

To:	Rick Beason	From:	Viola Lai and Brett Shipton
Company:	CenterCal Properties, LLC	Date:	July 14, 2016
Address:	1600 East Franklin Avenue El Segundo, CA 90245		

cc:	Patrick Burns, CenterCal Properties, LLC (via email only) David Gildersleeve, CenterCal Properties, LLC (via email only)		
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GDI Project:	CenterCal-23-01
RE:	Totem Lake Mall

Original File Name	Date	Document Title
CenterCal-23-01-030215-geor	3/2/15	Report of Geotechnical Engineering Services; Totem Lake Mall; Kirkland, Washington

Addendum Number	Date	Description
1	11/13/15	Additional Explorations - Lower Mall
2	2/12/16	Additional Explorations - Lower Mall
3	4/26/16	Additional Explorations - Lower Mall
4	7/14/16	Additional Explorations - Lower Mall (attached)

kt

Attachment

One copy submitted (via email only)

Document ID: CenterCal-23-01-071416-geoat-4.docx

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July 14, 2016

CenterCal Properties, LLC
1600 East Franklin Avenue
El Segundo, CA 90245

Attention: Rick Beason

Addendum 4
Additional Explorations – Lower Mall
Totem Lake Mall
Kirkland, Washington
GeoDesign Project: CenterCal-23-01

INTRODUCTION

It had been brought to our attention that an asphalt concrete section of between 1 and 3 feet thick was encountered on the southeast portion of the Lower Mall site near the intersection of Totem Lake Boulevard and 120th Avenue NE. Figure 1 shows the approximate location of where the thick asphalt section was observed. Figure 2 shows the thickened asphalt section.

GeoDesign requested to visit the site to observe subgrade conditions at the locations where the old mall buildings had been demolished at the locations of proposed Buildings A, B, and C; we visited the site on July 5, 2016.

The information for use in design and construction is presented in our geotechnical report and addenda:

- *Report of Geotechnical Engineering Services; Totem Lake Mall; Kirkland, Washington, dated March 2, 2015*
- *Addendum 1; Additional Explorations – Lower Mall; Totem Lake Mall; Kirkland, Washington, dated November 13, 2015*
- *Addendum 2; Additional Explorations – Lower Mall; Totem Lake Mall; Kirkland, Washington, dated February 12, 2016*
- *Addendum 3; Additional Explorations – Lower Mall; Totem Lake Mall; Kirkland, Washington, dated April 26, 2016*

These documents are available for download on the following FTP site:

<https://geodesigninc.egnyte.com/fl/IELKbUCSAG>.

OBSERVATIONS

Upon our arrival silty subgrade had been exposed over most of the area. We observed voids between the structural floor slab of the Ross store where it will adjoin the proposed Building C to the southeast. The void appeared to vary in width up to approximately 10 inches. The approximate location of the void is shown on Figure 1; Figures 3 and 4 show the void.

CONCLUSION AND RECOMMENDATIONS

Peat was encountered during various phases of subsurface exploration at the site. The peat appears to be randomly located at various depths across the site. Since the Ross building is supported on piling, the peat appears to be causing settlement at the ground surface without any stress increase from foundation loads. The most likely cause of this is degradation and decay of the organic peat soil. Further decay of the peat soil could cause settlement of structures that are supported on the subgrade.

We understand that column footing for Buildings B and C will be supported on ground that is improved with Geopiers or rigid inclusions. These foundations are protected from settlement caused by decay of the peat soil. In addition to supporting the column footings on improved ground, we recommend that the ground improvement also be extended beneath exterior wall footings. Slabs on grade are also susceptible to the type of settlement described above. To avoid repair of slabs on grade in the future, they should also be supported on improved ground.

Additional subsurface exploration is planned during the week of July 18, 2016 to confirm that our recommendations are appropriate.

◆ ◆ ◆

We appreciate the opportunity to be of continued service to you. Please call if you have questions concerning this addendum or if we can provide additional services.

Sincerely,

GeoDesign, Inc.



Viola C. Lai, P.E.
Project Engineer



Brett A. Shipton, P.E.
Principal Engineer



Signed 07/14/2016

cc: Patrick Burns, CenterCal Properties, LLC (via email only)
David Gildersleeve, CenterCal Properties, LLC (via email only)

