Detterman, Mark, Env. Health

From: Detterman, Mark, Env. Health
Sent: Tuesday, October 18, 2016 1:35 PM
To: 'Hoey, Kiersten'
Subject: RE: Case No RO0284, Former Chevron 90121; 3026 Lakeshore Ave, Oakland

Hi Kiersten,
I've been in a series of meetings that I needed to prep for as well, sorry for my delay. Use of the 1-inch wells would be fine. It induces some risk due to an inability to develop them fully due to their smaller size, but in this case it may be sufficient.

Mark Detterman
Senior Hazardous Materials Specialist, PG, CEG
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510.567.6876
Fax: 510.337.9335
Email: mark.detterman@acgov.org

PDF copies of case files can be downloaded at:

http://www.acgov.org/aceh/lop/ust.htm

From: Hoey, Kiersten [mailto:Kiersten.Hoey@ghd.com]
Sent: Tuesday, October 18, 2016 1:21 PM
To: Detterman, Mark, Env. Health
Subject: FW: Case No RO0284, Former Chevron 90121; 3026 Lakeshore Ave, Oakland
Importance: High

I'm emailing regarding the wells proposed in the sidewalks of Lakeshore Avenue (MW-10, MW-11, and MW-12) in Oakland. Based on the electrical and utility/stormdrain corridor discovered beneath the northern sidewalk, I'm requesting to install the wells as 1-inch diameter wells using a direct push rig. The depth of 20 fbg and screen interval of 10-20 fbg remains the same as proposed in the workplan. Based on the utility locations, it will be a lower risk to the crew safety and of damaging a utility if a direct push rig is used. This alternative has been utilized in the past based on the same constraints. I spoke to the City of Oakland about moving the wells to the park, but based on the nearness of the playground, the process would take time and go through several departments, and is not guaranteed to be approved. I've attached the geophysical report for your reference. The wells installations are currently scheduled to start on Monday.

Thank you,
Kiersten

Kiersten Hoey

GHD
T: +1 510 420 3347
5900 Hollis Street, Suite A Emeryville, California 94608 United States

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From: Hoey, Kiersten
Sent: Monday, October 17, 2016 1:00 PM
To: 'mark.detterman@acgov.org'

Subject: Case No RO0284, Former Chevron 90121; 3026 Lakeshore Ave, Oakland
Importance: High

Hello,

I'm emailing regarding the wells proposed in the sidewalks of Lakeshore Avenue (MW-10, MW-11, and MW-12) in Oakland. Based on the electrical and utility/stormdrain corridor discovered beneath the northern sidewalk, I'd like to request to install the wells as 1-inch diameter wells using a direct push rig, instead of 2-inch wells using a hollow stem auger rig. Based on the utility locations, it will be a lower risk to the crew safety and of damaging a utility if a direct push rig is used. This alternative has been utilized in the past based on the same constraints. I spoke to the City of Oakland about moving the wells to the park, but based on the nearness of the playground, the process would take time and go through several departments, and is not guaranteed to be approved. I've attached the geophysical report for your reference. The wells installations are currently scheduled to start on Monday.

Thank you,
Kiersten

Kiersten Hoey

GHD
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NORCAL Geophysical Consultants, Inc.
321A Blodgett Street
Cotati, CA 94931
707-796-7170

DAILY FIELD REPORT/LIMITATIONS

Date: 9/21/2016 **Personnel:** WEB/JJB **NORCAL Job #:**

Client/Location: FORMER CHEVRON STATION 9012, 3026 LAKESHORE AVE, OAKLAND, CA

Equipment: EM-LL/GPR

Description: CLEAR 8 BORING LOCATIONS

TIME	NOTES
0530-0600	MOB EQUIPMENT
0600-0735	TRAVEL TO SITE IN OAKLAND / MET CHARLEY MCLEAN / GHD
0735-1145	FIELD INVESTIGATION (INCLUDED 1/2 HR SAFETY ORIENTATION)
1215-1530	" " (INCLUDED ~1 HR STANDBY WAITING FOR CARS TO BE MOVED)
	TOTAL FIELD TIME 7.5 HRS
	CLEARED 8 PRIMARY PLUS TWO ALTERNATE LOCATIONS

NOTE: Because of the inherent limitations of the geophysical instrumentation used, NORCAL cannot assume liability in the event that utilities or other subsurface features are not detected.

