



Prevent • Promote • Protect

Environmental Health Division

1675 W. Garden of the Gods Rd., Suite 2044
Colorado Springs, CO 80907
(719) 578-3199 phone
(719) 575-8664 fax
www.elpasocountyhealth.org

ON-SITE WASTEWATER TREATMENT SYSTEM INSPECTION FORM

ON-SITE ID: ON0049133

APN # 7400000165

DATE: 5/9/2017

P

APPROVED YES ☒ NO ☐

Environmental Health Specialist: Kat McGarvy

Address: 811 Crystal Park Rd, Manitou Springs CO 80829 Owner: Alex Sung and Sun Lee

Residence: ☒ #Bedrooms: 5 Commercial: ☐ System Installer: Wilkinson Excavation

SEPTIC TANK: Construction Material concrete

Capacity Gallon 2000 gallon with Microfast system

SOIL TREATMENT AREA:

Trench: Depth (Range): Width: Total Length: Sq. Ft.:

Bed: Depth (Range): Width: Total Length: Sq. Ft.:

Depth of Rock: Under PVC: Type of cover on Rock:

SEEPAGE PITS: # of Pits: 1 Working Depth #1: 12' #2: Size (L x W) #1 5'x3' (4) #2 Total Sq. Ft. 623

CHAMBER SYSTEMS:

Type of Chamber: #Chambers: Sq. Ft./Chamber: Bed: ☐ Trench: ☐ Depth (Range):

Sq. Ft. Required (10-1): 600 Sq. Ft. Required (10-2): 600 Sq. Ft. Required (10-3): Sq. Ft. Required for Diverter Valve: (10-2)/(2)

Sq. Ft. Installed:

Engineer Design: Y ☒ N ☐ Engineering Firm: GeoQuest LLC Approval Letter Provided: Y ☐ N ☐

Well installed at time of OWTS Inspection: Y ☒ N ☐ Public Water: Y ☐ N ☒

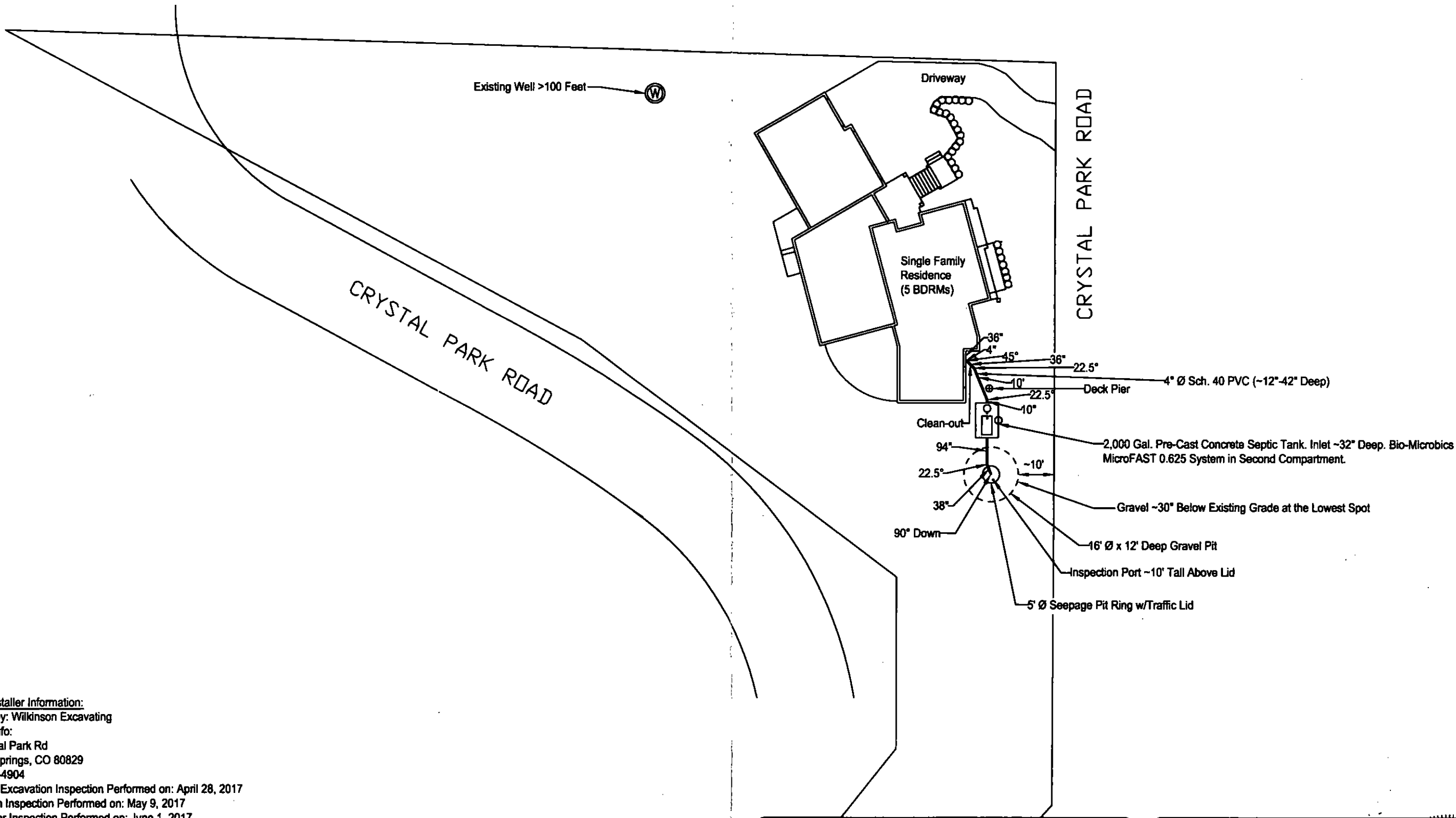
**Approval will be revoked if in the future the well is found to be within 50 feet of the septic tank and/or 100 feet of the soil treatment area.*

