Proposal

Paid CK# 101
$7,100.00

CHAMPCO
1281 30th Street
OAKLAND, CALIFORNIA 94608
(415) 451-3482
License 454562

PROPOSAL SUBMITTED TO	PHONE	DATE
WALTS AUTO TECH	881-9882	6-04-87
STREET	**JOB NAME**	
2896 CASTRO VALLEY BLVD.	WALTS TEXACO	
CITY, STATE AND ZIP CODE	**JOB LOCATION**	
CASTROVALLEY , CALIF. 94546	2896 CASTRO VALLEY BLVD.	
ARCHITECT / **DATE OF PLANS**		**JOB PHONE**
WALT QUIGLEY		881-9882

We hereby submit specifications and estimates for:

WE WILL REMOVE & DESTROY 3 UNDERGROUND GASOLINE STORAGE TANKS AND 1- 550 GALLON WASTE OIL TANK . TAKE TWO SOIL SAMPLE TESTS AT EACH END OF TANK FOR FIRE DEPARTMENT WATER QUALITY , & E.P.E.

AREA TO BE FENCED OFF BY 6' CHAIN LINK FENCE DURING CONSTRUCTION.

ALL PERMITS & FEES TO BE DONE BY CONTRACTOR.

EXCIVATION QUOTATIONS ARE BASED ON NORMAL SOIL CONDITIONS , IN THE EVENT ANY UNDERGROUND STRUCTURES , CABLES , CONDUITS, PIPES , DEBRIS OR ROCKS WATER OR RUNNING SAND ARE ENCOUNTERED DESTROYED OR DAMAGED DURING THE PREFORMANCE OF THE CONTRACT THE CONTRACTOR , SHALL NOT BE HELD RESPONSIBLE , ANY OF THE ABOVE WILL WILL BE CORRECTED ON A TIME & MATERIAL BASIS ONLY.

IN THE EVENT THE TANKS HAVE CONTAMINATED FUELS , OILS OR WATER , P.C.B OR ANY UNKNOWN FOREIGN MATERIAL IN THEM UPON REMOVAL FROM THE GROUND , WE WILL REMOVE SAID CONTAMINATION FOR A CHARGE OF NOT LESS THAN COST PLUS 20 % .

IN THE EVENT CLIENT STOPS JOB FOR ANY REASON AFTER CONTRACT HAS BEEN SIGNED THE TOTAL AMOUNT OF CONTRACT SHALL BE DUE AND PAYABLE IMMEDIATELY .

PRICE TO INCLUDE BACKFILL OF SAND OR 3/4A.B. GRAVEL TO ACQUIRE 90 % COMPACTIONBUT NOT ANY CONCRETE OR ASPHAULT , WE WILL ALSO REMOVE OLD GASOLINE LINES NOW IN POSITION.

We Propose hereby to furnish material and labor — complete in accordance with above specifications, for the sum of:
FOURTEEN THOUSAND TWO HUNDRED DOLLARS ..... 14,200.00 dollars ($).

Payment to be made as follows:

~~$ 7,100.00 WITH ORDER , $ 3,550.00 UPON REMOVAL OF TANKS , $ 3,550.00 UPON COMPLETION OF~~ JOB .....

All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado and other necessary insurance. Our workers are fully covered by Workmen's Compensation Insurance.

Authorized Signature James E. Brinks

Note: This proposal may be withdrawn by us if not accepted within 10 days.

Acceptance of Proposal — The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

Signature: Walter B. Quigley

Date of Acceptance: _____

Signature _____

APPENDIX

The boring logs and related information enclosed in the appendix depict subsurface conditions only at the specific locations drilled and at the particular times designated on the logs. Soil conditions at other locations may differ from conditions occurring at these boring locations. Also the passage of time may result in a change in the soil conditions at the boring locations drilled.

SPECIFICATIONS FOR SUBGRADE AND GRADE PREPARATION FOR FILL, FOUNDATIONS, FLOOR SLABS, AND PAVEMENT SUPPORT; AND SELECTION, PLACEMENT AND COMPACTION OF FILL SOILS USING MODIFIED PROCTOR PROCEDURES

GILES ENGINEERING ASSOCIATES, INC.

1. Inspection and testing of subgrades and grades for fill, foundation, floor slab and pavement; and fill selection, placement and compaction shall be performed under the supervision of an experienced soils engineer.

2. All subgrades and grades shall consist of and be (a) underlain by suitable bearing material, (b) free of all organic, frozen, or other deleterious material, and (c) inspected and approved by qualified engineering personnel under the supervision of an experienced soils engineer. Preparation of subgrades after stripping vegetation, organic or other unsuitable materials shall consist of (a) proof-rolling to detect soft, wet, yielding soils or other unstable materials that must be undercut, (b) scarifying top 6 to 8 inches, and (c) recompaction to same minimum in-situ density required for similar materials indicated under item 5. *Note:* Compaction requirements for pavement subgrade higher than other areas.