FIELD DAY SUMMARY

W. Black — **Signature**

BILL BLACK — **Print**

NORCAL Representative

Charley McLean — **Signature**

Charley McLean — **Print**

Client Representative

PERSONNEL: WEB/DJB

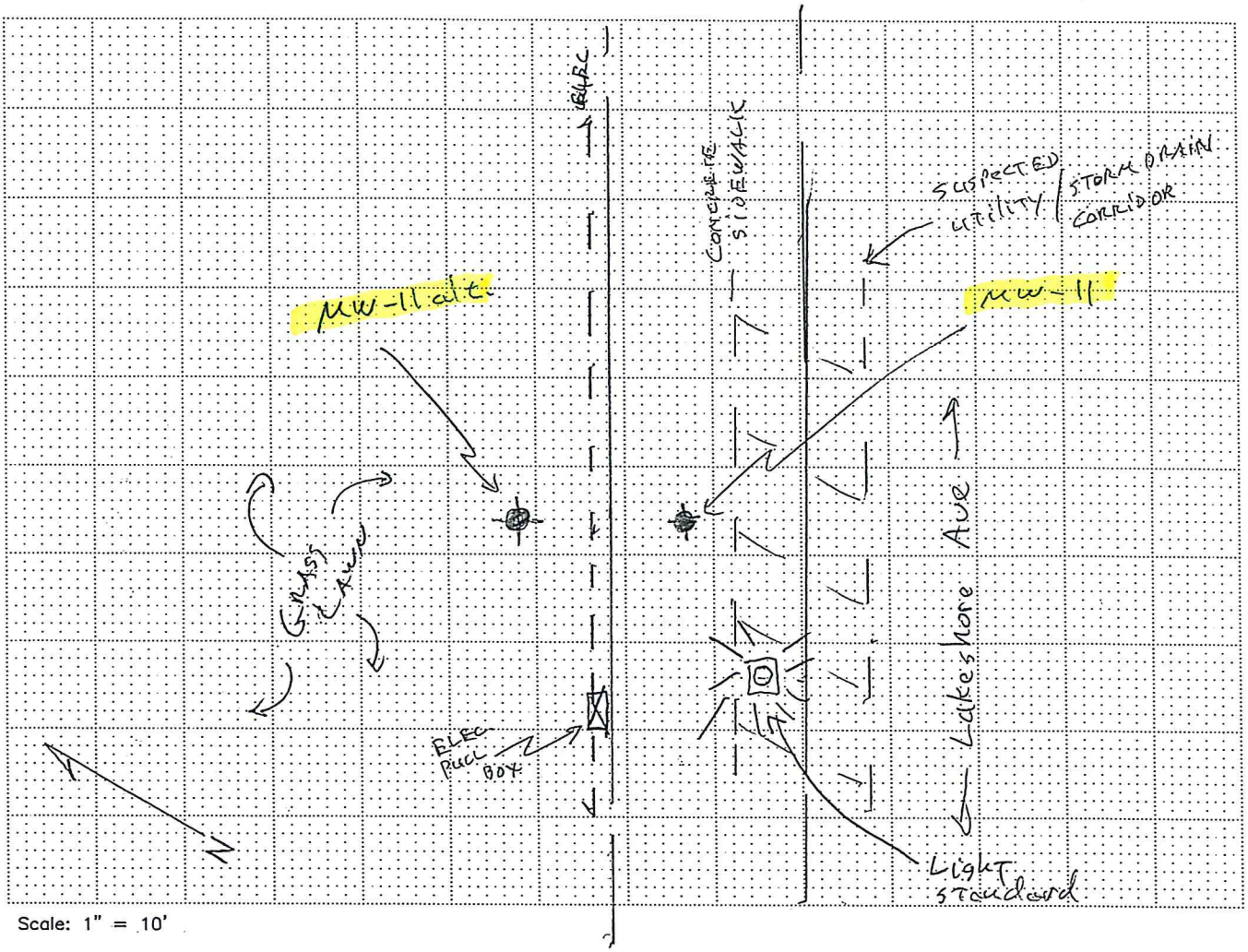
JOB: NS167030 | DATE: 9/24/16

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: GHD

LOCATION: Former Channel Star 90121
3026 Lakeshore Ave

BORING: MW-11 & MW-11alt.



Scale: 1" = 10'

EXPLANATION

- Original Boring Location
- Final Boring Location
- Existing Well Location
- GPR Traverse
- OR — Localized GPR Anomaly
- Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- ✓ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- ✓ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
_ RD 4000	✓ EMI (Induction)	✓ Dry
✓ M Scope	_ Ambient	_ other
_ other	_ GPR	

