ENVIRONMENTAL
EMERGENCY
MGT. SYSTEMS INC.

708-922-0833
16041 Springfield Ave.
Homewood IL 60430

Edward Boomsma, President

March 5, 2021

Mr. Mac Marshall(Client)
FBG Corp.
1015 S. Rt. 83
Elmhurst, IL 60126

Dear Mr. Marshall,

Thank you for allowing Environmental Emergency Management Systems, Inc. (EEMS) to perform the preliminary geotechnical soil investigation on the property commonly known as 475 Army trail Rd. in Bloomingdale, Illinois.

EEMS Personnel performed (6) six borings to a depth of 15' below grade surface (BGS) on the above parcel on March 4, 2021. Borings were placed in the West, Center and East of the proposed structure as outlined by the client(See Diagram). This investigation was completed for the purpose of soil strength testing and classification.

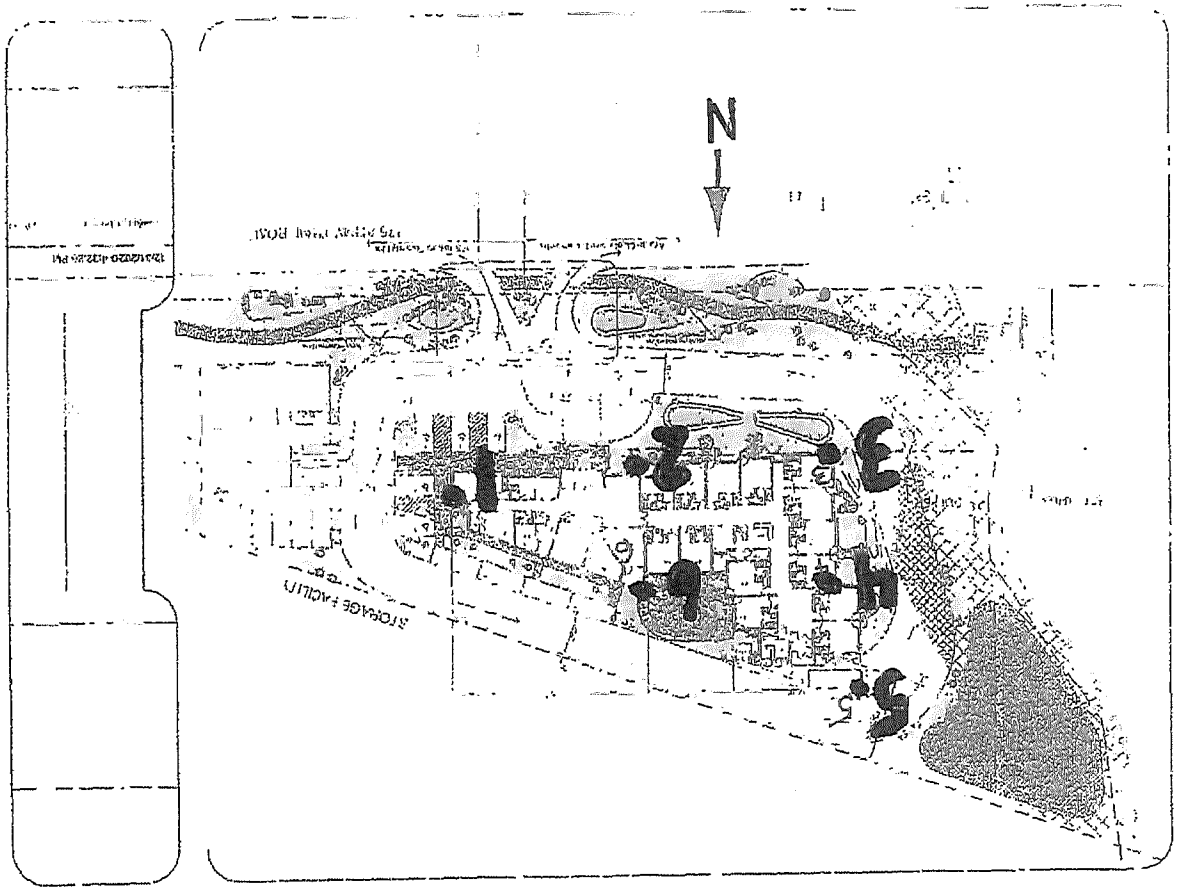
The borings were relatively similar in strata and unconfined soil strength as measured by a hand held spring loaded pocket penetrometer which indicates the compressive strength of soils in Tons Per Square Foot(TSF). All borings contained approximately 2 feet of black organic topsoil at the surface followed by7 to 8' of brown silty clay capable of supporting 2.0 to 2.5 TSF with the exception of B-1. Gray silty clay was observed from 9.5' to 15.0' below existing surface grade with unconfined soil strength of 2.5 TSF. Soils in the Eastern boring contained moist sandy clay from 2 to 5' below surface grade and moist brown silty clay with fine stone from 5' to 7' with low readings of only 1.0 TSF in B-1 and appeared to be fill material. Native dark brown silty clay was then observed from 7' to 9' below grade and is capable of supporting footing loads of 2.0 TSF followed by stiff gray silty clay to 15' and capable of supporting 2.5 TSF. Water was encountered in all borings during drilling and was determined to be "perched" water from the surface due to heavy snow melt in the area. Water was measured at 1' BGS upon completion of the borings in all locations.

