixed sediments
II	50–108	Fill; 7.5YR 4/3, brown; gravelly sandy clay loam; moderate, fine granular structure; moist, loose consistence; no cementation; slightly plastic; terrigenous origin; few fine roots; abrupt, smooth lower boundary; contained inclusions of 7.5YR 3/3, dark brown, volcanic sand alluvial deposits
III	93–167	Natural; 10YR 3/4, dark yellowish brown; silt loam; moderate, very fine granular structure; moist, loose consistence; no cementation; slightly plastic; terrigenous origin; lower boundary not observed; less than 15% gravels present; contained mottles of 10YR 4/3, brown, aeolian sand

1.1.125 Test Excavation 225 (TE-225)

TE-225 was in the southwestern portion of the project area (Figure 503). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.73 mbs. The stratigraphy of TE-225 consisted of a very dark brown, gravelly sandy loam Ap horizon (Stratum I) overlying dark brown, natural very cobbly sand with a band of brown sand and mottled with dark brown silty clay loam (Stratum II) and very dark brown, natural silty clay mottled with dark brown sandy clay loam (Stratum III) (Figure 504 through Figure 506 and Table 125). No cultural materials were encountered.



Figure 503. TE-225, overview of the general location, view to northeast



Figure 504. TE-225, oblique view of the east wall, view to south



Figure 505. TE-225, close-up of the east wall, view to northeast

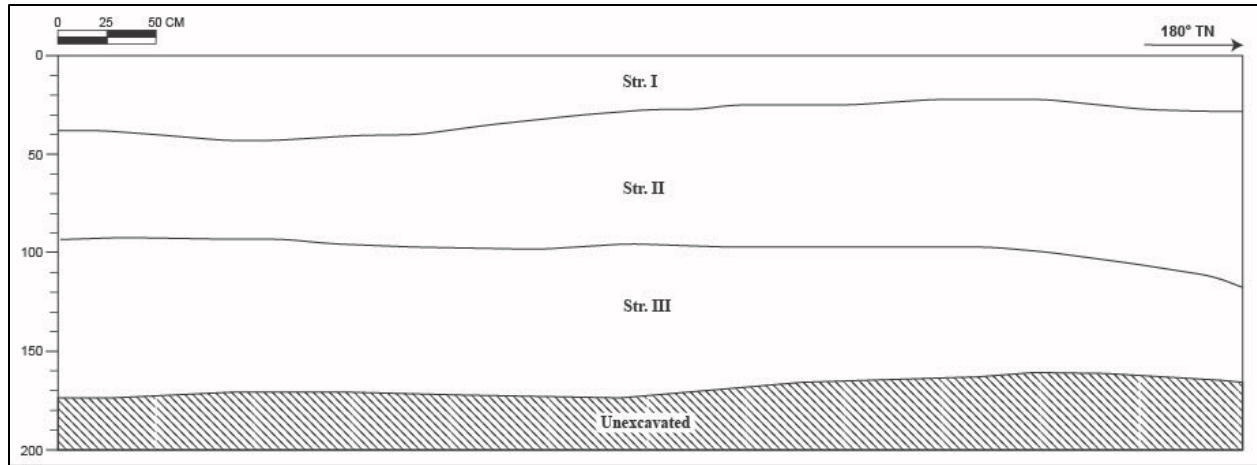


Figure 506. TE-225, stratigraphy of the east wall

Table 125. TE-225 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–42	Ap horizon; 10YR 2/2, very dark brown; gravelly sandy loam; moderate, fine blocky structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; fine to medium roots common; abrupt, smooth lower boundary
II	23–144	Natural; 7.5YR 3/2, dark brown; very cobbly sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; very abrupt, smooth lower boundary; contained a band of 10YR 4/3, brown, sand near the upper interface and common mottles of 7.5YR 3/3, dark brown, silty clay loam
III	92–173	Natural; 7.5YR 2.5/3, very dark brown; silty clay; moderate, fine granular structure; moist, friable consistence; no cementation; very plastic; terrigenous origin; few medium roots; lower boundary not observed; contained mottles of 10YR 3/3, dark brown, sandy clay loam

1.1.126 Test Excavation 226 (TE-226)

TE-226 was near the southwestern corner of the project area (Figure 507). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.60 mbs. The stratigraphy of TE-226 consisted of a very dark brown, gravelly sandy clay loam Ap horizon (Stratum I) overlying brown, natural gravelly silt loam (Stratum II) (Figure 508 through Figure 511 and Table 126). Stratum I contained modern refuse of plastic yellow tags that were possibly used to identify certain vegetation types (Figure 510).