REMARKS

alt = ALTERNATE

PERSONNEL: WEB / DJB

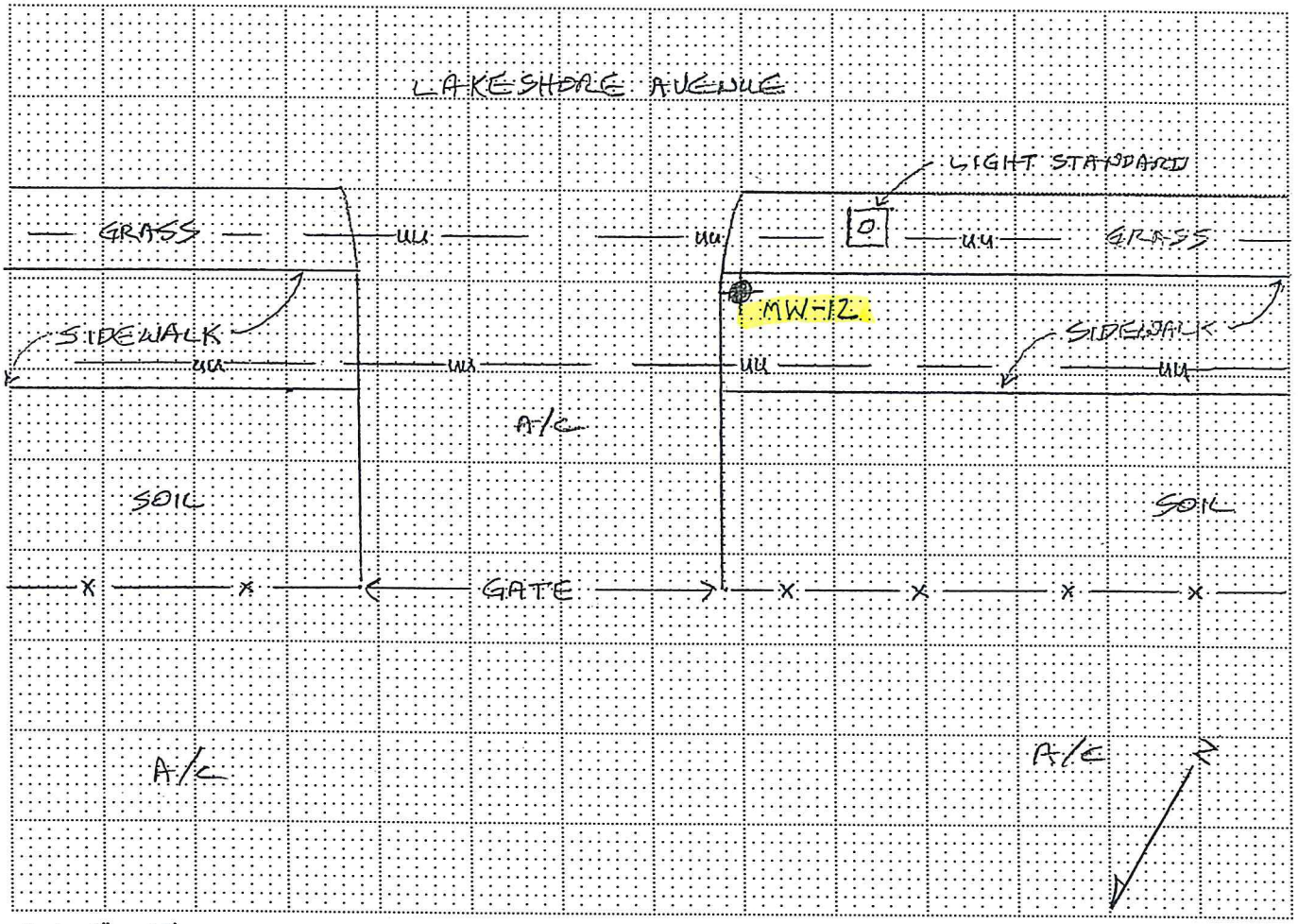
JOB: NS167030 | DATE: 9/21/16

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: GHD

LOCATION: FORMER CHEVRON STATION 90121
3026 LAKESHORE AVE. OAKLAND

BORING: MW-12



Scale: 1" = 10'

EXPLANATION

- Original Boring Location
- Final Boring Location
- Existing Well Location
- GPR Traverse
- OR Localized GPR Anomaly
- Utility Alignment
- CHAIN LINK FENCE

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- ✓ UU (Undifferentiated Utility)

Surface

- ✓ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- ✓ Soil
- _ Gravel
- ✓ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 4000	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