BAS:kt

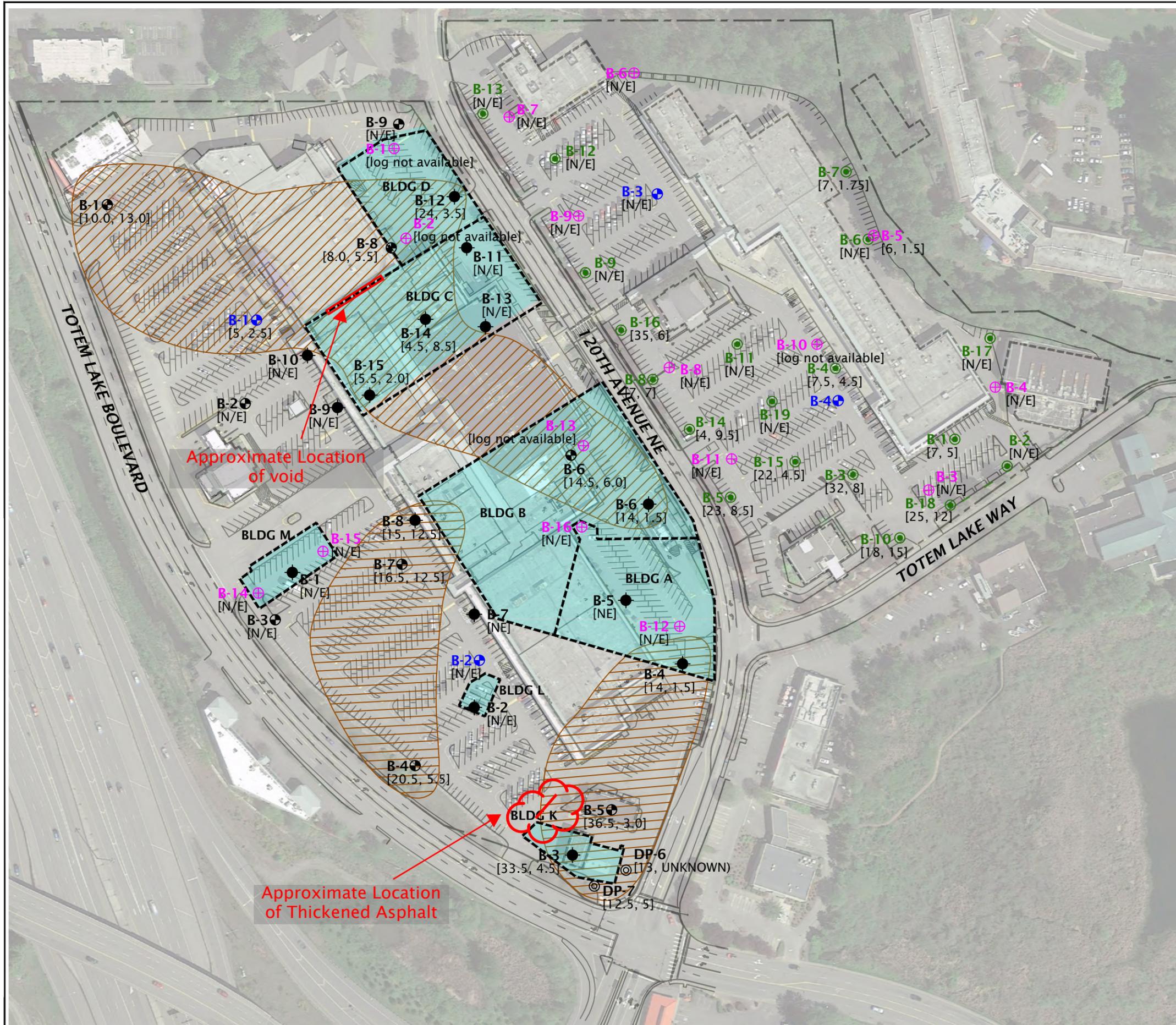
Attachments

One copy submitted (via email only)

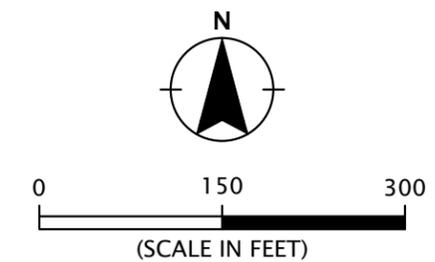
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FIGURES



- LEGEND:**
- B-1 ● BORING (GEODESIGN, 2016)
 - B-1 ⊕ BORING (GEODESIGN, 2015)
 - DP-6 ⊙ DIRECT-PUSH BORING (GEODESIGN, 2015)
 - B-1 ⊕ BORING (GEODESIGN, 2014)
 - B-1 ● BORING (LANDAU ASSOCIATES, 2008)
 - B-1 ⊕ BORING (PSI, 2004)
 - [5, 2.5] PEAT AND WOOD ENCOUNTERED [DEPTH ENCOUNTERED, THICKNESS (FEET)]
 - [N/E] NOT ENCOUNTERED
 - APPROXIMATE ZONE OF POTENTIAL PEAT IN SUBSURFACE; DEEP FOUNDATIONS RECOMMENDED.
 - APPROXIMATE BUILDING LOCATIONS (BUILDINGS A, B, C, D, K, L, AND M)



SITE PLAN BASED ON DRAWING PROVIDED BY CENTERCAL AND IMAGE OBTAINED FROM GOOGLE EARTH PRO®, DECEMBER 26, 2014

SITE PLAN	FIGURE 1
TOTEM LAKE MALL KIRKLAND, WA	
CENTERCAL-23-01	JULY 2016
 15575 SW Sequoia Parkway - Suite 100 Portland OR 97224 Off 503.968.8787 Fax 503.968.3068	



GEODESIGN_{LLC}

15575 SW Sequoia Parkway - Suite 100
Portland OR 97224
Off 503.968.8787 Fax 503.968.3068

CENTERCAL-23-01

JULY 2016

THICKENED ASPHALT CONCRETE

TOTEM LAKE MALL
KIRKLAND, WA

FIGURE 2





GEODESIGN_{LLC}

15575 SW Sequoia Parkway - Suite 100
Portland OR 97224
Off 503.968.8787 Fax 503.968.3068

CENTERCAL-23-01

JULY 2016

VOID BENEATH SLAB

TOTEM LAKE MALL
KIRKLAND, WA

FIGURE 4