Figure 507. TE-226, overview of the general location, view to southeast



Figure 508. TE-226, oblique view of the east wall, view to north



Figure 509. TE-226, close-up of the east wall, view to northeast



Figure 510. TE-226, close-up of modern, plastic yellow tag; not collected

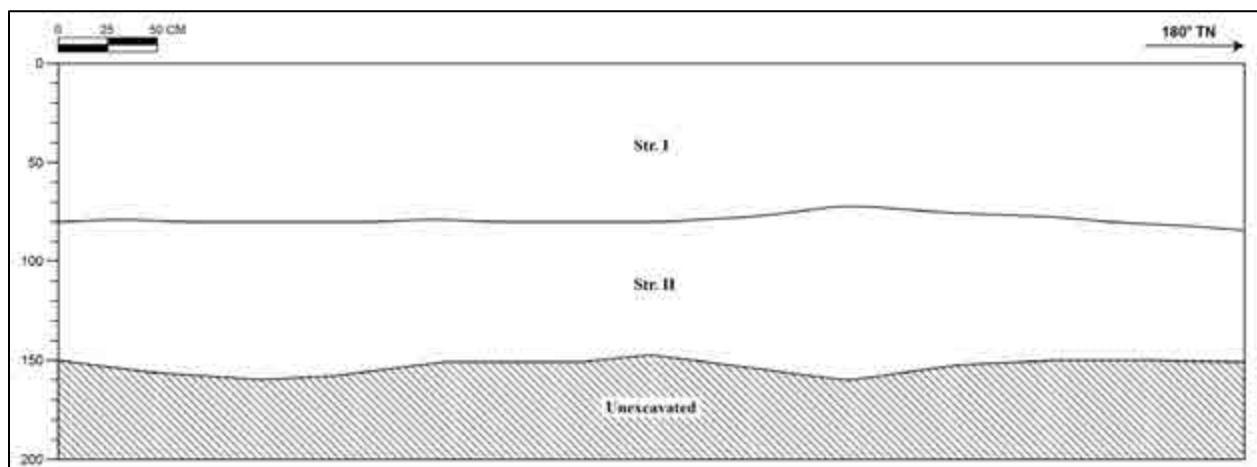


Figure 511. TE-226, stratigraphy of the east wall

Table 126. TE-226 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–82	Ap horizon; 10YR 2/2, very dark brown; gravelly sandy clay loam; moderate, medium blocky structure; dry, hard consistence; no cementation; plastic; mixed origin; many fine to coarse roots; diffuse, smooth lower boundary; contained plastic yellow tags (not collected)
II	73–160	Natural; 10YR 4/3, brown; gravelly silt loam; moderate, fine platy structure; moist, firm consistence; no cementation; plastic; terrigenous origin; fine to medium roots common; lower boundary not observed; alluvial deposit

1.1.127 Test Excavation 227 (TE-227)

TE-227 was near the southwestern corner of the project area (Figure 512). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.78 mbs. The stratigraphy of TE-227 consisted of a very dark brown, gravelly sandy clay loam Ap horizon (Stratum I) overlying very dark brown, natural gravelly silty loam (Stratum II); very dark brown, natural extremely gravelly sand with waterworn cobbles (Stratum III); and dark brown, natural silty clay loam mottled with dark brown silt loam (Stratum IV) (Figure 513 through Figure 515 and Table 127).