UU LINES ARE PROBABLY ELECTRIC

PERSONNEL: WEB/DJB

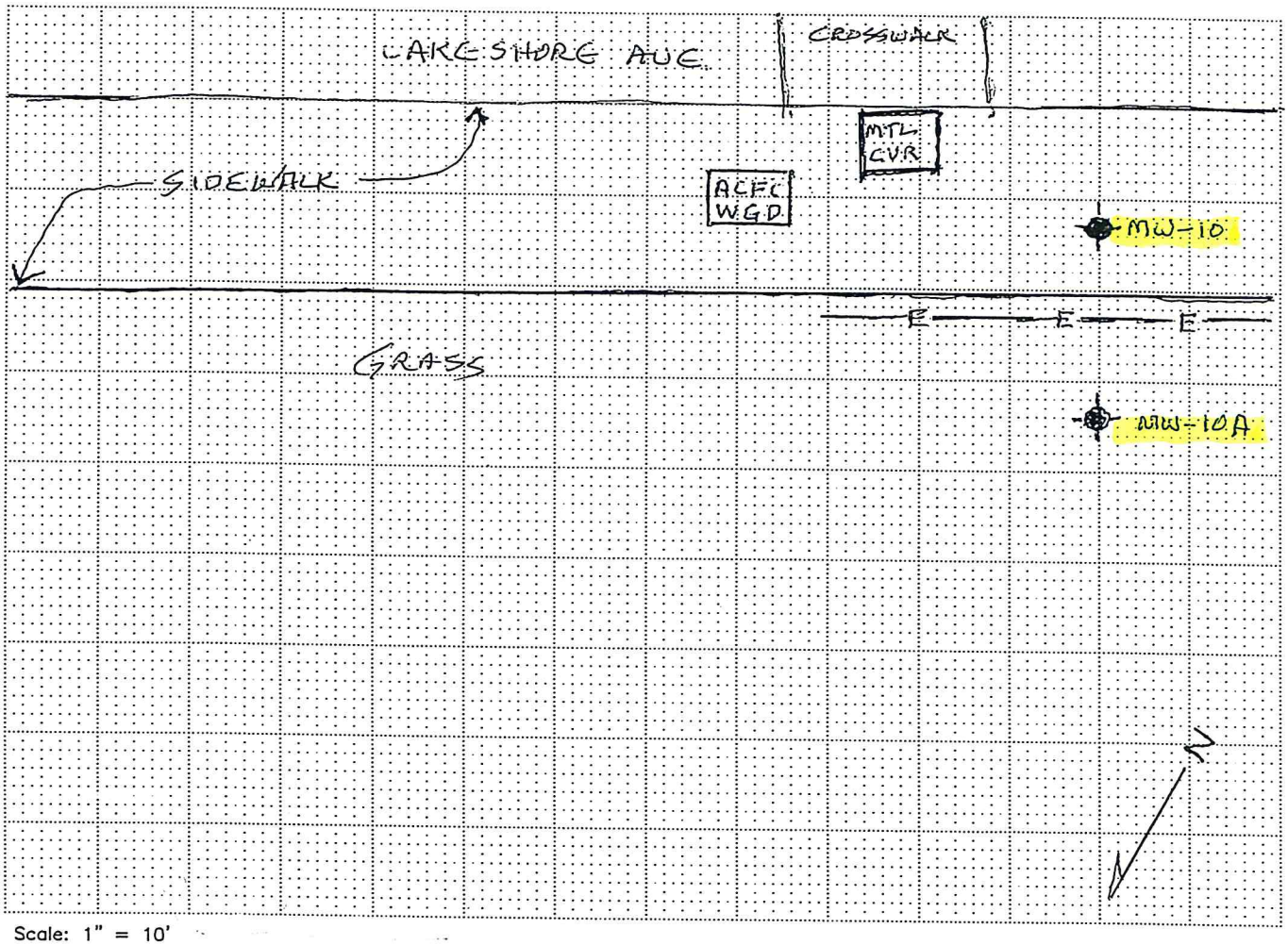
JOB: NS 167030 | DATE: 9/21/16

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: GHD

LOCATION: OAKLAND/FRMR CHEVRON STA 90121
3026 LAKESHORE AVE, OAKLAND

BORING: MW-10/MW-10A



Scale: 1" = 10'

EXPLANATION

- Original Boring Location
- Final Boring Location
- Existing Well Location
- GPR Traverse
- OR — Localized GPR Anomaly
- Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- ✓ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- ✓ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- ✓ C (Concrete)
- _ Soil
- _ Gravel
- ✓ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 4000
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