Notes:

See attached as built GeoQuest LLC Drawing dated 7.6.2017

January 13, 2015

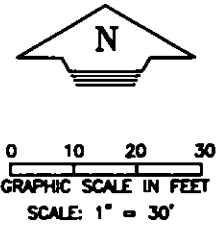
On-Site Wastewater Treatment System (OWTS) Record Drawing



OWTS Installer Information:
Installed by: Wilkinson Excavating
Contact Info:
228 Crystal Park Rd
Manitou Springs, CO 80829
(719) 685-4904

Bottom of Excavation Inspection Performed on: April 28, 2017
Installation Inspection Performed on: May 9, 2017
Final Cover Inspection Performed on: June 1, 2017

Geoquest, LLC. has Provided this Design in Accordance with the Standards of Practice Common to the Area. However, as with All Underground Absorption Fields, Guarantee from Failure is Impossible. Even with Proper Installation, as Outlined for this Proposed Construction, There Can Remain Many Uncertainties, and Difficulties Can Still Arise in the Operation of the System in the Future. Proper Design, Construction, and Maintenance can Assist in Minimizing Uncertainties, but Cannot Entirely Eliminate Them. Homeowners Should be Advised of Maintenance and Special Considerations for Septic Systems. Refer to El Paso County Public Health Brochure: "Maintaining Your Septic System" for Additional Information. Due to the Possibility of Unknown Water Usage Factors, Geoquest, LLC. Provides No Warranty of this Design or Installation Against Failure or Damage of Any Type.



Project: 16-0961	Project Name and Address Palace Homes 811 Crystal Park Road Site S-94(R) Crystal Park Subdivision No Schedule Number El Paso County, Colorado
Sheet: 1 of 1	
Date: 6 June 2017	
Revised:	
Scale: 1" = 30 FT	
Drawn by: vsm	
Checked by: cem	

GEOQUEST, LLC.
6825 SILVER PONDS HEIGHTS
SUITE 101
COLORADO SPRINGS, CO
80908

OFFICE: (719) 481-4560
FAX: (719) 481-9204

Attn: ALEX SUNG AND SUN LEE
818 CRYSTAL PARK RD
MANITOU SPRINGS, CO 80829

Notify Environmental Health of any change of ownership, type of business activity, business name, or billing address by calling (719) 578-3199. Failure to notify Environmental Health may result in late penalties, Permit/License denial or revocation, and business closure. PERMITS/LICENSES TO OPERATE AND ANNUAL FEE PAYMENTS ARE NOT TRANSFERABLE. Permits become void on change of ownership. New owners must apply and pay for a new Permit(s)/License(s) prior to beginning operation.



**EL PASO COUNTY PUBLIC HEALTH
ENVIRONMENTAL HEALTH DIVISION**
1675 W. GARDEN OF THE GODS ROAD, SUITE 2044
COLORADO SPRINGS, CO 80907
PHONE: (719) 578-3199 FAX: (719) 578-3188
www.elpasocountyhealth.org

NEW SYSTEM PERMIT - OWTS

Valid From 2/22/2017 To 2/22/2018

PERMITEE :

ALEX SUNG AND SUN LEE
818 CRYSTAL PARK RD
MANITOU SPRINGS, CO 80829

Onsite ID: ON0049133

Tax Schedule # : 7408000098

Permit Issue Date: 02/22/2017

Dwelling Type: RESIDENTIAL

of Bedrooms (if Res): 5

Proposed Use (if Comm):

Designed Gallons/Day:

Water Source: PRIVATE WELL

OWNER NAME :

ALEX SUNG AND SUN LEE

System Installation Requirements:

- Engineer septic system to be installed on site is sized for a 5 bedroom home with a seepage pit equipped with a Bio-Microbics Microfast system.
- Install according to Geoquest, LLC design, Project No. 16-0961 dated on 15 Feb 2017.
- Any modifications made to the system shall be reviewed and approved by both Geoquest, LLC and Public Health prior to installing.
- An as-built drawing and a certified approval letter submitted to Public Health is required for final approval.

This permit is issued in accordance with 25-10-106 Colorado Revised Statutes. The PERMIT EXPIRES upon completion/installation of the Onsite Wastewater Treatment System, or at the end of twelve (12) months from date of issue, whichever occurs first. If both a Building Permit and an Onsite Wastewater Treatment System Permit are issued for the same property and construction has not commenced prior to the expiration date of the Building Permit, the Onsite Wastewater Permit shall expire at the same time as the Building Permit. This permit is revocable if all stated requirements are not met. The Onsite Wastewater Treatment System must be installed by an El Paso County Licensed System Contractor, or the property owner.

The Health Officer shall assume no responsibility in case of failure or inadequacy of an Onsite Wastewater Treatment System, beyond consulting in good faith with the property owner or representative. Access to the property shall be authorized at reasonable time for the purpose of making such inspections as are necessary to determine compliance with the requirements of this law (permit).