Based upon the above information, it is the opinion of EEMS that all soils observed between 4.0' to 10' from surface grade, with the exception of B-1, are capable of supporting conventional footing loads consistent with normal architectural standards of 3,000 PSF. Footings in the (East) area of B-1 will require an "over dig" to a depth not less than 7' BGS.

This information is accurate as per the date the lot was drilled. The nature and extent of variations in the soil may become apparent in the construction process. If variations appear, it will be necessary to reevaluate the recommendations of this report.
If you have any questions, please feel free to call me at the above number or 312-719-4204.

Sincerely,

Edward Boomsma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# Boring Logs

# Soil Boring Log

Mac Marshall/FBG Corporation

TEST TERRESTRIAL, INC. Boring No.: B-1

Project: proposed funeral home 3/4/2021

Address: 475 W Army Trail Road, Bloomingdale, IL 60108

| Depth (ft.) | Soil/ Rock Description | Blow Count | Moisture Content | Unconfined Compressive Strength |
|---|---|---|---|---|
| 0 0 | Topsoil 12" | | | |
| 1 0 | | | | |
| 2 0 | Medium stiff brown silty clay little silt trace gravel | 8 | | 0.80 |
| 3 0 | | | | |
| 4 0 | | | | |
| 5 0 | | 8 | | 0 80 |
| 6 0 | Stiff brown silty clay | 10 | | 1.00 |
| 7 0 | | | | |
| 8 0 | Very stiff brown silty clay | 14 | | 2.00 |
| 9 0 | | | | |
| 10 0 | Very stiff gray silty clay | 15 | | 2.00 |
| 11 0 | | | | |
| 12 0 | | | | |
| 13 0 | | | | |
| 14 0 | | | | |
| 15 0 | | 17 | | 2.50 |
| | End of Boring @15 feet | | | |
| | End of Boring at 15 feet | | | |

Water Level (Ft.)

During Drilling 4 0

Immediately After Drilling. 3 0

# Soil Boring Log

Mac Marshall/FBG Corporation

TEST TERRESTRIAL, INC. Boring No.: B-2

Project: proposed funeral home 3/4/2021

Address: 475 W. Army Trail Road, Bloomingdale, IL 60108

| Depth (ft.) | Soil/ Rock Description | Blow Count | Moisture Content | Unconfined Compressive Strength |
|---|---|---|---|---|
| 0.0 | Topsoil 24" | | | |
| 1.0 | | | | |
| 2.0 | | | | |
| 3.0 | Very stiff brown silty clay, trace gravel | 14 | | 2.00 |
| 4.0 | | | | |
| 5.0 | | 16 | | 2.50 |
| 6.0 | | | | |
| 7.0 | | 17 | | 2.50 |
| 8.0 | | | | |
| 9.0 | | | | |
| 10.0 | Very stiff gray silty clay | 17 | | 2.50 |
| 11.0 | | | | |
| 12.0 | | | | |
| 13.0 | | | | |
| 14.0 | | | | |
| 15.0 | | 18 | | 2.50 |
| | End of Boring @15 feet | | | |

End of Boring at 15 feet

Water Level (Ft.)

During Drilling 5.0

Immediately After Drilling. 4.0

# Soil Boring Log

Mac Marshall/FBG Corporation

TEST TERRESTRIAL, INC. Boring No.: B-3

Project: proposed funeral home 3/4/2021

Address: 475 W Army Trail Road Bloomingdale IL 60108

| Depth (ft.) | Soil/ Rock Description | Blow Count | Moisture Content | Unconfined Compressive Strength |
|---|---|---|---|---|
| 0.0 | Topsoil 24" | | | |
| 1.0 | | | | |
| 2.0 | | | | |
| 3.0 | Very stiff brown silty clay trace gravel | 14 | | 2.00 |
| 4.0 | | | | |
| 5.0 | | 15 | | 2.25 |
| 6.0 | | | | |
| 7.0 | | 17 | | 2.50 |
| 8.0 | | | | |
| 9.0 | | | | |
| 10.0 | Very stiff gray silty clay | 18 | | 2.50 |
| 11.0 | | | | |
| 12.0 | | | | |
| 13.0 | | | | |
| 14.0 | | | | |
| 15.0 | | 18 | | 2.50 |
| | End of Boring @15 feet | | | |
| | End of Boring at 15 feet | | | |

Water Level (Ft.)