A = ALTERNATE

PERSONNEL: WEB/DTS

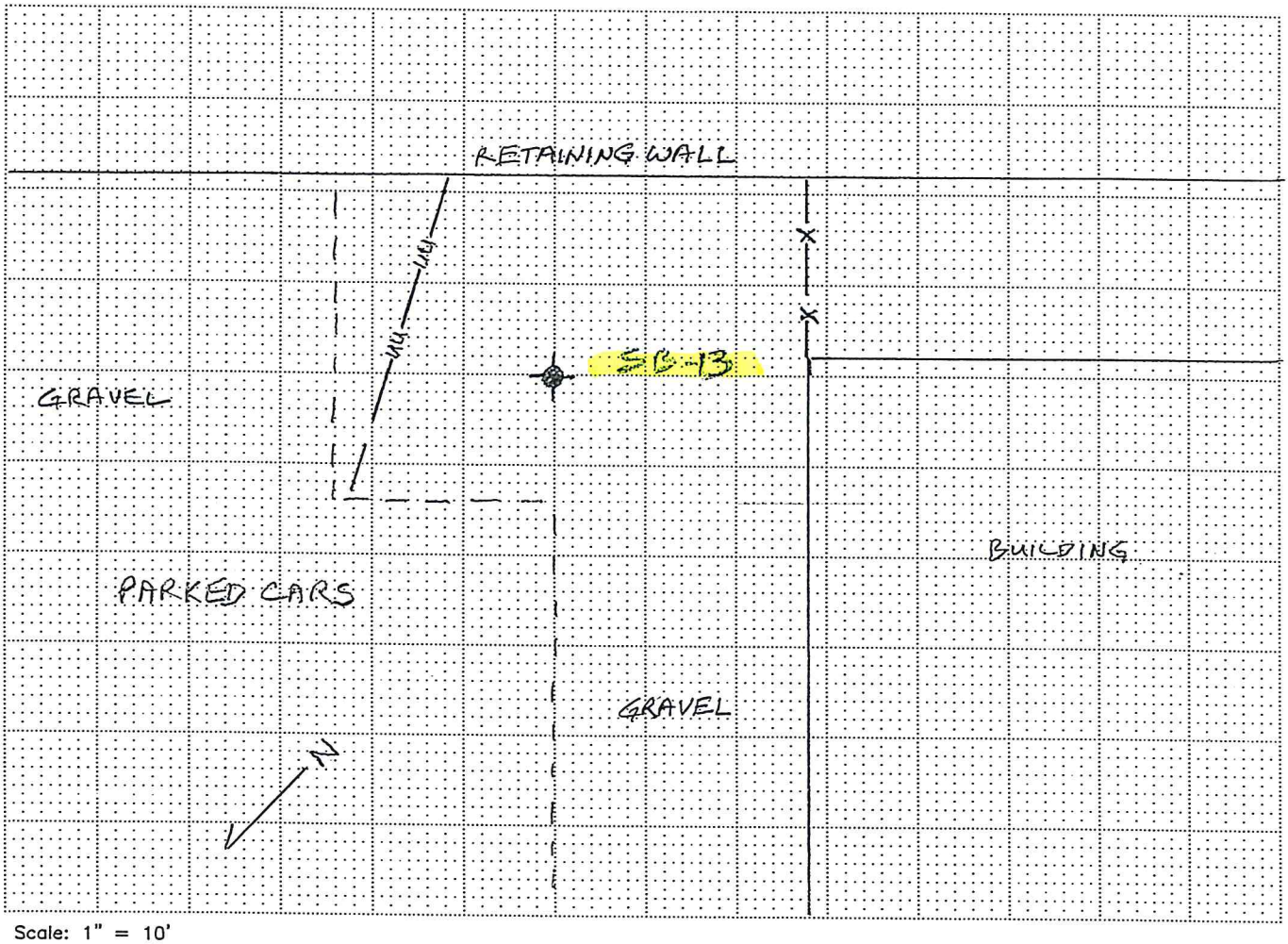
JOB: NS167030 | DATE: 9/21/16

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: GHD

LOCATION: FORMER CHEVRON STATION 9012.1
3026 LAKESHORE AVE, OAKLAND

BORING: SB-13



Scale: 1" = 10'

EXPLANATION

- Original Boring Location
- Final Boring Location
- Existing Well Location
- GPR Traverse
- OR — Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- ✓ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- ✓ Soil
- ✓ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 4000	_ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