Figure 512. TE-227, overview of the general location, view to northwest



Figure 513. TE-227, oblique view of the east wall, view to northeast



Figure 514. TE-227, close-up of the east wall, view to east

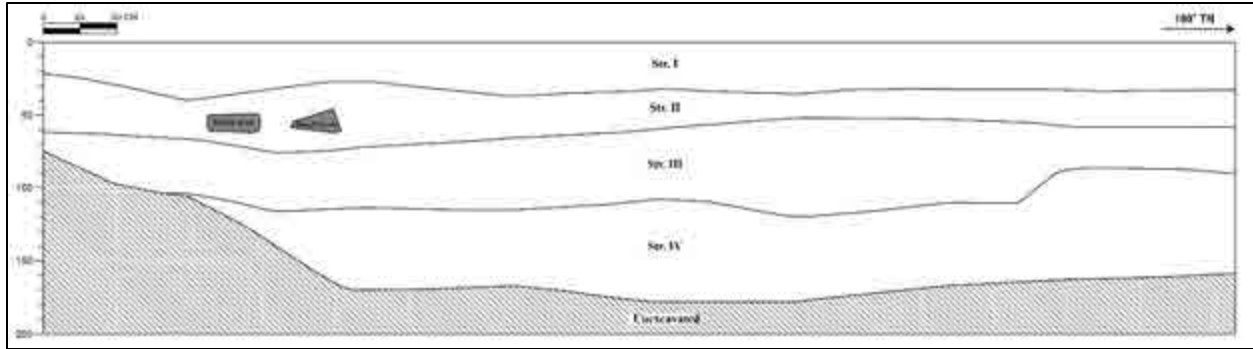


Figure 515. TE-227, stratigraphy of the east wall

Table 127. TE-227 stratigraphic description

Stratum	Depth	Description
I	0–40	Ap horizon; 10YR 2/2, very dark brown; gravelly sandy clay loam; moderate, fine granular structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; fine to medium roots common; clear, smooth lower boundary
II	22–76	Natural; 7.5YR 2.5/3, very dark brown; gravelly silt loam; moderate, fine granular structure; moist, friable consistence; no cementation; slightly plastic; mixed origin; few fine to medium roots; abrupt, smooth lower boundary; contained concentrations of 10YR 6/3, pale brown, sand with several marine shells and two basalt stones
III	52–120	Natural; 7.5YR 2.5/2, very dark brown; extremely gravelly sand with waterworn cobbles; structureless (single grain); moist, loose consistence; no cementation; non-plastic; mixed origin; few medium roots; abrupt, smooth lower boundary; alluvial deposit; contained concentrations of 7.5YR 2.5/3, very dark brown, silty clay loam
IV	86–178	Natural; 10YR 3/3, dark brown; silty clay loam; moderate, fine blocky structure; moist, friable consistence; no cementation; slightly plastic; terrigenous origin; lower boundary not observed; natural alluvial deposit; contained mottles of 7.5YR 3/3, dark brown, silt loam

1.1.128 Test Excavation 228 (TE-228)

TE-228 was in the southwestern corner of the project area (Figure 516). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.77 mbs. The stratigraphy of TE-228 consisted of a very dark brown, gravelly sandy loam Ap horizon (Stratum I) overlying very dark brown, natural extremely gravelly sand mottled with dark brown sandy loam (Stratum II) and dark brown, natural silty clay loam (Stratum III) (Figure 517 through Figure 519 and Table 128). No cultural materials were encountered.



