CEL CONSULTING, INC
Product Evaluations - Metallurgy
Structural Investigations - Forensics

11/23/2015

GPWSE (E)
Gregory Paul Wallace
5865 Doyle Street
Suite 112
Emeryville, CA 94608

RE:	**Kensington Community Center - CMU Investigation 94707**	**Inspection Date:**	**11/12/15**
		Location:	**Jobsite**
		Inspector:	**Jose Jacobo**
		Report #:	**151112S**

CEL#: **5053047S**

GROUND PENETRATING RADAR: SUMMARY

On the above date, CEL Consulting's representative reported to the subject project for the purpose of performing a ground penetrating radar survey.

Scanning was performed using the SIR-3000 by Geophysical Survey Systems, Inc. (GSSI). See attached report for full details of the scanning performed.

REVIEWING ENGINEER: Anil Nethisinghe

CC:
GPWSE (E)

CEL CONSULTING, INC

Product Evaluations Metallurgy
Structural Investigations - Forensics

Ground Penetrating Radar Scanning

Project Name: **Kensington Community Center**

CEL Project #: **50-53047-S**

Location: **Arlington Ave, Kensington Ca** Report #: **151112S**

Date: **11/12/2015** Day: **Thursday** IR #:

☑ Reported to **Greg Wallace** with **Project Engineer**

☑ As requested, our technician scanned **5** locations.

☐ Locations scanned include

Investigation of rebar spacing and grout patern of the masonry block walls at the Kensington Community Center. Vertical bars found to be placed every 24" at the block joints. The blocks were found to be grouted only in the cells containing the vertical bars.

North wall: Vertical bars at 24" O/C, horizontal bars found at ~55"- 60".

South wall: Vertical bars at 24" O/C, horizontal bars found at ~55"- 66".

Shear wall (East Wall): Vertical bars at 24" O/C, horizontal bars found at ~38"-60".

South room wall: Vertical bars at 24" O/C, horizontal bars found at ~24"-48".

West Wall: Vertical bars at 12"-24" O/C, one horizontal bar found at ~55" above the ground.

☑ **Rebar** was marked in place using **Blue Tape**

☐ _____ was marked in place using _____

☐ _____ was marked in place using _____

☑ See attached pages for photographs of scan locations.

☐ Additional Comments:

Signature of Inspector: Date: **11/17/2015**

Print Name/Title: **Jose Jacobo**

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Ground Penetrating Radar Scanning Photography Supplemental

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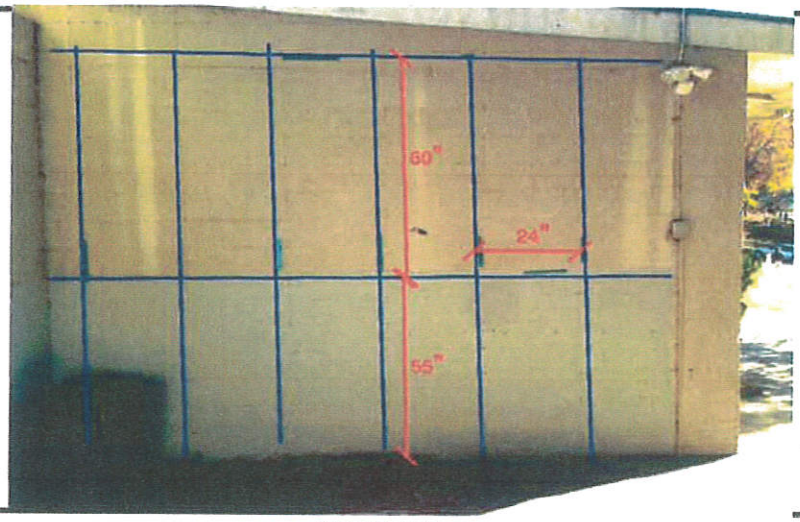
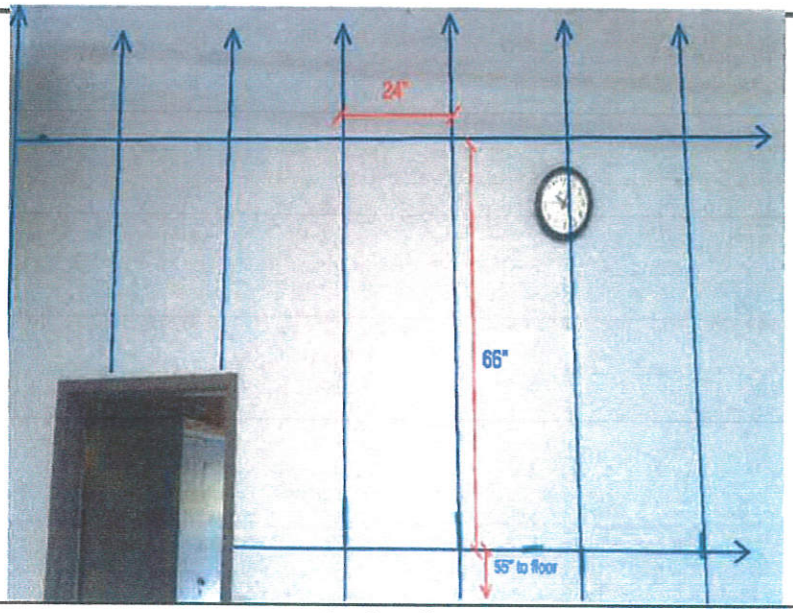
Location: **Arlington Ave, Kensington Ca** Report #: **151112S**