PERSONNEL: WEB / DJB

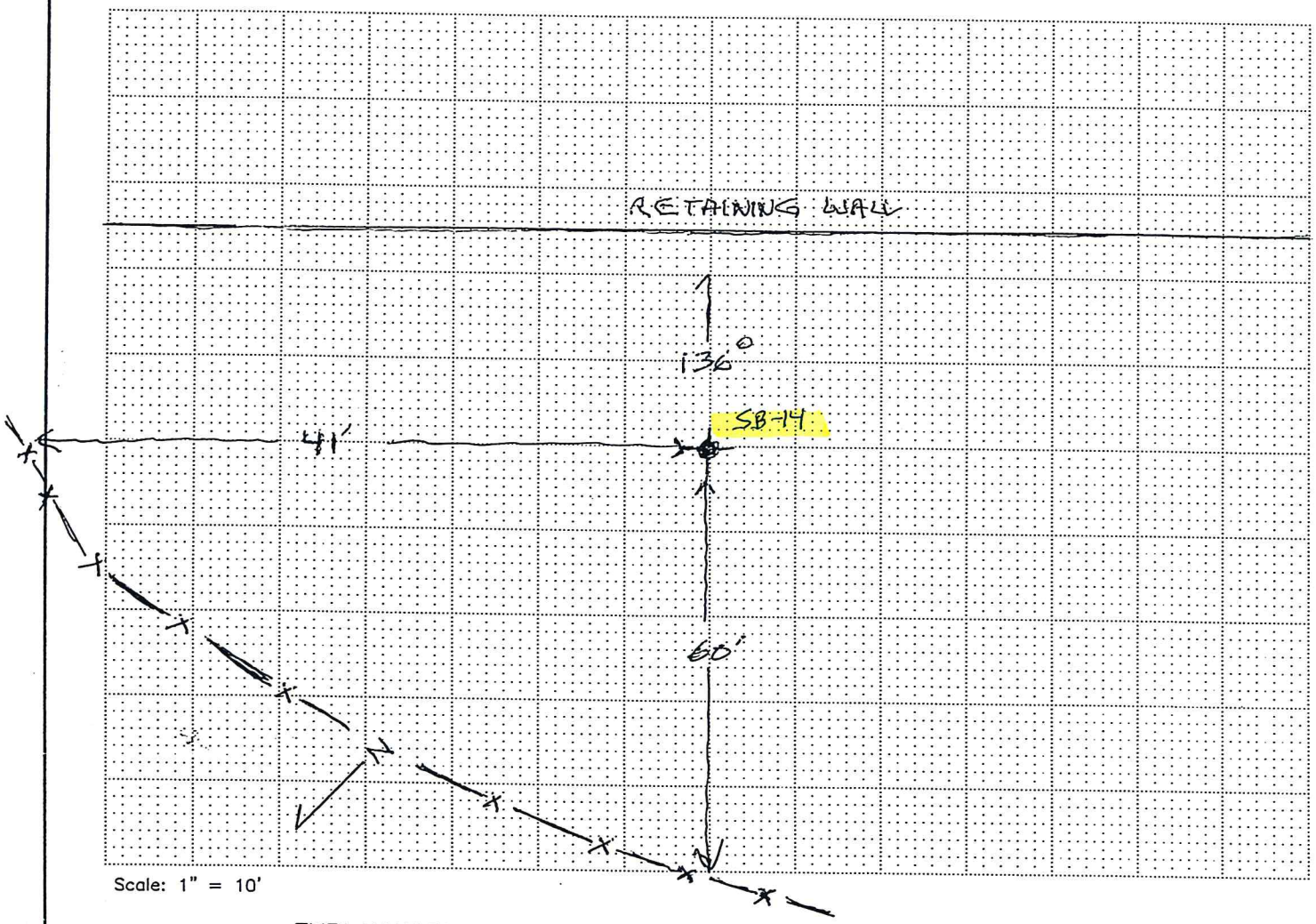
JOB: NS167030 | DATE: 9/21/16

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: GHD

LOCATION: OAKLAND (FORMER CHEVRON STATION 90121)
3026 LAKESHORE AVE

BORING: SB-14



Scale: 1" = 10'

EXPLANATION

- Original Boring Location
- Final Boring Location
- Existing Well Location
- GPR Traverse
- OR — Localized GPR Anomaly
- Utility Alignment

Utilities — FENCE

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- ✓ Soil
- ✓ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ~~✓ RD 4000~~
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- _ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ~~✓ Dry~~
- _ other