Figure 516. TE-228, overview of the general location, view to southeast



Figure 517. TE-228, oblique view of the east wall, view to south



Figure 518. TE-228, close-up of the east wall, view to east

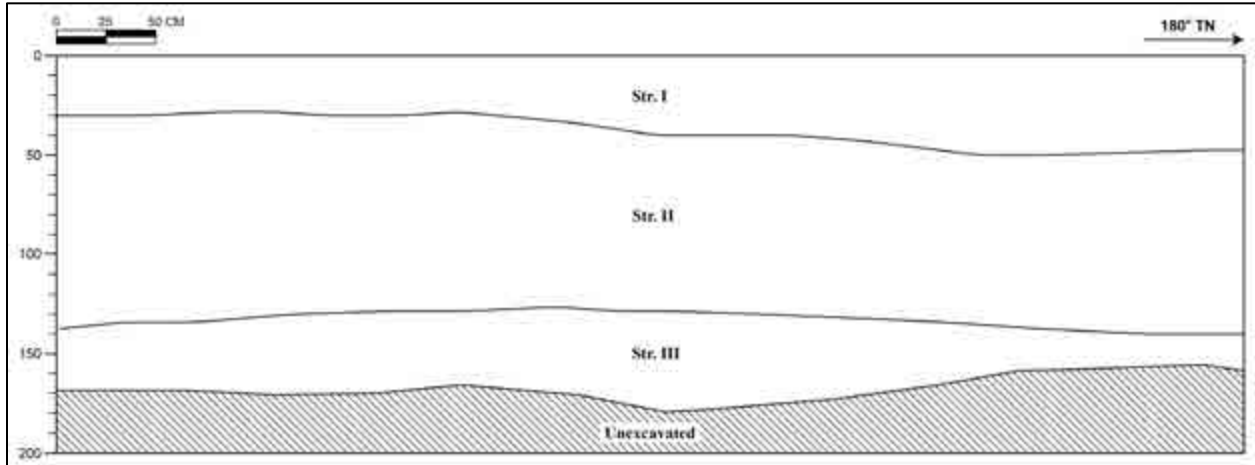


Figure 519. TE-228, stratigraphy of the east wall

Table 128. TE-228 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–48	Ap horizon; 10YR 2/2, very dark brown; gravelly sandy loam; moderate, fine granular structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine to medium roots; gradual, smooth lower boundary
II	27–137	Natural; 7.5YR 2.5/3, very dark brown, extremely gravelly sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; terrigenous origin; fine roots common; clear, smooth lower boundary; alluvial deposit; contained mottles of 7.5YR 3/3, dark brown, sandy loam
III	126–177	Natural; 10YR 3/3, dark brown; silty clay loam; moderate, fine blocky structure; moist, friable consistence; no cementation; plastic; terrigenous origin; lower boundary not observed

1.1.129 Test Excavation 229 (TE-229)

TE-229 was in the southwestern corner of the project area (Figure 520). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.64 mbs. The stratigraphy of TE-229 consisted of a very dark brown, gravelly sandy loam Ap horizon (Stratum I) overlying dark yellowish brown, natural gravelly silt loam (Stratum II) and dark yellowish brown, natural sand mottled with yellowish brown sand (Stratum III) (Figure 521 through Figure 523 and Table 129). No cultural materials were encountered.



Figure 520. TE-229, overview of the general location, view to northwest



Figure 521. TE-229, oblique view of the east wall, view to north



Figure 522. TE-229, close-up of the east wall, view to east

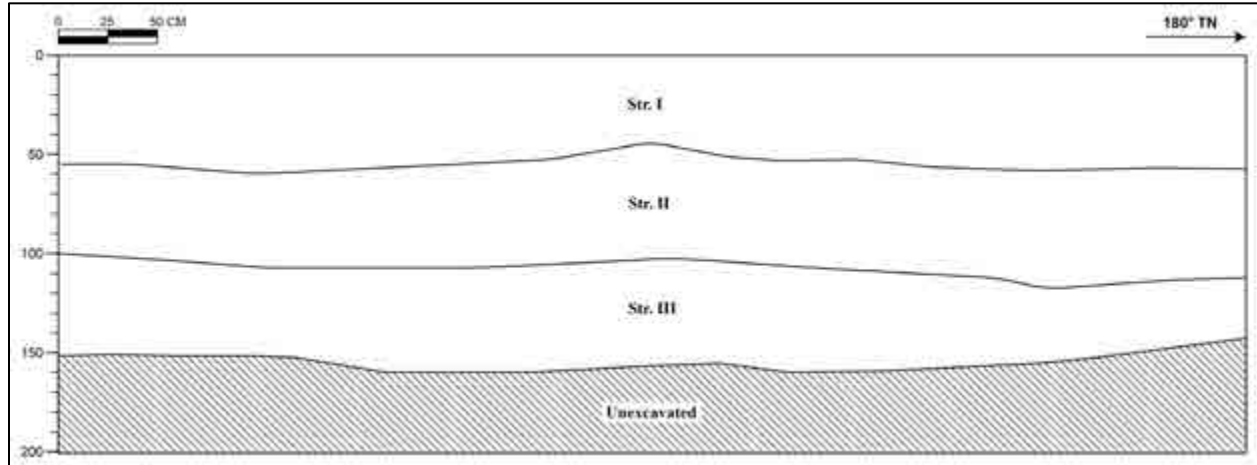


Figure 523. TE-229, stratigraphy of the east wall

Table 129. TE-229 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–60	Ap horizon; 10YR 2/2, very dark brown; gravelly sandy loam; moderate, medium blocky structure; dry, hard consistence; no cementation; slightly plastic; mixed origin; many fine to medium roots; gradual, smooth lower boundary
II	45–116	Natural; 10YR 4/4, dark yellowish brown; gravelly silt loam; moderate, fine granular structure; moist, friable consistence; no cementation; plastic; terrigenous origin; clear, smooth lower boundary
III	100–160	Natural; 10YR 4/4, dark yellowish brown; sand; structureless (single grain); moist, loose consistence; no cementation; non-plastic; marine origin; lower boundary not observed; aeolian sand; contained common mottles of 10YR 5/4, yellowish brown, sand