Date: **11/12/2015** Day: **Thursday** IR #:



North Wall scan



South wall scan

Signature of Inspector: Date: **11/17/2015**

Print Name/Title: Jose Jacobo

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Ground Penetrating Radar Scanning Photography Supplemental

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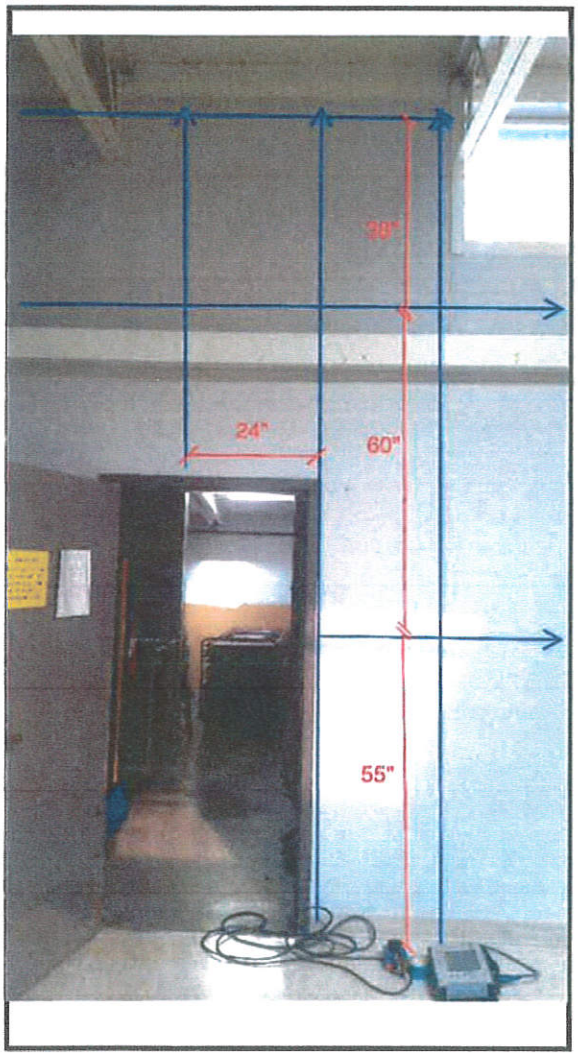
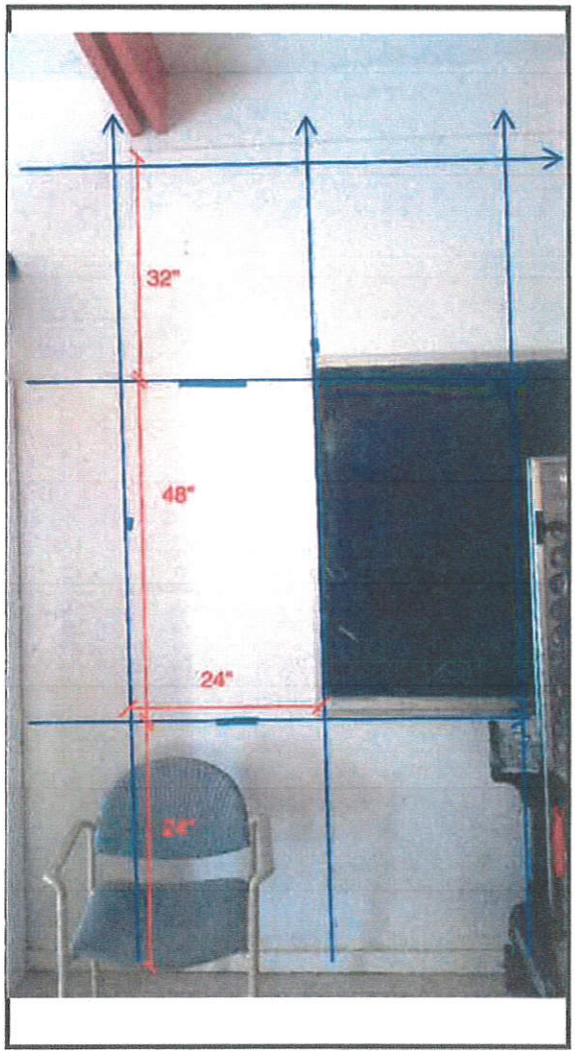