3. In undercut and fill areas, the compacted fill must extend (a) a minimum 1 foot beyond the edge of the foundation or pavement at grade and down to compacted fill subgrade on a maximum 2(V):1(H) slope, (b) 1 foot above footing grade outside the building, and (c) to floor subgrade inside the building. Fill shall be placed and compacted on a maximum 1(V):5(H) slope or must be stepped or benched as required to flatten if not specifically approved by qualified personnel under the direction of an experienced soils engineer.

4. The compacted fill materials shall be free of deleterious, organic or frozen matter, and shall have a maximum Liquid Limit (ASTM D-423) and Plasticity Index (ASTM D-424) of 30 and 10, respectively, unless specifically tested and found to have low expansive properties and approved by an experienced soils engineer. The top 12 inches of compacted fill should have a maximum 3 inch particle diameter and all underlying compacted fill a maximum 6 inch diameter unless specifically approved by an experienced soils engineer. All fill material must be tested and approved under the direction and supervision of an experienced soils engineer prior to placement. If the fill is to provide non-frost susceptible characteristics, it must be classified as a clean GW, GP, SW or SP per Unified Soil Classification System (ASTM D-2487).

5. The density of the structural compacted fill and scarified subgrade and grades shall not be less than 90 and 95 percent of the maximum dry density as determined by Modified Proctor (ASTM D-1557) for cohesive and granular materials, respectively, with the exception of the top 12 inches of pavement subgrade which shall have a minimum in-situ density of 95 and 100 percent of maximum dry density for cohesive and granular soils, respectively, or 5 percent higher than underlying fill materials. The moisture content of cohesive soil shall not vary by more than −1 to +3 percent and granular soil ±3 percent of optimum when placed and compacted or recompacted. The fill shall be placed in layers with a maximum loose thickness of 8 inches for foundations and 10 inches for floor slabs and pavements unless specifically approved by a qualified soils engineer taking into consideration the type of materials and compaction equipment being used. The compaction equipment must be approved by personnel under the direction of a qualified soils engineer who is also performing the inspection of fill placement and compaction to ensure that it is suitable for the type of materials being compacted. Under no circumstances may bulldozers or similar tracked vehicles be used for compaction equipment.

6. Excavation, filling, subgrade and grade preparation shall be performed in a manner and sequence that will provide drainage at all times and proper control of erosion. Precipitation, springs, and seepage water encountered shall be pumped or drained to provide a suitable working platform. Springs or water seepage encountered during grading/foundation construction must be called to the soil engineer's attention immediately, for possible revision or inclusion of an underdrain system.

7. Non-structural fill adjacent to structural fill shall be placed in unison to provide lateral support. Backfill along building walls must be placed and compacted with care to ensure excessive unbalanced lateral pressures do not develop. The type of fill material placed adjacent to below grade walls (i.e. basement walls and retaining walls) must be properly tested and approved by an experienced soils engineer with consideration for the lateral earth pressure used in the wall design.

C-880106 Castro Valley California

MINIT LUBE APPENDIX INSERT

GILES ENGINEERING ASSOCIATES INC

I. Foundations
   (A) Conventional spread footings
      1. Founded at nominal depth on suitable existing (natural/fill) soil
      (2) Founded at nominal depth on structural fill replacing existing unsuitable soil/materials approximately 12 feet deep, or extended
   (B) Turned-down slab or monolithically poured foundation and floor slab
      1. Founded at nominal depth on suitable existing (natural/fill) soil
      (2) Founded at nominal depth on structural fill replacing existing unsuitable soil/materials approximately 12 feet deep, or extended
   C. Moderately rigid spread footing foundations
      1. Founded at nominal depth on suitable existing (natural/fill) soil
      2. Founded at nominal depth on structural fill replacing existing unsuitable soil/materials approximately _____ feet deep, or extended
   D. Grade beam footings
      1. Founded at nominal depth on suitable existing (natural/fill) soil
      2. Founded at nominal depth on structural fill replacing existing unsuitable soil/materials approximately _____ feet deep, or extended
   E. Deep foundations
      1. Drilled piers (approximate depth _____ feet)
      2. Driven piles (approximate depth _____ feet)
   F. Post tensioned slab or waffle slab
      1. Founded at nominal depth on suitable existing (natural/fill) soil
      2. Founded at nominal depth on structural fill replacing existing unsuitable soil/materials approximately _____ feet deep, or extended

II. Floor Slab
   (A) Conventional slab-on-grade (including turned-down slab)
   B. Moderately rigid slab-on-grade
   C. Rigid heavily reinforced slab
   D. Post tensioned or waffle slab incorporated into foundation system
   E. Structural slab supported by deep foundation system
   F. Over-excavation expected for subgrade preparation (See IV Below)

III. Pavement
   (A) Conventional asphalt pavement with granular base, OR
   B. Conventional asphalt pavement with granular base and underlying geotextile
   (C) Full-depth asphalt pavement , OR
   D. Plain Portland Cement concrete
   (E) Reinforced Portland Cement concrete
   F. Over-excavation expected for subgrade preparation (See IV Below)