REMARKS

NO UNDERGROUND OBJECTS DETECTED

PERSONNEL: WEB / DJB

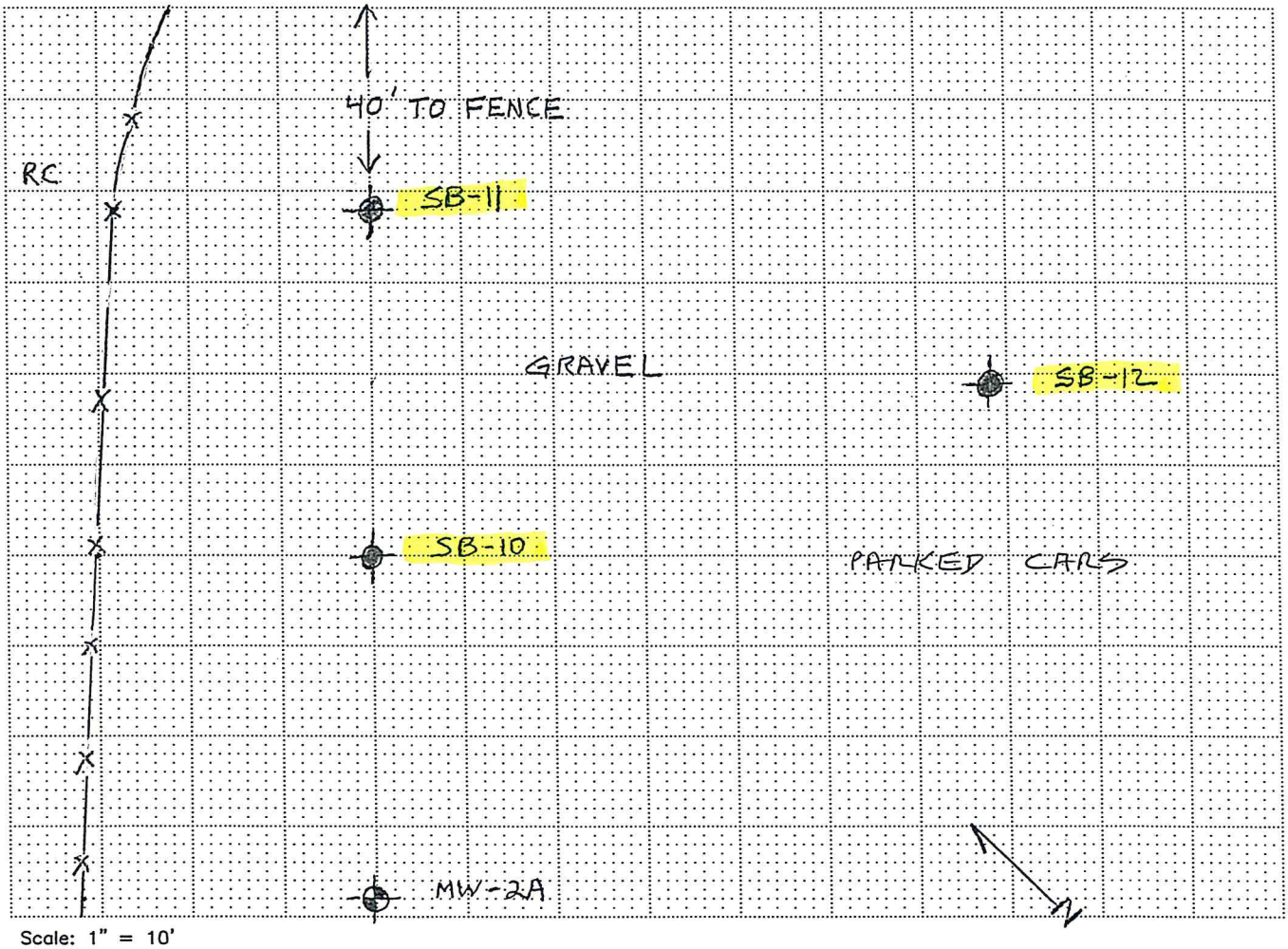
JOB: NS167030 | DATE: 9/21/16

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: GHD

LOCATION: FORMER CHEVRON STATION 90121
3026 LAKESHORE AVE, OAKLAND

BORING: SB-10, SB-11, SB-12



Scale: 1" = 10'

EXPLANATION

- Original Boring Location
- Final Boring Location
- Existing Well Location
- GPR Traverse
- OR — Localized GPR Anomaly
- Utility Alignment

Utilities —X— FENCE

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
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NOTES

Equipment:	Procedure:	Surface Conditions:
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✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

NO UNDERGROUND OBJECTS DETECTED