**Inspection request line: Call (719) 575-8699 before 8:30 a.m. of the day that the inspection is requested
Weekends & Holidays excluded.**

Authorized By: Environmental Health Specialist



SR0006471
AR0010746
IN0019490
ON00049133
Prevent • Promote • Protect

Environmental Health Division

1675 W. Garden of the Gods Rd., Suite 2044
Colorado Springs, CO 80907
(719) 578-3199 phone
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APPLICATION FOR AN ON-SITE WASTEWATER TREATMENT SYSTEM PERMIT

Property Information:

Property Address: 818 Crystal Park Road City and Zip: Manitou Springs, CO 80829

Legal Description: Site S-94R site Add Crystal Park Sub No 2

Tax Schedule #: 7408000098 Lot size: .7 acres

Is the property gated: ☒ Yes ☐ No Please provide a gate code if necessary: Not Needed

Site Located Inside City Limits: ☐ Yes ☒ No Proposed Use: ☒ Residential ☐ Commercial

Water Supply: ☒ Well ☐ Cistern ☐ Municipal Potential Number of Bedrooms: 5

Has a Conditional Acceptance Document been issued for this property: ☐ Yes ☒ No ☐ Unsure

Owner Information: ☒ Primary Contact

Owner: Alex Sung & Sun (Empire) LLC Daytime Phone: 719-231-1953

Owners Mailing Address: 1216 W Colorado Ave #110, C/S CO 80904

Email Address: info@palacehomesinc.com Fax #: 719-632-9925

General Contractor: Palace Homes Inc Phone/Email: 719-491-9635

OWTS Installer Information: ☐ Primary Contact

System Installer: Wilkinson Excavation Daytime Phone: 719-491-0880

Email Address: dave@customexcavating.com Licensed installer: ☐ Tier 1 ☒ Tier 2

All engineer-design systems must be installed by a Tier 2 licensed installer

CURRENT FEES AS APPROVED BY THE EL PASO COUNTY BOARD OF HEALTH

All Payments are due at the time of application submittal; by cash, check or major credit card (Visa / MC)

☒ **New Permit:** \$685.00 (EPCPH Charge) + \$147.00 (EPC Planning Dept. Surcharge) + \$23.00 (CDPHE Surcharge) = **\$855.00**

☐ **Major Repair Permit:** \$525.00 (EPCPH Charge) + \$23.00 (CDPHE Surcharge) = **\$548.00**

☐ **Minor Repair Permit:** \$240.00 (EPCPH Charge) + \$23.00 (CDPHE Surcharge) = **\$263.00**

Permits expire one year from date of issuance, unless otherwise noted

REQUIRED: Provide a complete written scope of work to be performed on the property.

New Home Build

The following documents MUST be included with your application.

- A soils report: including at least 1 soil profile excavation pit, in accordance with section 8.5 A-F of OWTS regulations
- A clear and legible design document: including the proposed and alternate locations, as well as system layout, labeled with all setbacks to pertinent structures and features in table 7-1.
- Provide directions to property, from a main highway, on the back side of application.

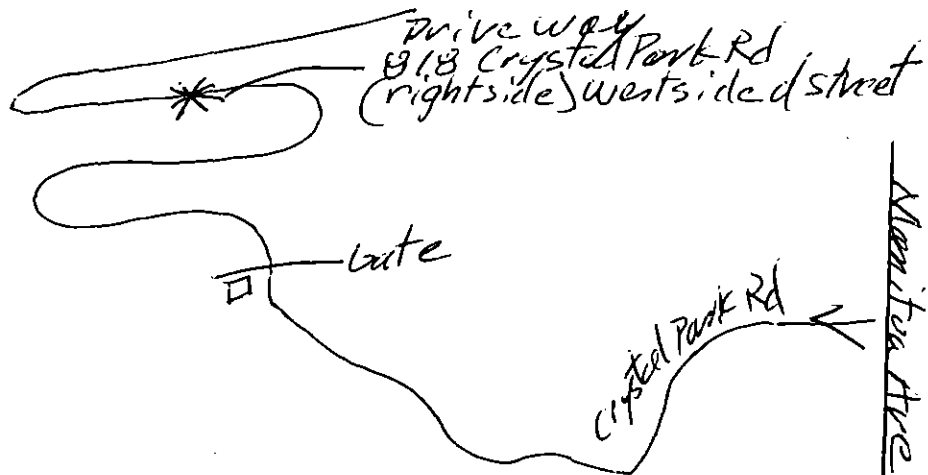
Failure to provide the above listed documents may result in denial of the permit application

I certify that the information provided on this application is in compliance with Section 8.3, Chapter 8 of the Onsite Wastewater System (OWS) Regulations of the El Paso County Board of Health. I also authorize the assigned representative of El Paso County Public Health to enter onto this property in order to obtain information necessary for the issuance of a permit.

Applicants Signature: Alex Lee Date: 2/17/17

- Property address or lot number must be clearly marked and visible from the road.
- Profile excavation test pit and/or soil profile holes must be clearly marked
- Proposed and alternate soil treatment areas must be protected from compaction and disturbance
- Locked gates require the gate code or lock combination be provided on front of application
- Please provide directions to the property from a main highway, by text or picture, below.

Follow Crystal Park Road from Manitoba Avenue going south through gate. A short distance past gate (1/4 mile) it is located on the west side of the street. (Right side as going up)



Failure to comply with the above information may result in an additional charge for a return trip.

Permit #: 0N0049133

Site Inspection date: 2/21/17

Date Approvals Rcvd: Development Services: 2/21/17 Floodplain/enumerations: N/A

Design: ☐ Conventional ☒ Engineer

Design Engineer: Gequest, LLC

Engineer Job #: 16-0961

Engineer Date Stamped: 2/16/17

LTAR/Soil Type: 1.0 / 0 Groundwater: PP1/ PP2 Bedrock: PP1/ PP2

Minimum Requirements: Tank Capacity: 1500 Soil Treatment Area: 600

System Feed: ☒ Gravity ☐ Pump to Gravity ☐ Pressure Dosed ☐ Other: _____

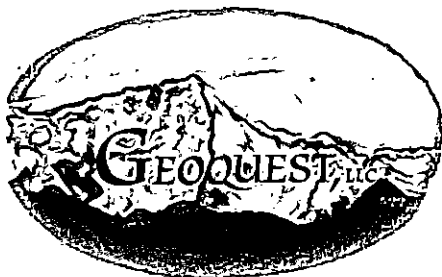
System Media: ☐ Chambers ☐ Rock and Pipe ☒ Other Soil Treatment Area: ☐ Trenches ☐ Bed

Additional Comments: _____

E.H. Specialist: Neil Zuz

Date: 2/22/17

☒ Approved ☐ Denied



6825 Silver Ponds Heights #101
Colorado Springs, CO 80908
(719) 481-4560

June 6, 2017

0N0049133

APN 7400000105

5.9.17

El Paso County Health Department
1675 West Garden of the Gods Road
Colorado Springs, Colorado 80907

Re: Septic System Inspection (GQ#16-0961)
811 Crystal Park Road, Manitou Springs CO
Site S-94(R), 80829
Crystal Park Subdivision,
El Paso County, Colorado


Dear Sir,

We inspected the installation of the engineered septic system at the above address at several points during its construction as well as the finished product. It has been installed in accordance with our engineered plans and specification. This includes having the correct size septic tanks, the proper grade on all pipes and sections of the absorption field, the correct depth, size and configuration of the absorption field, and the backfill around and over the field.