IV. Site Grading and Subgrade Preparation (Also Deals with II and III Above)
   A. Topsoil stripping
   (B) Moisture sensitive soils typically resulting in undercutting during wet periods
   (C) Over-excavation due to soft subgrade soils below topsoil
   (D) Over-excavation resulting from existing fill
   E. Difficult excavation due to:
      1. Existing fill containing rubble
      2. Loose granular materials
      3. Dense soils
      4. High cobble and boulder content
      5. Shallow rock
      6. Expansive Soil
   (F) Existing structures resulting in grading/excavation problems
   G. Existing or proposed slopes, possibly requiring retaining wall
   H. Springs within existing or cut slopes requiring special drainage/de-watering
   (I) Shallow water table possibly requiring underdrain or some form of temporary or permanent subdrainage system
   J. Existing drainage swale resulting in potential significant over-excavation for proper cleaning and development of firm subgrade
   K. Lime stabilization of subgrade due to expansive or metastable soil
   L. Other _____

V. Contamination, soil/groundwater (based on odors in samples, will be substanciated and elaborated, where relative, when current preliminary chemical testing is completed).
   A. Minor/localized problem (nominal over-excavation expected)
   (B) Major problem (Recommend additional special study) POSSIBLE GROUNDWATER CONTAMINATION

VI. Additional Field Exploration Recommended
   A. Test borings (Reason _____)
   B. Water observation wells (Reason _____)
   C. Test pits (Reason _____)
   D. Special contamination assessment study (Reason _____)
   E. Other (Reason _____)

VII. Seismic Consideration
   A. Special study area
   (B) Not in Alquist-Priolo Special Studies Zone to date. But in UBC Zone 4.

GEA677/kah

C-880106 Castro Valley, lifornia
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D. Grade beam footings
1. Founded at nominal depth on suitable existing (natural/fill) soil
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L. Other _____

V. Contamination, soil/groundwater (based on odors in samples, will be substanciated and elaborated, where relative, when current preliminary chemical testing is completed).
A. Minor/localized problem (nominal over-excavation expected)
(B) Major problem (Recommend additional special study) POSSIBLE GROUNDWATER CONTAMINATION

VI. Additional Field Exploration Recommended
A. Test borings (Reason _____)
B. Water observation wells (Reason _____)
C. Test pits (Reason _____)
D. Special contamination assessment study (Reason _____)
E. Other (Reason _____)

VII. Seismic Consideration
A. Special study area
(B) Not in Alquist-Priolo Special Studies Zone to date. But in UBC Zone 4.