Shear wall scan



South room wall scan

Signature of Inspector: Date: **11/17/2015**

Print Name/Title: **Jose Jacobo**

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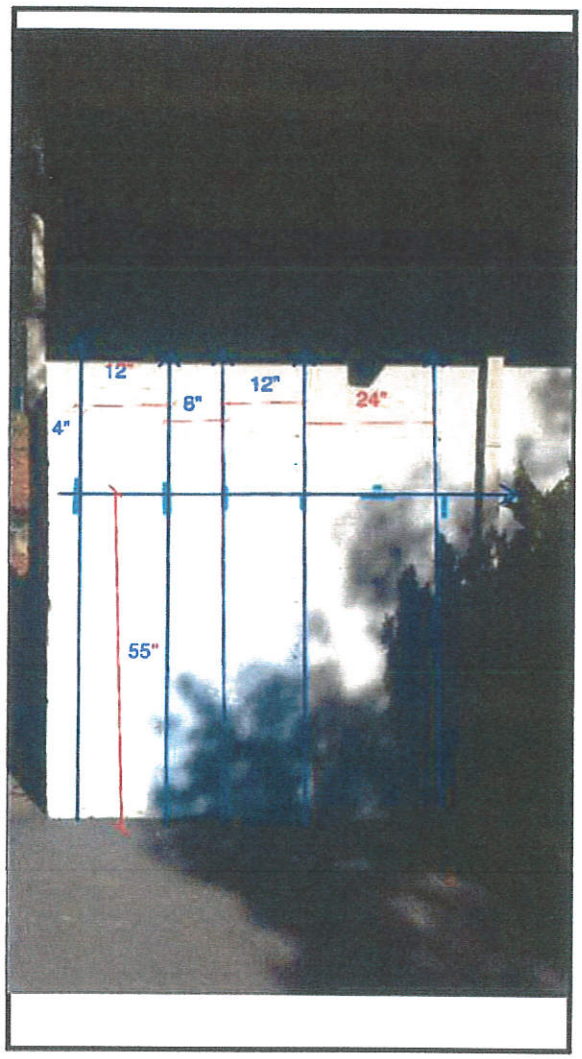
Project Name: **Kensington Community Center**

CEL Project #: **50-53047-S**

Location: **Arlington Ave, Kensington Ca** Report #: **151112S**

Date: **11/12/2015** Day: **Thursday** IR #:



West Wall scan

Signature of Inspector: Date: **11/17/2015**

Print Name/Title: **Jose Jacobo**

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LEED Info

http://www.usgbc.org/ - **LEED**, or Leadership in Energy & Environmental Design, is a green building certification program that recognizes best-in-class building strategies and practices. To receive **LEED** certification, building projects satisfy prerequisites and earn points to achieve different levels of certification.

The number of points a project earns determines the level of LEED certification. There are four levels of certification - the number of points a project earns determines the level of LEED certification that the project will receive. Typical certification thresholds are: Certified 40-49 points, Silver 50-59 points, Gold 60-79 points, Platinum 80+ points

Wikipedia: Developed by the non-profit U.S. Green Building Council (USGBC) [LEED] includes a set of rating systems for the design, construction, operation, and maintenance of green buildings, homes, and neighborhoods[8] that aims to help building owners and operators be environmentally responsible and use resources efficiently.
G. Newsham et al. published a detailed study on IEQ and LEED buildings in August 2013.[31] Field studies and Post-Occupancy Evaluations (POE) were performed in 12 "green" and 12 "conventional" buildings across Canada and the northern United States. On-site, 974 workstations were measured for thermal conditions, air quality, acoustics, lighting, workstation size, ceiling height, window access and shading, and surface finishes. Responses were positive in the areas of environmental satisfaction, satisfaction with thermal conditions, satisfaction with view from the outside, aesthetic appearance, reduced disturbance from heating, ventilation and air-conditioning noise, workplace image, night-time sleep quality, mood, physical symptoms, and reduced number of airborne particulates. The results showed green buildings exhibited superior performance compared with similar conventional buildings.[31]

After four years of development, aligning credits across all LEED rating systems and weighting credits based on environmental priority, USGBC launched LEED v3,[15] which consists of a new continuous development process, a new version of LEED Online, a revised third-party certification program and a new suite of rating systems known as LEED 2009.