The field should be seeded in the future to allow for vegetation growth next spring. Additional grading may be required in the future to repair any minor erosion areas until the grass seed takes hold. You should ensure that no vehicles are allowed to park on any portion of the system.

The system is ready for final certification from the El Paso County Health Department. A Certificate of Occupancy (CO) will not be issued by PPRBD until El Paso County Health Department has received this letter and the AS-Built Drawing. Please call me if you have any questions.

Sincerely,


Charles E. Milligan
Civil Engineer





6825 Silver Ponds Heights #101
Colorado Springs, CO 80908
(719) 481-4560

PROFILE PIT EVALUATION

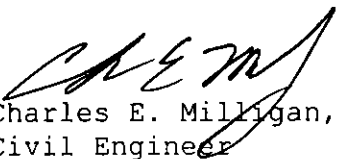
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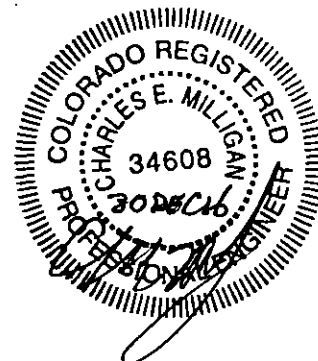
PALACE HOMES

JOB #16-0961

Site 94,
Crystal Park Subdivision,
818 Crystal Park Road,
El Paso County,
Colorado

Respectfully submitted,


Charles E. Milligan, P.E.
Civil Engineer



PROFILE PIT FINDINGS

Enclosed are the results of the profile pit for the septic system to be installed at **Site 94, Crystal Park Subdivision, 818 Crystal Park Road, El Paso County, Colorado**. The location of the test pit was determined by Gordon of Palace Homes. The residence will not be on a public water system. The number of bedrooms in the design for the residence is unknown. Due to the natural slope of the property, the entire system will feed northeast at approximately 22% at least 20 feet. All applicable portions of the El Paso County Health Department Onsite Wastewater Treatment System Regulations (OWTS) must be complied with for the installation of the treatment system.

The inspection was performed on December 12, 2016, in accordance with Table 10-1 of the **E.P.C.P.H. OWTS Regulations**.

Soil Profile #1:

- 0 to 6" - Topsoil- loam, organic composition.
- 6" to 36" - USDA soil texture sandy clay loam, soil type 3, structure shape granular, structure grade 2, non-cemented, LTAR 0.35, dark reddish brown in color, 5 YR 3/3.
- 36" to 8' - USDA soil texture loamy sand, soil type 0, structure shape none, structure grade 0, non-cemented, LTAR 1.0, reddish brown in color, 5 YR 4/4, soil type 1 with greater than 35% rock.

Soil Profile #2:

- 0 to 6" - Topsoil- loam, organic composition.
- 6" to 8' - USDA soil texture sand, soil type 0, structure shape none, structure grade 0, non-cemented, LTAR 1.0, reddish brown in color, 5 YR 4/4, soil type 1 with greater than 35% rock.

No water was encountered during the inspection. Bedrock was not encountered during the inspection. No known wells were observed within 100 feet of the proposed system. **All setbacks shall conform to county regulations.**

Due to encountering USDA soil type 0 the septic system to be installed on this site shall be designed by a Colorado Licensed Engineer. Based on the observed conditions, we feel a design based on an LTAR of 1.0 is reasonable. A 3 foot deep unlined sand filter (uniformly pressure dosed) will be required. The maximum depth of install for the septic system is 4 feet below existing grade.

If during construction of the field itself, subsurface conditions change considerably or if the location of the proposed field changes, this office shall be notified to determine whether the conditions are adequate for the system as designed or whether a new system needs to be designed.

Weather conditions at the time of the test consisted of mostly cloudy skies, with moderate temperatures.

PROFILE PIT LOG - Profile Pit #1

JOB#: 16-0961
DATE EVALUATED: 12 Dec 2016
EQUIPMENT USED: Backhoe

0"- 6" TOPSOIL

Loam
Organic Composition

6"- 36" DECOMPOSED GRANITE

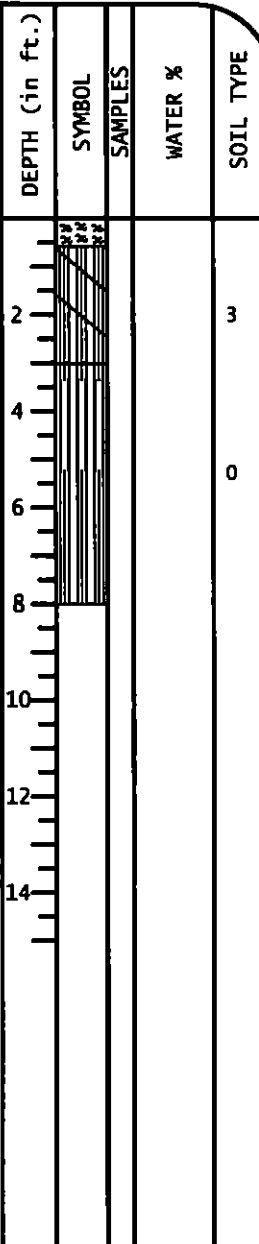
Fine-coarse Grained
Moderate Density
Low-moderate Moisture Content
Low-moderate Clay Content
Low-moderate Cohesion
Low-moderate Plasticity
Dark Reddish Brown Color
5YR 3/3