GEA677/kah

C-880106 Castro Valley, Californ
MINIT LUBE UNIT PRICES FOR EXTRA

GILES ENGINEERING ASSOCIATES INC

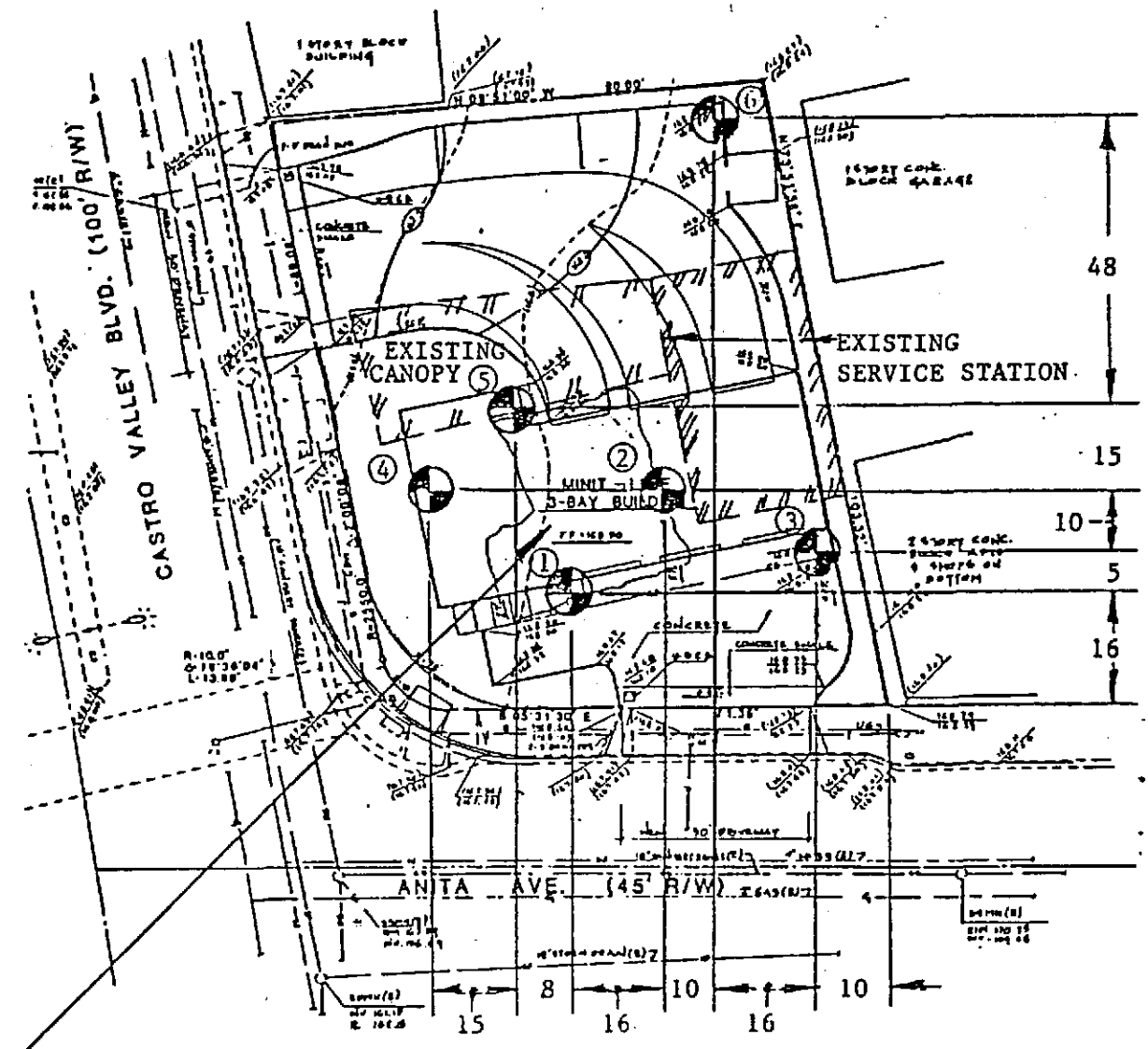
(1) Remove unsuitable, unstable existing soils below the topsoil to develop a stable subgrac and replace with structural compacted fill
   a. Select sand and gravel or crushed stone (well-graded granular material)
   (b) Common soil (silt, clay, sand, gravel mixture)
(2) Provide, place, and compact structural fill as general site fil including pavement and floor slab areas, BUT WALL BACKFILL IMPORTED FREE DRAINING
   a. Select sand and gravel or crushed stone (well-graded granular material)
   (b) Common soil (silt, clay, sand, gravel mixture), WALL BACKFILL FREE DRAINING
(3) Provide, place, and compact structural fill in foundation excavations
   a. Select sand and gravel or crushed stone (well-graded granular material)
   (b) Common soil (silt, clay, sand, gravel mixture)
4. Excessive topsoil stripping (depth estimate inches)
5. Subgrade preparation with hydrated lime (6%± by dry weight mixed int top 6 to 8 inches and compacted to proper in-place density)
6. Subgrade preparation with Portland Cement (8%± by dry weight mixed int top 6 to 8 inches, moist cured, and compacted to proper in-place density)
7. Geotextile underlayment below pavement base course on top of properl prepared subgrade (____ ounce)
8. Excavation of building debris fill (including concrete, asphalt, and possibly other rubble)
9. Removal of large tree root balls, where requires over-excavation belo typical subgrade excavation depth
(10) Provision, placement, and compaction of working mat (coarse granular material such as coarse crushed stone) for stabilization of surface soils may include a geotextile overlayment, but geotextile where necessary not to be included in this item. BASEMENT
(11) Remove and dispose of existing asphalt and/or concrete paving
12. Hard rock excavation (including blasting and/or ripping where necessary)
13. Soft rock and/or dense soil excavations (including ripping where necessary)
14. Construction de-watering
   (a.) Sump pits with pump (POSSIBLY WORKABLE)
   b. French drain (3 to 4 foot depth with geotextile rap and perforated pipe)
   c. Blanket drain (geotextile envelope with free draining granular material 6 to 8 inches in thickness and perforated pipe discharge)
   (d.) Well points (10 to 15 foot depth with appropriate header and pumps)
   e. Deep wells (with appropriate perforated liner and down hole pump)
15. Permanent and/or temporary subdrainage system
   (a.) Underdrain system with proper incorporation of geotextile and perforated pipe placed at * ~~foot on center~~ throughout required area WALL PERIMETER
   b. French drain with a geotextile rap and perforated drain pipe (3 to 4± foot depth)
   c. Blanket drain with geotextile envelope and 6 to 8 inch free draining granular material discharged with perforated pipe
16. Rerouting of existing drain pipe where encountered in excavation to preserve its function and prevent plugging
17. Bracing of excavations extending into unstable materials (special de-watering requirements to also be included in this item where required and not duplicated under the construction de-watering item)
18. Additional longitudinal reinforcement of conventional strip footing pads (total of six No. 5 rebars-3 top and 3 bottom)
19. Additional reinforcement of conventional slab-on-grade floor slab (consisting of No. 3 rebars) with floor slab increased to minimum 5 inch thickness
   a. 12 inches on-center each way
   b. 18 inches on-center each way

EA669/kah

NOTE: Dimensions indicate approximate method of locating test borings in the field with respect to apparent property lines All dimensions in feet.