1.1.130 Test Excavation 230 (TE-230)

TE-230 was in the southwestern corner of the project area (Figure 524). The excavation was 6.00 m long by 0.80 m wide with a maximum depth of 1.72 mbs. The stratigraphy of TE-230 consisted of a very dark brown, gravelly sandy clay loam Ap horizon (Stratum I) overlying dark brown, natural very gravelly silty clay loam mottled with very dark brown, sandy clay loam alluvial deposits (Stratum II); dark brown, natural gravelly silty clay loam mottled with very dark brown, sand alluvial deposits (Stratum III); and dark brown, natural gravelly sandy loam (Stratum IV) (Figure 525 through Figure 527 and Table 130). No cultural materials were encountered.



Figure 524. TE-230, overview of the general location, view to north



Figure 525. TE-230, oblique view of the east wall, view to northeast



Figure 526. TE-230, close-up of the east wall, view to east

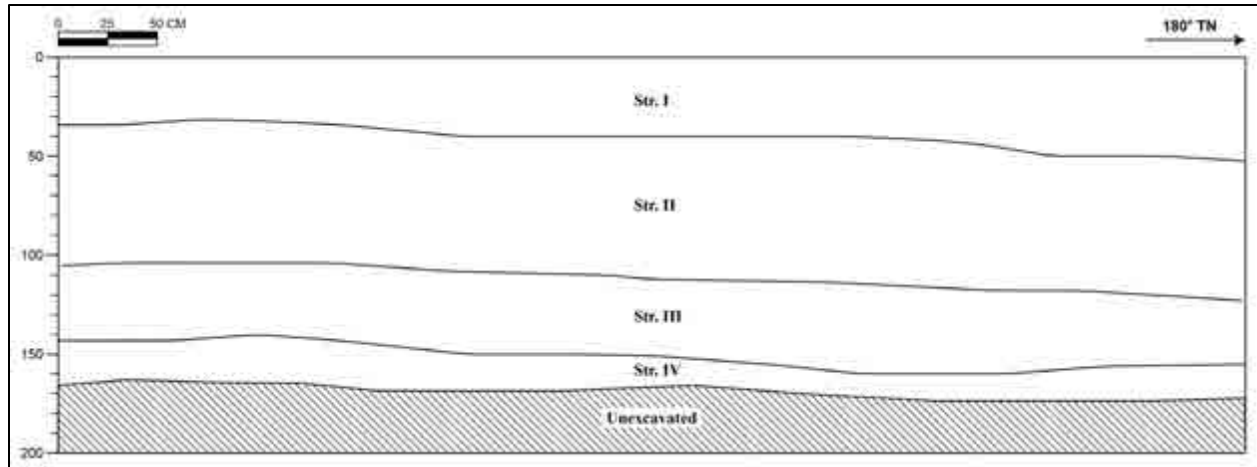


Figure 527. TE-230, stratigraphy of the east wall

Table 130. TE-230 stratigraphic description

Stratum	Depth (cmbs)	Description
I	0–50	Ap horizon; 10YR 2/2, very dark brown; gravelly sandy clay loam; moderate, fine granular structure; moist, firm consistence; no cementation; plastic; mixed origin; many fine to coarse roots; clear, smooth lower boundary
II	32–120	Natural; 7.5YR 3/3, dark brown; very gravelly silty clay loam; moderate, fine blocky structure; moist, friable consistence; no cementation; plastic; terrigenous origin; fine to coarse roots common; clear, smooth lower boundary; contained mottles of 7.5YR 2.5/2, very dark brown, sandy clay loam alluvial deposits
III	103–158	Natural; 10YR 3/3, dark brown; gravelly silty clay loam; moderate, fine granular structure; moist, friable consistence; no cementation; plastic; terrigenous origin; few fine roots; clear, smooth lower boundary; contained mottles of 7.5YR 2.5/2, very dark brown, sand alluvial deposits
IV	140–172	Natural; 7.5YR 3/3, dark brown; gravelly sandy loam; moderate, fine granular structure; moist, friable consistence; no cementation; plastic; mixed origin; lower boundary not observed

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