USDA Soil Type: 3
USDA Soil Texture: Sandy Clay Loam
USDA Structure Shape: Granular
USDA Structure Grade: 2
Cementation Class: Non-Cemented
Long Term Acceptance Rate (LTAR, Treatment Level 1): 0.35
Less than 50% Rock

36"- 8' DECOMPOSED GRANITE

Fine-coarse Grained
Moderate-high Density
Low Moisture Content
Low Clay Content
Low Cohesion
Low Plasticity
Reddish Brown Color
5YR 4/4

USDA Soil Type: 0
USDA Soil Texture: Loamy Sand
USDA Structure Shape: None
USDA Structure Grade: 0
Cementation Class: Non-Cemented
Long Term Acceptance Rate (LTAR, Treatment Level 1): 1.0
Soil Type 1 w/ > 35% Rock



LTAR to be Used for OWTS Sizing: 1.0GPD/SF (USDA Type 0, Treatment soil, Treatment Level 1)

Depth to Groundwater (Permanent or Seasonal): Not Encountered

Depth to Bedrock and Type: Not Encountered

Depth to Proposed Infiltrative Surface from Ground Surface: Unknown (Maximum 4 ft Below Existing Ground Surface))

Soil Treatment Area Slope and Direction: Northeast @ 22% Minimum 3' deep unlined sand filter required

Note: See El Paso County Board of Health Regulation Chapter 8: On-Site Wastewater Treatments Systems (OWTS) Regulations for Additional Information. Refer to Table 10-1 for Corresponding LTAR if Treatment Level 2, 2N, 3, or 3N will be Implemented in the Design of the OWTS. System Sizing Depends on a Number of Factors (i.e. LTAR, # of Bedrooms, Type of Soil Treatment Area (STA), Method of Transfer to the STA (Gravity, Dosed, or Pressure Dosed), and Type of Storage / Distribution Media Used in the STA)

Project: 16-0961

Sheet: 1 of 2

Date: 20 Dec 2016

Scale: 1/4" = 1'

Drawn by: tcw

Checked by: cem

Project Name and Address

Palace Homes

Site S-94 (R)
818 Crystal Park Rd.
Crystal Park Subdivision
El Paso County, Colorado

GEOQUEST, LLC.

6825 SILVER PONDS HEIGHTS
SUITE 101
COLORADO SPRINGS, CO
80908

OFFICE: (719) 481-4560
FAX: (719) 481-9204

PROFILE PIT LOG - Profile Pit #2

JOB#: 16-961
DATE EVALUATED: 12 Dec 2016
EQUIPMENT USED: Backhoe

0"- 6" TOPSOIL

Loam
Organic Composition

6"- 8' DECOMPOSED GRANITE

Fine-coarse Grained
Moderate Density
Low Moisture Content
Low Clay Content
Low Cohesion
Low Plasticity
Reddish Brown Color
5YR 4/4

USDA Soil Type: 0
USDA Soil Texture: Sand
USDA Structure Shape: None
USDA Structure Grade: 0
Cementation Class: Non-Cemented
Long Term Acceptance Rate (LTAR, Treatment Level 1): 1.0
Soil Type 1 w/ > 35% Rock

DEPTH (in ft.)	SYMBOL	SAMPLES	WATER %	SOIL TYPE
0				
2				
4				0
6				
8				
10				
12				
14				

LTAR to be Used for OWTS Sizing: 1.0GPD/SF (USDA Type 0, Treatment soil, Treatment Level 1)

Depth to Groundwater (Permanent or Seasonal): Not Encountered

Depth to Bedrock and Type: Not Encountered

Depth to Proposed Infiltrative Surface from Ground Surface: Unknown (Maximum 4 ft below Existing Ground Surface))

Soil Treatment Area Slope and Direction: Northeast @ 22% Minimum 3' deep unlined sand filter required

Note: See El Paso County Board of Health Regulation Chapter 8: On-Site Wastewater Treatments Systems (OWTS) Regulations for Additional Information. Refer to Table 10-1 for Corresponding LTAR if Treatment Level 2, 2N, 3, or 3N will be Implemented in the Design of the OWTS. System Sizing Depends on a Number of Factors (i.e. LTAR, # of Bedrooms, Type of Soil Treatment Area (STA), Method of Transfer to the STA (Gravity, Dosed, or Pressure Dosed), and Type of Storage / Distribution Media Used in the STA)

Project: 16-0961

Sheet: 2 of 2

Date: 18 Dec 2016

Scale: 1/4" = 1'

Drawn by: tcw

Checked by: cem

Project Name and Address

Palace Homes

Sit S-94 (R)
818 Crystal Park Rd.
Crystal Park Subdivision
Sch. No.
El Paso County, Colorado

GEOQUEST, LLC.