NORTH

1 INCH = 30 FEET APPROXIMATELY



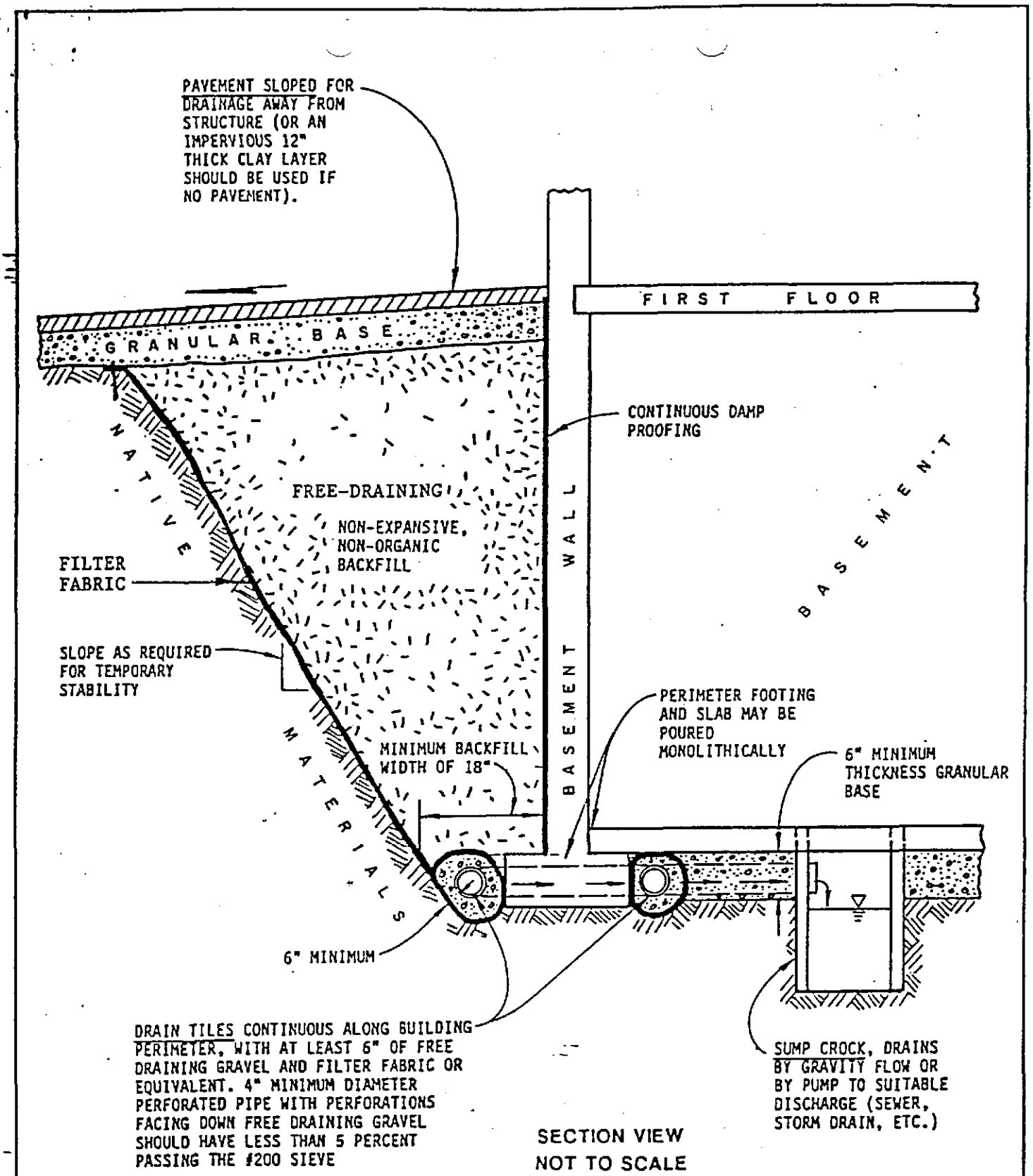
APPROXIMATE LOCATION OF TANK REMOVAL AREA

DRAWING REFERENCE: "Grading Plan" by Michael J. Majors Civil Engineers, Inc., Dated 12/8/86

BORING LOCATION PLAN
FIGURE 1

Proposed Minit-Lube
Castro Valley, California
GEA Project No. C-880106

GILES ENGINEERING ASSOCIATES, INC.
CONSULTING SOIL AND FOUNDATION ENGINEERS



Giles Engineering Associates, Inc.
Consulting Soil and Foundation Engineers

FIGURE 2
SCHEMATIC DRAINAGE SYSTEM

GEA C-880106

RECORD OF SUBSURFACE EXPLORATION

BORING NO.	GEA PROJECT NO.
2 (north of tanks)	C-880106
DATE	**FIELD REPRESENTATIVE**
1/22/88	John Moser