During Drilling 3.0

Immediately After Drilling 1.0

# Soil Boring Log

Mac Marshall/FBG Corporation

TEST TERRESTRIAL, INC. Boring No.: B-4

Project: proposed funeral home 3/4/2021

Address: 475 W Army Trail Road Bloomingdale IL 60108

| Depth (ft.) | Soil/ Rock Description | Blow Count | Moisture Content | Unconfined Compressive Strength |
|---|---|---|---|---|
| 0.0 | Topsoil 24" | | | |
| 1.0 | | | | |
| 2.0 | | | | |
| 3.0 | Very stiff brown silty clay, trace gravel | 15 | | 2.25 |
| 4.0 | | | | |
| 5.0 | | 16 | | 2.25 |
| 6.0 | | | | |
| 7.0 | | 17 | | 2.50 |
| 8.0 | | | | |
| 9.0 | | | | |
| 10.0 | Very stiff gray silty clay | 18 | | 2.50 |
| 11.0 | | | | |
| 12.0 | | | | |
| 13.0 | | | | |
| 14.0 | | | | |
| 15.0 | | 19 | | 2.50 |
| | End of Boring @15 feet | | | |

End of Boring at 15 feet

| Water Level (Ft.) | |
|---|---|
| During Drilling | 3.0 |
| Immediately After Drilling | 2.0 |

# Soil Boring Log

Mac Marshall/FBG Corporation

TEST TERRESTRIAL, INC. Boring No.: B-5

Project: proposed funeral home 3/4/2021

Address: 475 W Army Trail Road, Bloomingdale, IL 60108

| Depth (ft) | Soil/ Rock Description | Blow Count | Moisture Content | Unconfined Compressive Strength |
|---|---|---|---|---|
| 0 0 | Topsoil 24' | | | |
| 1 0 | | | | |
| 2 0 | | | | |
| 3 0 | Very stiff brown silty clay trace gravel | 16 | | 2.50 |
| 4 0 | | | | |
| 5 0 | | 16 | | 2.50 |
| 6 0 | | | | |
| 7 0 | | 17 | | 2.50 |
| 8 0 | | | | |
| 9 0 | | | | |
| 10 0 | Very stiff gray silty clay | 18 | | 2.50 |
| 11 0 | | | | |
| 12 0 | | | | |
| 13 0 | | | | |
| 14 0 | | | | |
| 15 0 | | 20 | | 2.75 |
| | End of Boring @15 feet | | | |

End of Boring at 15 feet

Water Level (Ft.)

During Drilling 5 0

Immediately After Drilling 3 0

# Soil Boring Log

Mac Marshall/FBG Corporation

TEST TERRESTRIAL, INC. Boring No.: B-6

Project: proposed funeral home 3/4/2021

Address: 475 W Army Trail Road, Bloomingdale, IL 60108

| Depth (ft.) | Soil/ Rock Description | Blow Count | Moisture Content | Unconfined Compressive Strength |
|---|---|---|---|---|
| 0.0 | Topsoil 24" | | | |
| 1.0 | | | | |
| 2.0 | | | | |
| 3.0 | Very stiff brown silty clay, trace gravel | 15 | | 2.00 |
| 4.0 | | | | |
| 5.0 | | 16 | | 2.50 |
| 6.0 | | | | |
| 7.0 | | 17 | | 2.50 |
| 8.0 | | | | |
| 9.0 | | | | |
| 10.0 | Very stiff gray silty clay | 17 | | 2.50 |
| 11.0 | | | | |
| 12.0 | | | | |
| 13.0 | | | | |
| 14.0 | | | | |
| 15.0 | | 17 | | 2.50 |
| | End of Boring @15 feet | | | |

End of Boring at 15 feet

Water Level (Ft.)

During Drilling 5.0

Immediately After Drilling 3.0

**Frank Giudice**

| | |
|---|---|
| **From:** | Mac Marshall |
| **Sent:** | Wednesday, March 10, 2021 1:40 PM |
| **To:** | Frank Giudice |
| **Subject:** | Fwd: 475 Army Trail Rd Report and Invoice |
| **Attachments:** | FBG Bloomingdale Invoice 11309.pdf; FBG Bloomingdale Geo Rpt.pdf |

Soil Boeing's for Hospice center are attached.

Mac Marshall

Begin forwarded message:

> **From:** EDWARD BOOMSMA <eemsinc@comcast.net>
> **Date:** March 10, 2021 at 1:18:59 PM CST
> **To:** Mac Marshall <mac@fbgcorporation.com>
> **Subject: 475 Army Trail Rd Report and Invoice**
>
> Hey Mac,
>
> Please see attached Report and Invoice for the requested Geotech analysis for your Bloomingdale project.
> Make sure you have a competent soils Engineer on site while excavating the Eastern portion of lot to confirm that the underlying soils are capable of supporting 3,000 PSF because weak moist soils are present in that area and will require an undercut and removal.
> I kept the invoice on the low side for you at $2,200.00.
>
> Thanks,
>
> Ed Boomsma
> 312-719-4204