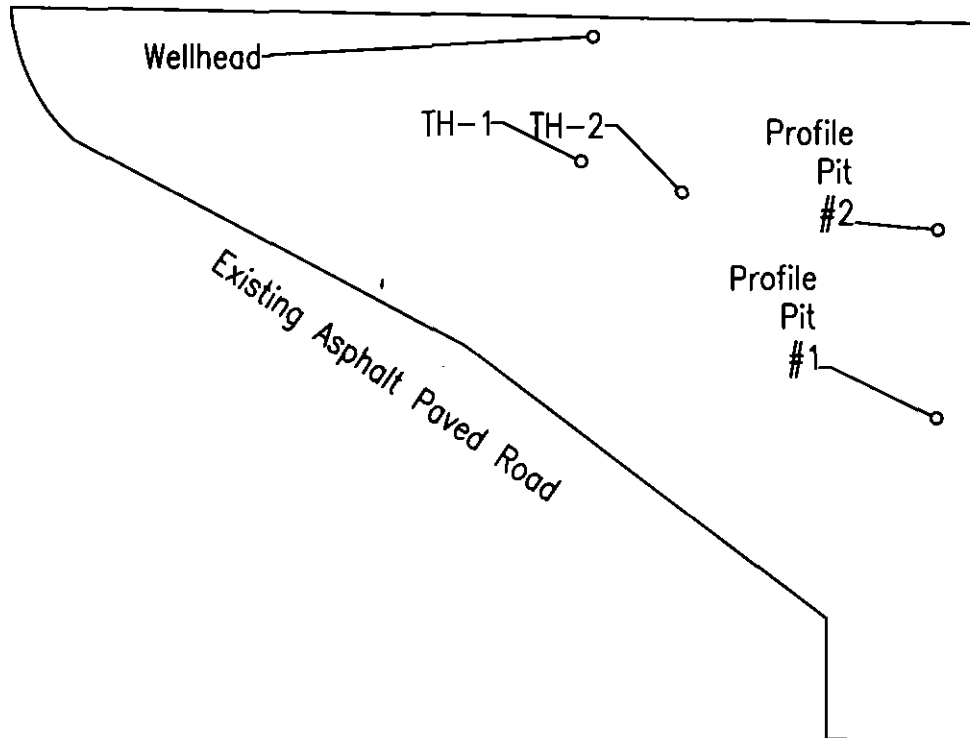
6825 SILVER PONDS HEIGHTS
SUITE 101
COLORADO SPRINGS, CO
80908

OFFICE: (719) 481-4560
FAX: (719) 481-9204

GEOQUEST LLC

SITE MAP

Site S-94 (R)
818 Crystal Park Road
Crystal Park
El Paso County,
Colorado
Job #16-0961



Location from Wellhead to Profile Pit #1:

S. 41° E. - 132'

Location from Profile Pit #1 to Profile Pit #2:

N. 1° W. - 67'

GPS coordinates:

Pit 1; N. 38° 50' 32.39" W. 104° 54' 22.07"

Pit 2; N. 38° 50' 33.00" W. 104° 54' 21.95"



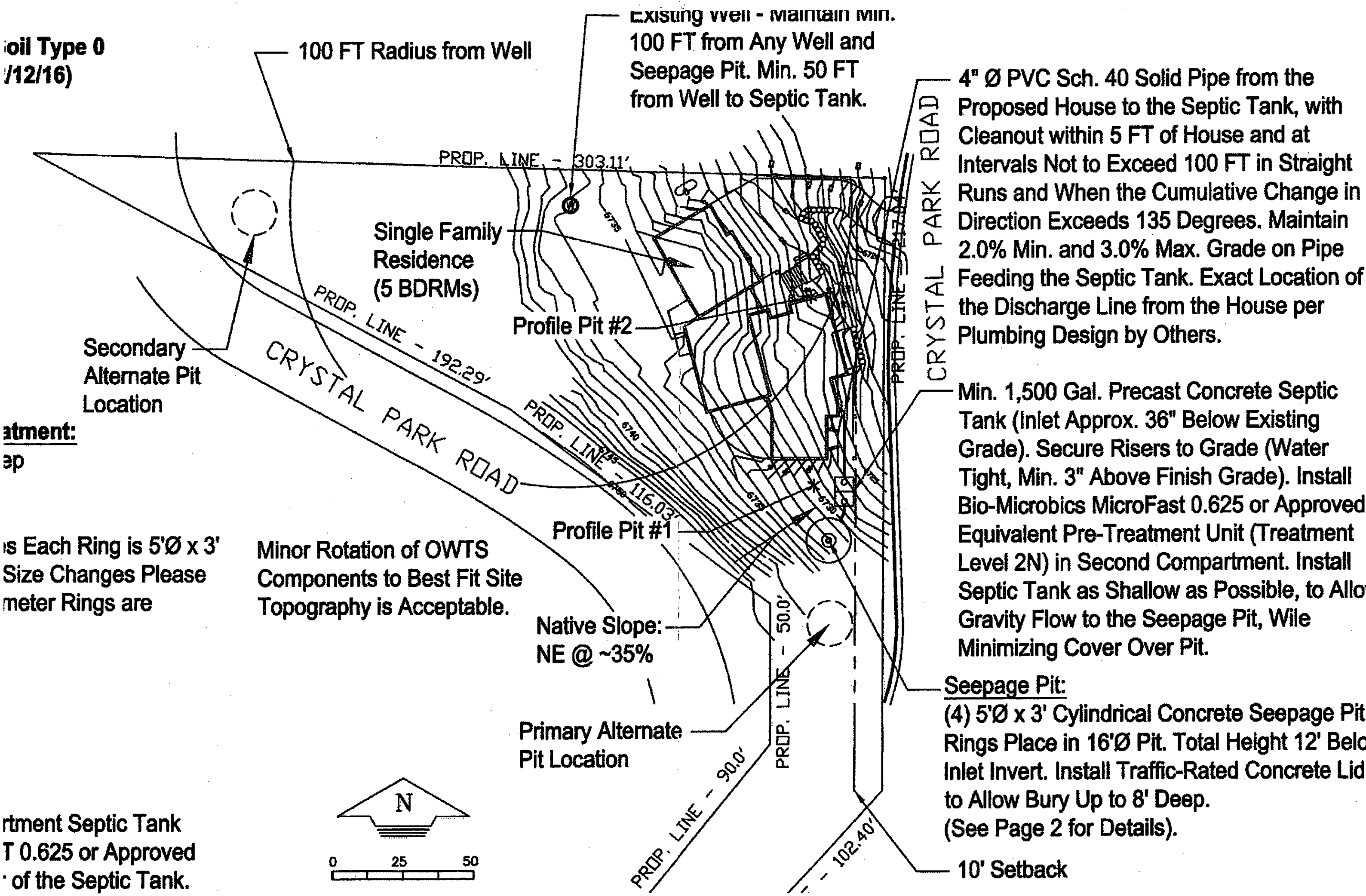
0 10 20 30 40 50
GRAPHIC SCALE IN FEET
SCALE: 1" = 50'

oil Type 0
/12/16)

atment:
ep

is Each Ring is 5'Ø x 3'
Size Changes Please
meter Rings are

rtment Septic Tank
T 0.625 or Approved
of the Septic Tank.