PROJECT

Proposed Minit-Lube

Castro Valley, California

GILES ENGINEERING ASSOCIATES, INC.
CONSULTING SOIL AND FOUNDATION ENGINEERS

DESCRIPTION Ground Surface Elevation 168'±	Depth Below Surface	Sample No. & Type	N	q_u	q_p	q_s	w	*PID
FILL: 2± inches BASE: crushed aggregate Greenish Gray Brown fine Sand, with some Silt (uniform)		1-AU	-					ND
		2-SS	9				6	ND
Brown to Dark Brown fine rounded Gravelly Silt, trace of fine to coarse Sand and Clay (POSSIBLE FILL)	5'	3-SS	12		0.5		24	ND
		4-SS	5				12	ND
NOTE A	10'	5-SS	1	-	-	-	** TPH BTX	140
Brown with some Black and Greenish Brown fine to coarse Sandy Silt, with fine rounded Gravel	15'	6-SS	14		1.5		17	ND
	20'	7-SS	25				-	ND

Boring Terminated at 20'

* PID = Results of vapor analysis conducted on representative samples utilizing a Photoionization Detector equipped with a 10.2 eV Lamp Calibrated to Benzene reported as parts per million (ND = Not Detectable)

NOTE A: Dark Brown to Black fine Gravelly Silt, trace of fine to coarse Sand and Clay (PETROLEUM ODOR) (POSSIBLE FILL)

** TPH & BTX: Sample hydrocarbon testing

▽ Water encountered at 13 ft. while drilling

▽ Water at 9 ft. at completion

▼ Water at ____ ft. after ____ hours

Changes of strata indicated by the lines are approximate boundary between soil types. The actual transition may be gradual and may vary considerably between boring locations. Dashed lines should be interpreted as more approximate than solid lines.

RECORD OF SUBSURFACE EXPLORATION

GILES ENGINEERING ASSOCIATES, INC.
CONSULTING SOIL AND FOUNDATION ENGINEERS

BORING NO.	GEA[illegible]JECT NO.
4 (S. of new building)	C-880106
DATE	**FIELD REPRESENTATIVE**
1/22/88	John Moser

PROJECT
Proposed Minit-Lube

Castro Valley, California

DESCRIPTION Ground Surface Elevation 168'±	Depth Below Surface	Sample No. & Type	N	q_u	q_p	q_t	w	*PID
FILL: NOTE A		1-AU	-					ND
Brown fine well-rounded Gravelly Silt (POSSIBLE FILL)		2-SS	3				10	ND
Dark Brown to Black Clayey Silt (POSSIBLE FILL)	5'	3-SS	2		0.8		18	ND
		4-SS	11		0.8		22	ND
Gray Greenish Brown Clayey Silt	10'	5-SS	10		1.8		18	ND
Dark Brown and Gray Brown mottled Clayey Silt, with fine rounded Gravel, some Clay	15'	6-SS	12		2.5		27	ND
	20'	7-SS	5	-	-	-	** TPH BTX	2
Boring Terminated at 20'	25'							
NOTE A: 2± inches Asphalt 3± inches BASE: crushed aggregate Dark Brown angular Gravelly Silt, with fine to coarse Sand	30'							
* PID = Results of vapor analysis conducted on representative samples utilizing a Photoionization Detector equipped with a 10.2 eV Lamp Calibrated to Benzene reported as parts per million (ND = Not Detectable)	35'							
** TPH & BTX: Sample sent for hydrocarbon testing	40'							
▽ Water encountered at 13 ft. while drilling ▼ Water at 9½ ft. at completion ▼ Water at ____ ft. after ____ hours	45'							

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RECORD OF SUBSURFACE EXPLORATION

BORING NO.	GEA PROJECT NO.
6 (new trash corral)	C-880106
DATE	**FIELD REPRESENTATIVE**
1/22/88	John Moser
PROJECT	
Proposed Minit-Lube	
Castro Valley, California	

GILES ENGINEERING ASSOCIATES, INC.
CONSULTING SOIL AND FOUNDATION ENGINEERS

DESCRIPTION Ground Surface Elevation 169'±	Depth Below Surface	Sample No. & Type	N	q_u	q_p	q_s	w	*PID
FILL: NOTE A Brown, Gray Brown and Black mottled fine Gravelly Silt		1-AU	-					ND
		2-SS	4		1.2		19	ND
Brown fine Sandy Silt, trace of Clay and fine Gravel (POSSIBLE FILL)	5'	3-SS	4		1.8		16	ND
Boring Terminated at 5'								
No Groundwater Encountered								
NOTE A: 2± inches Asphalt 3± inches BASE: crushed aggregate	10'							
* PID = Results of vapor analysis conducted on representative samples utilizing a Photoionization Detector equipped with a 10.2 eV Lamp Calibrated to Benzene. (ND = Not Detectable)	15'							
	20'							
	25'							
	30'							
	35'							
	40'							
▽ Water encountered at ____ft. while drilling ▼ Water at ____ft. at completion ▼ Water at ____ft. after ____hours	45'							

Changes of strata indicated by the lines are approximate boundary between soil types. The actual transition may be gradual and may vary considerably between boring locations. Dashed lines should be interpreted as more approximate than solid lines.