Under LEED 2009, there are 100 possible base points distributed across six credit categories: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Environmental Quality, Innovation in Design.

COST: $4250 registration fee plus $2750 review fee, plus cost of accredited professionals expertise

LEED v4 for BD+C: New Construction and Major Renovation

Project Checklist

Project Name:
Date:

Y	?	N			
			Credit	Integrative Process	1

3	2	0		Location and Transportation	16
			Credit	LEED for Neighborhood Development Location	16
			Credit	Sensitive Land Protection	1
			Credit	High Priority Site	2
			Credit	Surrounding Density and Diverse Uses	5
3			Credit	Access to Quality Transit	5
	1		Credit	Bicycle Facilities	1
	1		Credit	Reduced Parking Footprint	1
			Credit	Green Vehicles	1

0	6	0		Sustainable Sites	10
Y			Prereq	Construction Activity Pollution Prevention	Required
	1		Credit	Site Assessment	1
	2		Credit	Site Development - Protect or Restore Habitat	2
			Credit	Open Space	1
	1		Credit	Rainwater Management	3
	1		Credit	Heat Island Reduction	2
	1		Credit	Light Pollution Reduction	1

0	8	0		Water Efficiency	11
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
	2		Credit	Outdoor Water Use Reduction	2
	6		Credit	Indoor Water Use Reduction	6
			Credit	Cooling Tower Water Use	2
			Credit	Water Metering	1

0	7	0		Materials and Resources	13
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
	2		Credit	Building Life-Cycle Impact Reduction	5
	1		Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
	1		Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
	1		Credit	Building Product Disclosure and Optimization - Material Ingredients	2
	2		Credit	Construction and Demolition Waste Management	2

0	11	0		Indoor Environmental Quality	16
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
	1		Credit	Enhanced Indoor Air Quality Strategies	2
	2		Credit	Low-Emitting Materials	3
	1		Credit	Construction Indoor Air Quality Management Plan	1
	1		Credit	Indoor Air Quality Assessment	2
	1		Credit	Thermal Comfort	1
	2		Credit	Interior Lighting	2
	3		Credit	Daylight	3
			Credit	Quality Views	1
			Credit	Acoustic Performance	1

0	0	0		Innovation	6
			Credit	Innovation	5
			Credit	LEED Accredited Professional	1

0	18	0		Regional Priority	29

			Credit	Water Metering	1

0	14	0	Energy and Atmosphere	33
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
	3		Credit	Enhanced Commissioning	6
	8		Credit	Optimize Energy Performance	18
			Credit	Advanced Energy Metering	1
			Credit	Demand Response	2
	3		Credit	Renewable Energy Production	3
			Credit	Enhanced Refrigerant Management	1
			Credit	Green Power and Carbon Offsets	2

0	18	0	Regional Priority		29
	10		Credit	Regional Priority: Specific Credit	Optimize energy performance	18
	2		Credit	Regional Priority: Specific Credit	Rainwater management	3
	2		Credit	Regional Priority: Specific Credit	Outdoor water use reduction	2
	4		Credit	Regional Priority: Specific Credit	Indoor water use reduction	6

3	66	0	TOTALS	Possible Points: 135

Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110

Yearly Electricity and Gas Use: November 2014 - October 2015

	59 Arlington Ave., 8,129 sq. feet		1 Windsor Ave.	
Date	**Electricity**	**Gas**	**Electricity**	**Gas**
Nov. '14	137.43	77.28	18.27	9.37
Dec. '14	114.14	81.84	18.77	9.44
Jan. '15	124.25	89.06	18.04	9.20
Feb. '15	122.37	79.89	17.70	10.21
Mar. '15	112.10	80.99	17.77	9.33
Apr. '15	114.04	65.34	17.56	8.91
May '15	163.05	69.28	19.58	9.67
June '15	138.61	62.03	19.86	9.22
July '15	136.27	55.08	18.66	9.43
Aug. '15	129.52	62.37	18.97	8.96
Sept. '15	144.81	58.55	21.49	10.22
Oct. '15	157.81	57.23	20.52	8.64
Yearly Total	1594.40	838.94	227.19	112.60
Monthly Average	132.87	69.91	18.93	9.38

Building Total	2433.34	339.79