4" Ø PVC Sch. 40 Solid Pipe from the Proposed House to the Septic Tank, with Cleanout within 5 FT of House and at Intervals Not to Exceed 100 FT in Straight Runs and When the Cumulative Change in Direction Exceeds 135 Degrees. Maintain 2.0% Min. and 3.0% Max. Grade on Pipe Feeding the Septic Tank. Exact Location of the Discharge Line from the House per Plumbing Design by Others.

Min. 1,500 Gal. Precast Concrete Septic Tank (Inlet Approx. 36" Below Existing Grade). Secure Risers to Grade (Water Tight, Min. 3" Above Finish Grade). Install Bio-Microbics MicroFast 0.625 or Approved Equivalent Pre-Treatment Unit (Treatment Level 2N) in Second Compartment. Install Septic Tank as Shallow as Possible, to Allow Gravity Flow to the Seepage Pit, While Minimizing Cover Over Pit.

Seepage Pit:
(4) 5'Ø x 3' Cylindrical Concrete Seepage Pit Rings Place in 16'Ø Pit. Total Height 12' Below Inlet Invert. Install Traffic-Rated Concrete Lid to Allow Bury Up to 8' Deep. (See Page 2 for Details).

10' Setback

Calculations (Seepage Pit):

Single Family Residence
5 Bedrooms

LTAR = 1.0 GPD/SF USDA Soil Type 0
per Profile Pit Evaluation 12/12/16)

$$Q = (3 \text{ BDRM})(150 \text{ GPD}) \\ + (2 \text{ BDRM})(75 \text{ GPD})$$

$$Q = 600.0 \text{ GPD}$$

$$A = \frac{Q}{\text{LTAR}} = \frac{600.0 \text{ GPD}}{1.0 \text{ GPD/SF}}$$

A = 600.0 SF (Required)
Treatment Level 2N

For Seepage Pits w/ Pre-Treatment:

Use 1 Pits: Min. 16'Ø x 12' Deep

4 Seepage Pit Rings w/

6" Traffic-Rated Concrete Lid.

(Special Note: Design Assumes Each Ring is 5'Ø x 3' Tall Precast Concrete. If Ring Size Changes Please Contact Engineer). Larger Diameter Rings are Acceptable.

Area:

$$A = \pi(r^2) + 2\pi rh$$

$$A = \pi(2.5^2) + 2\pi(8)(12)$$

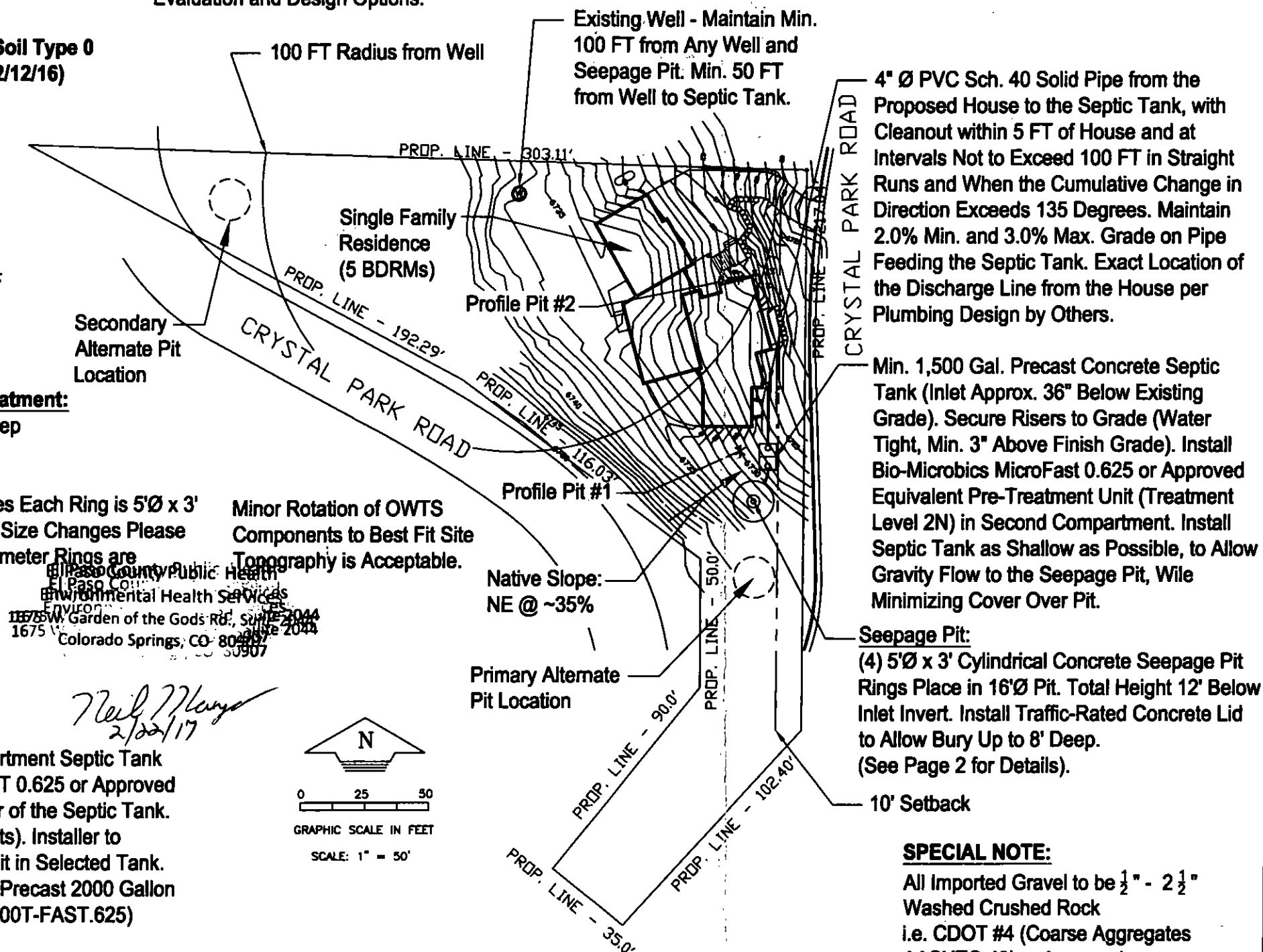
$$A = 622.8 \text{ SF Actual}$$

Min. 1,500 Gallon Two-Compartment Septic Tank
Install Bio-Microbics MicroFAST 0.625 or Approved Equivalent in Second Chamber of the Septic Tank.
(See Bio-Microbics Spec Sheets). Installer to Verify Use of Bio-Microbics Unit in Selected Tank.
We Recommend Using Valley Precast 2000 Gallon Tank with MiroFAST 0.625 (2000T-FAST.625)

Seepage Pits Shall be Installed a Min. of 20' from the House, 10' from the Property Line.

Special Note: Maintain a Minimum Horizontal Distance of 100 ft between Any Well and Seepage Pits.

Special Note: See Attached
Design Narrative for Soil
Evaluation and Design Options.



*Indicates Geoquest, LLC. Profile Pit Test Locations
Location from Wellhead to Profile Pit #1: S. 41° E. - 132'
Location from Profile Pit #1 to Profile Pit #2: N. 1° W. - 67'
GPS Coordinates Profile Pit #1: N. 38° 50' 32.39", W. 104° 54' 22.07"
GPS Coordinates Profile Pit #2: N. 38° 50' 33.00", W. 104° 54' 21.95"

Geoquest, LLC. has Provided this Design in Accordance with the Standards of Practice Common to the Area. However, as with All Underground Absorption Fields, Guarantee from Failure is Impossible. Even with Proper Installation, as Outlined for this Proposed Construction, There Can Remain Many Uncertainties, and Difficulties Can Still Arise in the Operation of the System in the Future. Proper Design, Construction, and Maintenance can Assist in Minimizing Uncertainties, but Cannot Entirely Eliminate Them. Homeowners Should be Advised of Maintenance and Special Considerations for Septic Systems. Refer to El Paso County Public Health Brochure: "Maintaining Your Septic System" for Additional Information. Due to the Possibility of Unknown Water Usage Factors, Geoquest, LLC. Provides No Warranty of this Design or Installation Against Failure or Damage of Any Type.

General Notes:

All Work per El Paso County Board of Health
Regulations Chapter 8: On-Site Wastewater Treatment
Systems (OWTS) Criteria.

All Setbacks Shall Conform to El Paso County
Regulations (See Table 7-1 in the Regulations for
Additional Information). Contractor/Homeowner Must
Verify All Setbacks and Obtain Utility Clearances Prior
to Construction.

Contractor/Homeowner is Responsible for Permit.
Contractor/Homeowner Must Obtain Approval of
Engineered OWTS from the El Paso County Health
Department.

All Bends Limited to 45 Degree Ells or Long Sweep
Quarter Bends. Areas Under Driveways Shall Be
Protected as Per El Paso County Health Department
Regulations.

Building Sewer Clean-Outs Shall Be Installed within
5 FT of the Structure and at Intervals Not to Exceed
100 FT in Straight Runs and When the Cumulative
Change in Direction Exceeds 135 Degrees.

Grade Surrounding Area to Drain Away from the Soil
Treatment Area (STA).

Paving, Planting of Trees/Shrubs, and Vehicular or
Hoofed Animal Traffic of Any Kind Over the Leach
Field may Cause Premature Failure and is Prohibited.

Refer to Sheet 2 for Additional Details and Information.

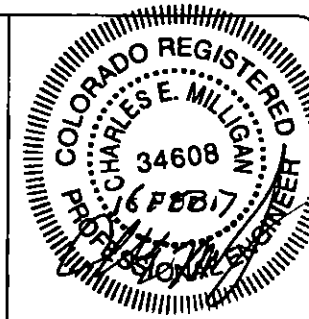
SPECIAL NOTE:

All Imported Gravel to be $\frac{1}{2}$ " - $2\frac{1}{2}$ "
Washed Crushed Rock
i.e. CDOT #4 (Coarse Aggregates
AASHTO 43) or Approved
Equivalent. Gradation Curve to be
Provided for Engineer to Approve.

GEOQUEST, LLC.

6825 SILVER PONDS HEIGHTS
SUITE 101
COLORADO SPRINGS, CO
80908

OFFICE: (719) 481-4560
FAX: (719) 481-9204



Project: 16-0961

Sheet: 1 of 2

Date: 15 Feb 2017

Revised:

Drawn by: djp

Checked by: cem

Project Name and Address

Palace Homes

818 Crystal Park Road

Site S-94 (R)

Crystal Park Subdivision,

No Schedule Number

El Paso County, Colorado



**El Paso County Public Health
Environmental Health Services
1675 W. Garden of the Gods Rd., Suite 2044
Colorado Springs, CO 80907**

Crystal Park Subdivision,
No Schedule Number
El Paso County, Colorado