GENERAL NOTES

Giles Engineering Associates, Inc.

SAMPLE IDENTIFICATION

All sample classifications reviewed by Geotechnical Engineer in accordance with Unified Soil Classification System (ASTM D-2487)

DESCRIPTIVE TERM (% BY DRY WEIGHT)	
Trace:	1-10%
Little:	11-20%
Some:	21-35%
And/Adjactive	36-50%

PARTICLE SIZE (DIAMETER)		
Boulders:	8 in and larger	
Cobbles:	3 in to 8 in	
Gravel:	coarse-	3/4 to 3 in
	fine-	No. 4 (4.76mm) to 3/4 in
Sand:	coarse-	No. 4 (4.76mm) to No. 10 (2.0mm)
	medium-	No. 10 (2.0mm) to No. 40 (0.42mm)
	fine-	No. 40 (0.42mm) to No. 200 (0.074mm)
Silt:	No. 200 (0.074mm) and smaller (Non-plastic)	
Clay:	No. 200 (0.074mm) and smaller (Plastic)	

SOIL PROPERTY SYMBOLS

Dd: Dry Density, pcf
LL: Liquid Limit
PL: Plastic Limit
SL: Shrinkage Limit
LI: Liquidity Index[(w - PL)/PI]
PI: Plasticity Index (LL-PL)
Gs: Specific Gravity
K: Coefficient of Permeability
w: Moisture Content
qp: Calibrated Penetrometer Resistance, tsf
qs: Vane-Shear Strength, tsf
qu: Unconfined Compressive Strength, tsf
N: Penetration Resistance per foot or fraction thereof for standard 2 inch O.D., 1 3/8 inch I.D.,split spoon sampler driven with a 140 pound weight free-falling 30 inches, in accordance with Standard Penetration Test Specifications (ASTM D-1586)
Nc: Penetration Resistance per foot or fraction thereof for standard Cone Penetrometer driven with a 140 pound weight free-falling 30 inches
▼: Apparent groundwater level at the time noted after completion
: Depth to which boring caved during water level readings

DRILLING AND SAMPLING SYMBOLS

SS: Split-Spoon
ST: Shelby Tube - 3" O.D. (except where noted)
AU: Auger Sample
DB: Diamond Bit
CB: Carbide Bit
WS: Wash Sample
RB: Rock-Roller Bit
BS: Bag Sample

SOIL STRENGTH CHARACTERISTICS

COHESIVE (CLAYEY) SOILS

COMPARATIVE CONSISTENCY	BLOWS PER FOOT (N)	UNCONFINED COMPRESSIVE STRENGTH (TSF)
Very Soft	0-2	0 - 0.25
Soft	3-4	0.25 - 0.50
Medium Stiff	5-8	0.50 - 1.00
Stiff	9-15	1.00 - 2.00
Very Stiff	16-30	2.00 - 4.00
Hard	31+	4.00+

NON-COHESIVE (GRANULAR) SOILS

RELATIVE DENSITY	BLOWS PER FOOT (N)
Very Loose	0-4
Loose	5-10
Firm	11-30
Dense	31-50
Very Dense	51+

DEGREE OF PLASTICITY	PI
None to Slight	0-4
Slight	5-10
Medium	11-30
High to Very High	31+

DEGREE OF EXPANSIVE POTENTIAL	PI
Low	0-15
Medium	15-25
High	25+

GEA446/kah

RECORD OF SUBSURFACE EXPLORATION

BORING NO.	GEA PROJECT NO.
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DATE	**FIELD REPRESENTATIVE**
1/22/88	John Moser
PROJECT	
Proposed Minit-Lube	
Castro Valley, California	

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CONSULTING SOIL AND FOUNDATION ENGINEERS

DESCRIPTION Ground Surface Elevation 168'±	Depth Below Surface	Sample No. & Type	N	q_u	q_p	q_s	w	*PID
FILL: 3± inches BASE: crushed aggregate Greenish Gray Brown fine Sand, some Silt (uniform)		1-AU	–					ND
		2-SS	14				12	ND
Dark Brown Silty Clay, trace of fine Gravel and fine to coarse sand (POSSIBLE FILL)	5'	3-SS	18		2.2		14	ND
		4-SS	6		0.8		19	ND
NOTE A	10'	5-SS	9				–	ND
Brown fine to coarse Sandy Silt, with rounded fine Gravel, and trace of Clay	15'	6-SS	17				18	ND
	20'	7-SS	26		4.5+		18	ND
Boring Terminated at 20'	25'							
	30'							
	35'							
	40'							
	45'							

* PID = Results of vapor analysis conducted on representative samples utilizing a Photoionization Detector equipped with a 10.2 eV Lamp Calibrated to Benzene reported as parts per million. (ND = Not Detectable)

NOTE A: Dark Brown to Black Clayey Silt, trace of fine Gravel and fine to coarse Sand

▽ Water encountered at 12½ ft. while drilling

▼ Water at 8½ ft. at completion

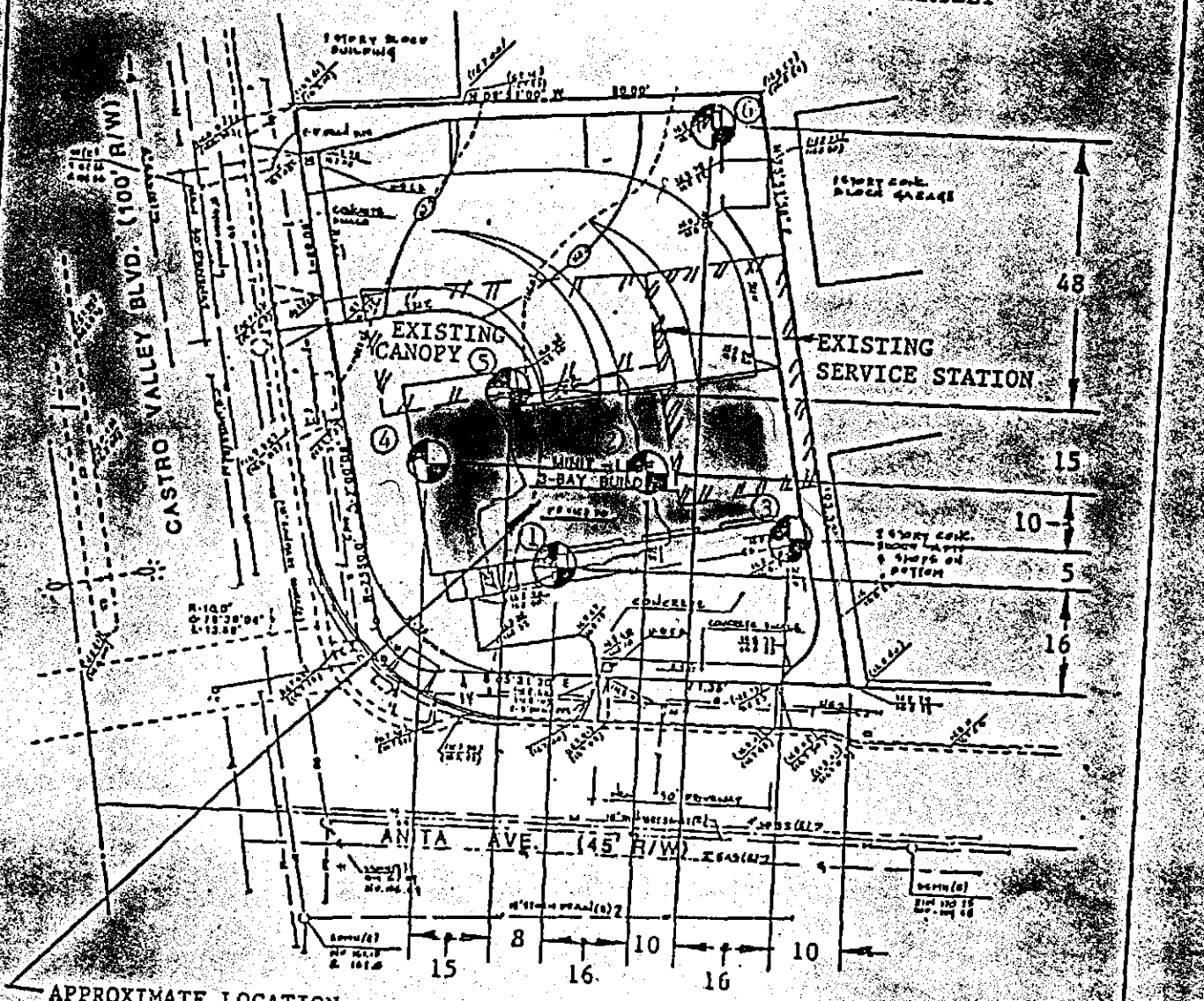
▼ Water at ____ ft. after ____ hours

Changes of strata indicated by the lines are approximate boundary between soil types. The actual transition may be gradual and may vary considerably between boring locations. Dashed lines should be interpreted as more approximate than solid lines.

NOTE: Dimensions indicate approximate method of locating test borings in the field with respect to apparent property lines
All dimensions in feet.

NORTH

1 INCH = 30 FEET APPROXIMATELY



APPROXIMATE LOCATION OF TANK REMOVAL AREA

DRAWING REFERENCE: "Grading Plan" by Michael J. Majors Civil Engineers, Inc., Dated 12/8/86

ORING LOCATION PLAN
IGURE 1

roposed Minit-Lube
astro Valley, California
EA Project No. C-880106

GILES ENGINEERING ASSOCIATES, INC.
CONSULTING SOIL AND FOUNDATION ENGINEERS